ILLINOIS POLLUTION CONTROL BOARD September 2, 2010

IN THE MATTER OF:)	
)	
REASONABLY AVAILABLE CONTROL)	R10-20
TECHNOLOGY (RACT) FOR VOLATILE)	(Rulemaking - Air)
ORGANIC MATERIAL EMISSIONS FROM)	
GROUP IV CONSUMER & COMMERCIAL)	
PRODUCTS: PROPOSED AMENDMENTS)	
TO 35 ILL. ADM. CODE 211, 218, AND 219)	

Adopted Rule. Final Opinion and Order.

OPINION AND ORDER OF THE BOARD (by A.S. Moore)

On March 8, 2010, the Illinois Environmental Protection Agency (Agency or Illinois EPA) filed a regulatory proposal under provisions including the "fast-track" rulemaking authority of Section 28.5 of the Environmental Protection Act (Act). *See* 415 ILCS 5/10, 27, 28 (2008); Public Act 96-0308, eff. Aug. 11, 2009 (P.A. 96-0308) (re-enacting repealed Section 28.5). Generally, the Agency proposed volatile organic material (VOM) emission controls for the following Group IV Consumer and Commercial Product Categories: miscellaneous metal and plastic parts coatings; auto and light-duty truck coatings; miscellaneous industrial adhesives; and fiberglass boat manufacturing materials.

On March 18, 2010, the Board adopted its first-notice opinion and order without commenting on the substantive merits of the Agency's proposal. *See* 34 Ill. Reg. 4281, 4335, 4475 (Apr. 2, 2010); *see also* P.A. 96-0308 (subsection (e)). On July 15, 2010, the Board adopted its second-notice opinion and order. *See* P.A. 96-0308 (subsection (n)). At its meeting on August 10, 2010, the Joint Committee on Administrative Rules (JCAR) issued its Certificate of No Objection to the Board's proposal. JCAR proposed non-substantive changes, which are not specifically addressed in this opinion and which are reflected in the order below. Today the Board adopts its final order in this rulemaking.

In this opinion and order, the Board first provides the procedural history of this rulemaking before briefly summarizing the background of federal VOM regulation. The Board then describes the sources addressed in this rulemaking and VOM emissions from them. Next, the Board summarizes current regulations governing those sources and the Agency's proposed amendments. The opinion then considers the economic reasonableness and technical feasibility of the proposal. The Board then summarizes the adopted rules on a section-by-section basis. The Board concludes by directing the Clerk to file the adopted rules with the Secretary of State for publication in the *Illinois Register*. The order following this opinion presents the adopted rules.

PROCEDURAL HISTORY

On March 8, 2010, the Agency filed a proposal to amend Parts 211, 218, and 219 of the Board's air pollution regulations (Prop. 211, Prop. 218, and Prop. 219, respectively). The Agency filed its proposal under provisions including the "fast-track" rulemaking authority of Section 28.5 of the Act. *See* 415 ILCS 5/10, 27, 28 (2008); P.A. 96-0308. Among others, the following documents accompanied the proposal: a Statement of Reasons (SR), a Technical Support Document (TSD), "Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings" (CTG Miscellaneous Coatings); "Control Techniques Guidelines for Automobile and Light-Duty Truck Assembly Coatings" (CTG Auto and Truck); "Control Techniques Guidelines for Miscellaneous Industrial Adhesives" (CTG Adhesives); and "Control Techniques Guidelines for Fiberglass Boat Manufacturing Materials" (CTG Fiberglass Boat). The Agency also filed a motion for waiver of copy requirements. In an order dated March 18, 2010, the Board accepted the Agency's proposal for hearing and granted the Agency's motion for waiver of copy requirements.

In a letter dated March 18, 2010, the Board requested that the Department of Commerce and Economic Opportunity (DCEO) conduct an economic impact study of the Agency's rulemaking proposal. *See* 415 ILCS 5/27(b) (2008). In a response dated April 1, 2010, and received by the Board on April 7, 2010, DCEO Director Warren Ribley stated in pertinent part that, "[a]t this time, the Department is unable to undertake such an economic impact study. Therefore, I must respectfully decline your request."

In an order dated March 18, 2010, the hearing officer scheduled three hearings: the first beginning Wednesday, April 28, 2010, in Springfield with pre-filed testimony due on or before April 16, 2010; the second beginning Wednesday, May 19, 2010, in Chicago with pre-filed testimony due on or before May 7, 2010; and the third beginning Wednesday, June 2, 2010, in Chicago with pre-filed testimony due on or before May 21, 2010. *See* P.A. 96-0308 (subsections (e), (f)).

First notice of the proposed rules appeared in the *Illinois Register* on April 2, 2010. 34 Ill. Reg. 4281, 4335, 4475 (Apr. 2, 2010); *see* 5 ILCS 100/5-40(b) (2008) (45-day comment period).

On April 15, 2010, the Agency pre-filed the testimony of Mr. Rory Davis (Davis Test.). The first hearing took place as scheduled on April 28, 2010, in Springfield. During the first hearing, the hearing office admitted into the record a single exhibit, the pre-filed testimony of Mr. Davis (Exh.1). The Board received the transcript of the first hearing (Tr.1) on April 29, 2010.

On May 4, 2010, the Agency filed a request that the second hearing be held as scheduled. *See* P.A. 96-0308 (subsection (f)(1)). On May 5, 2010, the American Coatings Association (ACA) also filed a request that the second hearing be held as scheduled. *Id.* On May 7, 2010, the Board received pre-filed testimony for the second hearing from the Olin Corporation (Olin) (Olin Test.) and from the ACA (ACA Test.).

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On May 17, 2010, the Board received two filings from the Agency: the first post-hearing comments responding to questions posed and requests for information made at the first hearing (PC 1), and the second a motion to amend its rulemaking proposal (Mot. Amend). On June 1, 2010, S&C Electric Company (S&C) filed a response to the motion to amend (S&C Resp.) The Board addresses the Agency's motion to amend and S&C's response below under "Preliminary Matter."

The second hearing took place as scheduled on May 19, 2010, in Chicago. During the second hearing, the hearing officer admitted into the record three exhibits: the pre-filed testimony of the American Coatings Association (Exh. 2); the testimony of Mr. David Halcomb, Senior Vice President, Global, of Awlgrip Business Development (Exh. 3); and the testimony of Mr. Robert D. Raymond of RayVac Plastic Decorators, Inc. (Rayvac) (Exh. 4). The Board received the transcript of the second hearing (Tr.2) on May 21, 2010.

In an order dated May 24, 2010, the hearing officer noted agreement by the Agency's counsel that pre-filing no testimony for the third hearing by the deadline of May 21, 2010, would indicate the Agency's intent to cancel the third hearing. *See* Tr.2 at 69. Because the Agency did not pre-file testimony for a third hearing on or before the deadline of May 21, 2010, the hearing officer order cancelled the third hearing. *See* P.A. 96-0308 (section (f)(3)). The hearing officer order also set a deadline of June 4, 2010, to file post-hearing comments. *See id.* (section (k)).

On June 3, 2010, Olin filed a post-hearing comment (PC 2), which also addressed the Agency's May 17, 2010 motion to amend its rulemaking proposal. On June 4, 2010, the Board also received post-hearing comments from the following: the Agency (PC 3); ACA (PC 4); IERG (PC 5); and Mr. John Kaps on behalf of Electro-Motive Diesel (PC 6).

On July 15, 2010, the Board adopted its second-notice opinion and order. On August 10, 2010, JCAR addressed the Board's proposal and issued its Certificate of No Objection.

BACKGROUND OF FEDERAL VOM REGULATION

The Agency stated that its proposal satisfies Illinois' obligation to submit a State Implementation Plan (SIP) addressing sources of VOM emissions in areas designated as nonattainment with respect to the National Ambient Air Quality Standard (NAAQS) for ozone. SR at 1, 7, citing 42 U.S.C. §§ 7502, 7511a.

The Agency characterized VOM¹ as "a primary precursor to the formation of ground-level ozone, which is formed when oxides of nitrogen and VOM react in the atmosphere in the presence of sunlight." SR at 3. The Agency stated that "[g]round-level ozone is a major component of smog." *Id.*, citing 73 Fed. Reg. 58482 (Oct. 7, 2008). The Agency indicated that, in 1997, "USEPA revised the NAAQS for ozone by replacing a 1-hour standard with an 8-hour

¹ The Agency stated that VOM and volatile organic compounds (VOC) are "effectively the same" as one another. SR at 1.

standard." SR at 3, citing 62 Fed. Reg. 38856 (July 18, 1997), *see* TSD at 6. Two Illinois areas, Chicago and St. Louis/Metro East, have been designated as moderate nonattainment areas (NAA) for the 8-hour ozone standard.² SR at 3, 8; TSD at 6.

These designations trigger CAA requirements to adopt "regulations that reduce emissions sufficiently to demonstrate attainment of the standard." SR at 4, citing 42 U.S.C. § 7502(c)(1). Specifically, the Agency claimed that the CAA requires Illinois "to submit VOM regulations constituting RACT [reasonably available control technology] for Group IV Consumer and Commercial Product Categories in ozone NAAs classified as moderate and above." SR at 5-6, citing 42 U.S.C. §§ 7502(c)(1), 7511a(b)(2); see Davis Test. at 1. The Agency defined RACT "as the lowest emissions limitation that a particular source can meet by applying a control technique that is reasonably available considering technological and economic feasibility." SR at 5, citing 44 Fed. Reg. 53762 (Sept. 17, 1979). The Agency stated that "Illinois is required to submit its SIP revisions by October 7, 2009." SR at 6.

The Agency stated that the CAA requires USEPA to "conduct a study of the emissions of VOM into the ambient air from consumer and commercial products in order to determine their potential to contribute to ozone levels which violate the ozone NAAQS and to establish criteria for regulating emissions of VOM from such products." SR at 3, citing 73 Fed. Reg. 58482 (Oct. 7, 2008). The Agency further stated that the CAA provides that "[t]he Administrator shall list those categories of consumer or commercial products that the Administrator determines, based on the study, account for at least 80 percent of the VOC emissions . . . from consumer or commercial products in areas that violate the NAAQS for ozone" and separate those categories into groups. SR at 3-4, citing 42 U.S.C. 7511b(e)(3)(A).

The Agency claimed that "[t]he CAA requires that USEPA then either regulate VOM emissions from such categories or issue a CTG in lieu of a national regulation if the Administrator determines that such guidance will be substantially as effective as regulations in reducing emissions of VOM which contribute to ozone levels in ozone NAAs." SR at 4, citing 42 U.S.C. § 7511b(e)(3)(C). The Agency stated that "CTGs provide states with recommendations regarding what types of controls could constitute RACT for VOM for the applicable source categories." SR at 4, citing 73 Fed. Reg. 58483 (Oct. 7, 2008). The Agency claimed that "[s]tates must either adopt regulations to implement the recommendations in the CTG or adopt alternative approaches that constitute RACT, either of which must be submitted to the USEPA for review and approval as part of the SIP process." SR at 4, citing 73 Fed. Reg. 58483 (Oct. 7, 2008).

The Agency reported that, on October 7, 2008, "USEPA issued final CTGs for Group IV Consumer and Commercial Product categories." SR at 4; *see* TSD at 4, 6. USEPA required

² The Chicago nonattainment area includes the following Illinois jurisdictions: Cook, DuPage, Kane, Lake, McHenry, and Will Counties, Goose Lake and Aux Sable Townships in Grundy County, and Oswego Township in Kendall County. SR at 3, citing 40 C.F.R. 81.314; *see* TSD at 6. The St. Louis/Metro East nonattainment includes the following Illinois counties: Jersey, Madison, Monroe, and St. Clair. SR at 3, citing 40 C.F.R. 81.314; *see* TSD at 6.

submission of SIP revisions responding to the CTGs within one year. SR at 4, citing 73 Fed. Reg. 58484 (Oct. 7, 2008).

The Agency reported that "Illinois is required to submit these SIP revisions before the USEPA can re-designate the Chicago and Metro East NAAs to attainment of the 1997 ozone NAAQS, regardless of whether the VOM reductions obtained by the SIP revisions are actually necessary to achieve attainment of the NAAQS." SR at 7, citing Wall v. USEPA, 265 F.2d 426, 433, 440-42 (6th Cir. 2001); 42 U.S.C. § 7407(d)(3)(E). The Agency noted that, on July 2, 2007, it "submitted to the USEPA an attainment demonstration for the Metro East nonattainment area for the 1997 8-hour ozone NAAQS." SR at 7. The Agency further noted that it submitted an attainment demonstration for the Chicago nonattainment area on March 19. 2009. *Id.* at 7-8. The Agency argued that "[t]hese areas cannot be redesignated to attainment, however, unless and until the Illinois EPA submits SIP revisions in response to the Group IV CTGs and the USEPA approves such revisions." *Id.* at 8. The Agency stated that its proposal intends generally "to implement the recommendations contained in the CTGs to the extent that such recommendations are consistent with existing regulations." *Id.* at 10-11.

The Agency also noted that USEPA recently strengthened the ozone standard. SR at 8, citing 73 Fed. Reg. 16436 (Mar. 27, 2008). The Agency considered it "likely" that areas designated as nonattainment for the current standards will be designated nonattainment for the revised standard as well. SR at 8. The Agency argued that, "[w]hile attainment of the revised standard is not the purpose of this rulemaking, it should be noted that any reduction in VOM emissions in the NAAs resulting from these proposed amendments will improve ozone air quality and will likely help Illinois achieve and maintain the newly revised NAAQS." *Id.*; *see* Davis Test. at 2.

DESCRIPTION OF SOURCES AND VOM EMISSIONS

Miscellaneous Metal and Plastic Parts Coatings

Description of Sources

In its TSD, the Agency stated that "[m]iscellaneous metal and plastic parts coatings are coatings applied to a wide range of metal and plastic parts for decorative, protective, and functional purposes." TSD at 8 (§2.1). The Agency further stated that manufacturers apply these coatings to components of products such as

fabricated metal products, molded plastic parts, small and large farm machinery, commercial and industrial machinery and equipment, automotive or transportation equipment, interior or exterior automotive parts, construction equipment, motor vehicle accessories, bicycles and sporting goods, toys, recreational vehicles, pleasure craft (recreational boats), extruded aluminum structural components, railroad cars, heavier vehicles, lawn and garden equipment, business machines, laboratory and medical equipment, electronic

equipment, steel drums, metal pipes, and numerous other industrial and household products. *Id*.

The Agency indicated that, in order to conform to the CTG corresponding to these products, it refers to coatings applied to these subcategories of parts as "miscellaneous metal and plastic parts coatings." *Id.*, citing CTG Miscellaneous Coatings. The Agency stated that "[e]missions of VOM from this source category occur when the solvent carrying the coating material evaporates and leaves the coating material on the surface during application and drying, and to a lesser extent during the mixing and thinning of the coating, and during cleaning operations." TSD at 8, citing CTG Miscellaneous Coatings.

The Agency emphasized that its proposal affects coatings "that are applied by manufacturers to the parts they produce, and not [] coatings that are applied to test panels or coupons for research and development, quality control, or performance testing." TSD at 8. The Agency also emphasized that its proposal does not address "any coatings that are otherwise defined in CAA Section 183(e) which have been previously addressed by other CTGs." *Id.* The Agency stated that CTGs have addressed coatings including the following: shipbuilding and repair coatings; aerospace coatings; wood furniture coatings; metal furniture coatings; large appliance coatings; automobile and light-duty truck assembly coatings; flatwood paneling coatings; miscellaneous industrial adhesives; fiberglass boat manufacturing materials; and paper, film, and foil coatings." *Id.*

Potentially Affected Sources

The Agency stated that it relied upon USEPA's estimate of the number of sources affected nationally by the proposed regulations to determine the number of Illinois sources "potentially affected by the proposed regulation regarding miscellaneous metal and plastic parts coatings." TSD at 20 (§2.6). According to the Agency, the CTG lists 1,269 sources in this category in nonattainment areas nationally with 155 in Illinois nonattainment areas. *Id.* The Agency reported that "111 of these sources remained in operation in 2007." *Id.*; *see id.* at 20-23 (Table 2.3).

During the first hearing, counsel for the Agency asked Mr. Halcomb whether he was "aware of any sources in Illinois non-attainments areas that will be affected by the proposed pleasure craft industry limits?" Tr.2 at 31-32. He responded that, while he had looked at the Agency's list of 111 potentially affected sources, he did not recognize any sources in the Illinois nonattainment areas "that would be affected." *Id.* at 32. Counsel for the Agency also asked Mr. Halcomb whether he was "aware of any sources that are planning to begin operating in Illinois non-attainment areas that would be subject these limits?" *Id.* He responded that, to his knowledge, no source plans to begin such operations. *Id.*

VOM Emissions

Noting that "existing emission sources in Illinois are not required to report what portion of their VOM emissions are due to metal and plastic parts coatings," the Agency claimed that "it

is difficult to determine the total VOM emissions directly related to the category." TSD at 9 (§2.2). Based on USEPA data indicating 111 Illinois sources potentially affected by these proposed regulations, the Agency estimated that those sources "emitted a total of 1,730 tons of VOM in 2007." *Id.* Claiming that the CTG "does not detail the level of control anticipated from proposed regulations meeting the CTG's recommendations," the Agency stated that it "has not estimated the VOM reductions that may result from implementation of this proposal." *Id.*

While it acknowledged uncertainty regarding emissions reduction, the Agency claimed that it must revise Illinois' SIP "to include RACT for VOM sources covered by a CTG issued by USEPA after November 15, 1990, and before the area's date of attainment." TSD at 9, citing CTG Miscellaneous Coatings. The Agency stated that the CTG for this category recommends controls that may constitute RACT for affected coating operations. TSD at 9. The Agency further stated that it "concurs with the recommendations of the CTG and has included them, with few exceptions, in the proposed regulation. . . ." *Id*.

Automobile and Light-Duty Truck Assembly Coatings

Description of Sources

The Agency characterized automobile and light-duty track assembly coatings as "coatings applied to new automobile or light-duty truck bodies or body parts for those vehicles" in order "to enhance durability and appearance." TSD at 24 (§3.1). The Agency stated that Section 183(e) of the CAA categorizes these coatings, which are generally formulated and marketed for these purposes. *Id.* The Agency emphasized that "[t]his coating category includes coatings applied on a contractual basis outside vehicle manufacturing facilities, but does not include coatings used at plastic or composites molding facilities described in the Auto and Light-Duty Trucks NESHAP [National Emission Standards for Hazardous Air Pollutants] (40 C.F.R. Part 63, Subpart III)." *Id.*, citing 72 Fed. Reg. 20227-37 (Apr. 24, 2007) (National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks; National Emissions Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products).

The Agency stated that "[t]he coating process for automobiles and light-duty trucks generally consists of surface preparation, priming operations, topcoat operations, and final repair operation." TSD at 24. The Agency further stated that "[e]missions of VOM from auto and light-duty truck coatings occur when the solvent carrying the coating material evaporates and leaves the coating material on the surface during application and drying, and to a lesser extent during the mixing and thinning of the coating." *Id.* The Agency claimed that coating application, flash off, and the drying and curing of coatings account for a majority of emissions from this category. *Id.*

Potentially Affected Sources

The Agency stated that its emissions inventory identified only a single source affected by the proposed regulation of these coating operations. TSD at 29 (§3.6). The Agency elaborated

that Ford Motor Company in Cook County is the only source in that inventory "that is classified by the North American Industry Classification System ("NAICS") codes specified by the USEPA's notice of final determination and availability of control techniques guidelines to be affected by the auto and light-duty truck coatings category." *Id.* at 24-25 (§3.2), citing 73 Fed. Reg. 58481-91 (Oct. 7, 2008) (Consumer and Commercial Products, Group IV: Control Techniques Guidelines in Lieu of Regulations for Miscellaneous Metal Products Coatings, Plastic Parts Coatings, Auto and Light-Duty Truck Assembly Coatings, Fiberglass Boat Manufacturing Materials, and Miscellaneous Industrial Adhesives).

VOM Emissions

The Agency reported that the single source subject to these proposed regulations, Ford Motor Company in Cook County, includes the following affected coating operations: topcoat operations, prime coat operations, sealer application, dip coating application, and a final repair coating line. TSD at 25 (§3.2). The Agency stated that all of these operations exceed the applicability threshold of 15 pounds of VOM emissions per day in the CTG and reflected in the proposed regulations. *Id.*, citing CTG Auto and Truck. The Agency stated that this source emitted approximately 466 tons of VOM from affected coating lines in 2007. TSD at 25 (§3.2).

Miscellaneous Industrial Adhesives

Description of Sources

The Agency stated that "[t]he miscellaneous industrial adhesives category includes adhesives and adhesive primers at manufacturing and repair facilities with adhesive application operations." TSD at 30 (§4.1). The Agency emphasized, however, that "[t]he category does not include adhesives that have been addressed by earlier CTGs." *Id*.

The Agency reported that these "[m]iscellaneous industrial adhesives are used for joining surfaces in assembly and construction of a large variety of products." *Id.* The Agency argued that, compared with other fastening methods, "[a]dhesives allow for faster assembly speeds, less labor input, and more ability for joining dissimilar materials." *Id.*

The Agency indicated that, while "there are a wide variety of adhesives formulated from a multitude of synthetic and natural raw materials, all adhesives can be generally classified as solution/waterborne, solvent-borne, solventless or solid (*e.g.*, hot melt adhesives), pressure sensitive, hot-melt, or reactive (*e.g.*, epoxy adhesives and ultraviolet-curable adhesives)." *Id.* The Agency also indicated that these "[a]dhesives can also be generally classified according to whether they are structural or nonstructural. Structural adhesives are commonly used on industrial assembly processes and are designed to maintain a product's structural integrity." *Id.* The Agency stated that industrial adhesives can be applied by methods including "air atomized spray, electrostatic spray, high volume/low pressure (HVLP) spray, dip coating, flow coating, brush or roll coating, electrocoating, and hand application." *Id.*, citing CTG Adhesives.

The Agency reported that "VOM emissions from miscellaneous industrial adhesives are generally due to evaporation of solvents during application of the adhesive, drying and curing of the adhesive, and in cleaning operations." TSD at 30. The Agency elaborated that "[t]he majority of emissions occurs during the application and drying/curing of the adhesives." *Id*.

Potentially Affected Sources

The Agency stated that it relied upon USEPA's estimate of the number of sources affected nationally by the proposed regulations to determine the number of Illinois sources "potentially affected by the proposed regulation." TSD at 35 (§4.6). According to the Agency, the CTG lists 180 sources in this category in nonattainment areas nationally with 17 of those sources in Illinois nonattainment areas. *Id.* at 35-36. The Agency reports that 12 of those 17 were in operation in 2007. *Id.* at 35-36; *see id.* at 36 (Table 4.2).

During the first hearing, the Agency responded to a question from counsel for IERG regarding applicability of the proposed regulations. Tr.1 at 10. The Agency indicated that the list of those 12 sources in the TSD "may not be an exhaustive list, but they are the sources that we would expect or have been identified by the USEPA and IEPA that should be potentially affected sources." *Id.* at 10-11, citing TSD at 36 (Table 4.2 Potentially Affected Sources in Illinois).

VOM Emissions

Noting that "Illinois emission inventory data is not adequately specific to determine what portion of a source's emissions are due to industrial adhesives," the Agency claimed that "it is difficult to determine the total VOM emissions directly related to the category at any given source." TSD at 31 (§4.2). The Agency estimated, however, that the 12 potentially affected sources "emitted an estimated total of 120 tons of VOM in 2007." *Id*.

The Agency claimed that data regarding emission reductions from the proposed regulation are "uncertain." *Id.* The Agency stated that it must nonetheless revise Illinois' SIP "to include RACT for VOM sources covered by a CTG issued by USEPA after November 15, 1990, and before the area's date of attainment." *Id.*, citing CTG Adhesives. The Agency stated that the CTG for this category recommends controls that constitute RACT for affected adhesives. TSD at 31. The Agency further stated that its proposed regulations "are consistent with the CTG's recommendations." *Id.*

Fiberglass Boat Manufacturing Materials

Description of Sources

The Agency stated that "[t]he CTG addressing fiberglass boat manufacturing materials applies to sources manufacturing fiberglass hulls or decks for boats, or sources that construct molds for the manufacture of fiberglass boat hulls or decks." TSD at 37 (§5.1). The Agency further stated that "[t]he CTG does not apply to sources solely manufacturing boat parts." *Id*.

The Agency indicated that, if a source manufactures fiberglass boat hulls and decks, [then] the manufacture of all fiberglass boat parts at the source is covered by the CTG." *Id.* The Agency stated that "[e]missions of VOM from fiberglass boat manufacture occurs from the use of gel coats and resins applied to fiberglass in the manufacturing process and from material used to clean application equipment used in the process." *Id.*, citing CTG Fiberglass Boat.

Potentially Affected Sources and VOM Emissions

The Agency stated that "there are currently no sources in Illinois that will be affected by the proposed regulation of this source category." TSD at 43 (§5.4). However, the Agency expected that the proposed regulations apply to both existing and new sources "that are covered by a Group IV CTG, are located in the Chicago or Metro East NAAs, and meet the applicability criteria specified. . . ." *Id.* at 8. The Agency stated that it assumes "that any source that intended to commence operation of a source in this category in an Illinois non-attainment area would necessarily consider the proposed regulation in the planning of source operations. . . ." *Id.*

SUMMARY OF EXISTING REGULATIONS

Miscellaneous Metal and Plastic Parts Coatings

The Agency stated that miscellaneous metal and plastic parts coatings are regulated in the Chicago and Metro East nonattainment areas by Sections 218.204 and 219.204, respectively, of the Board's air pollution regulations. TSD at 6, 23; *see* 35 Ill. Adm. Code 218.204, 219.204; *see also* CTG Miscellaneous Coatings at C-23 - C-26, D-4 - D-6 (appendices summarizing Illinois regulations).

Automobile and Light-Duty Truck Assembly Coatings

The Agency stated that automobile and light-duty truck assembly coatings are regulated in the Chicago and Metro East nonattainment areas by Sections 218.204 and 219.204, respectively, of the Board's air pollution regulations. TSD at 6, 29; *see* 35 Ill. Adm. Code 218.204, 219.204; *see also* CTG Auto and Truck at 32 (appendix summarizing Illinois regulations). The Agency further stated that Illinois' regulations are based upon the 2004 NESHAP. TSD at 29, citing 72 Fed. Reg. 20227-37 (Apr. 24, 2007) (National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks; National Emissions Standards for Surface Coating of Plastic Parts and Products).

Miscellaneous Industrial Adhesives

The Agency stated that "[t]here are currently no federal or state regulations specifically addressing miscellaneous industrial adhesives." TSD at 7 (Introduction); *see also id.* at 30 (§4.1), citing CTG Adhesives.

Fiberglass Boat Manufacturing Materials

The Agency stated that a 2001 NESHAP now regulates fiberglass boat manufacturing materials. TSD at 7, citing 40 C.F.R. Part 63 Subpart VVVV. The Agency noted, however, that "[t]he current Illinois regulation for polyester resin product manufacturing in Subpart CC of 35 Ill. Adm. Code Part 218, requiring high efficiency spray techniques and VOM content limits in resin and gel coat materials, was determined by the USEPA to be less stringent than the 2001 NESHAP." TSD at 7, citing CTG Fiberglass Boat.

SUMMARY OF AGENCY'S PROPOSED REGULATIONS

The Agency stated that it proposed "regulations consistent with the recommendations contained in the CTGs to control VOM emissions from Consumer and Commercial Products, Group IV." TSD at 4. In the following subsections separately addressing product categories in that group, the Board briefly summarizes the Agency's proposal.

Miscellaneous Metal and Plastic Parts Coatings

Although Parts 218 and 219 now regulate VOM emissions from miscellaneous metal and plastic parts coating, the Agency proposed to amend those two parts to reflect the RACT recommendations of the CTG. TSD at 4-5; *see* 35 Ill. Adm. Code 218, 219. The Agency stated that the CTG recommends "more stringent limits for sources as well as more specific subcategories for coatings and applications." TSD at 5; *see* Davis Test. at 2. The Agency noted that the CTG also recommends work practices for this category, and the Agency's proposal included "the recommended work practices from the CTG in their entirety." TSD at 19 (§2.5) (Work Practices).

Automobile and Light-Duty Truck Assembly Coatings

Although Parts 218 and 219 now regulate VOM emissions from automobile and light-duty truck assembly coating, the Agency proposed to amend those two parts to reflect the RACT recommendations of the CTG. TSD at 4-5, 25; *see* 35 Ill. Adm. Code 218, 219. The Agency stated that the CTG recommends "more stringent limits for sources as well as more specific subcategories for coatings and applications." TSD at 5. The Agency noted that the CTG also recommends work practices for this category, and the Agency's proposal included "the recommended work practices from the CTG in their entirety." TSD at 28 (§3.5) (Additional Recommendations: Work Practices). The Agency argued that "[t]he limits and work practices included in the CTG reflect current practices that the USEPA considers to be RACT, and were supplied to the USEPA by member and non-member companies of the Alliance of Automobile Manufacturers in 2008." *Id.* at 25; Davis Test. at 3.

Miscellaneous Industrial Adhesives

Noting that this category is not now specifically addressed by Illinois regulations, the Agency proposed a new subpart II reflecting the CTG's recommendation of control measures

that constitute RACT. TSD at 5, 30. The Agency noted that the CTG also recommends work practices for this category, and the Agency's proposal included "the recommended work practices from the CTG in their entirety." TSD at 35 (§4.5) (Additional Recommendations: Work Practices); *see* Davis Test. at 3.

Fiberglass Boat Manufacturing Materials

Noting that this category is not now specifically addressed by Illinois regulations, the Agency proposed a new subpart JJ reflecting the CTG's recommendation of monomer VOM limits and control techniques. TSD at 5, 43. The Agency noted that the CTG also recommends work practices for this category, and the Agency's proposal included "the recommended work practices from the CTG in their entirety." TSD at 43-44 (§5.5) (Additional Recommendations: Work Practices); *see* Davis Test. at 4.

TECHNICAL FEASIBLITY AND ECONOMIC REASONABLENESS

Technical Feasibility

Particularly in its Technical Support Document, the Agency addressed various technical approaches to controlling VOM emissions from Group IV product categories. *See* TSD at 9-17, 25-27, 31-33, 43. The Agency argued that it is technically feasible to control VOM emissions from the Group IV categories. *See* SR at 8. The Agency further argued that "[a]ffected sources can meet the requirements in the proposed amendments through a number of readily available control techniques." *Id.* In the subsections below, the Board addresses the record on the issue of the technical feasibility of those techniques.

Miscellaneous Metal and Plastic Parts Coatings

The CTG for miscellaneous metal and plastic parts coating provided three emission control options and recommended various work practices. TSD at 9 (§2.3); *see* Davis Test. at 2; *see generally* TSD Miscellaneous Coatings. The TSD argued that "[t]he three options for control detailed in the CTG are intended to provide a measure of flexibility in compliance," and the Agency included all three options in its proposal. TSD at 10.

The TSD stated that the Agency "relied upon the CTG to determine the technical feasibility of the proposed VOM limits." TSD at 10; *see* Davis Test. at 2; *see generally* CTG Miscellaneous Coatings. The TSD noted that "USEPA based the limits and practices on regulations achieving the same level of emission reduction in California, and specifically in the South Coast Air Quality Management District." TSD at 10. The Agency argued that, because sources in other regions comply with these limits and because there is some flexibility in complying, "the limits in the proposed regulation are technically feasible." *Id*.

<u>Use of Low VOM Coatings.</u> The TSD noted the use of low-VOM coatings as one option for reducing VOM emissions. TSD at 10 (§2.3.1); *see* Davis Test. at 2. The TSD further noted that the CTG provides "recommended application methods and specific limits on VOM

content in coatings in terms of mass of VOM per volume of coating. These VOM limits do not include water and exempt compounds in the calculation of mass per volume VOM content." *Id.* at 10, 12-13 (Table 2.1), citing CTG Miscellaneous Coatings at 33-34 (Tables 2, 3). The CTG also recommended "one or more of the following application methods: electrostatic application, HVLP spray, flow coat, roller coat, dip coat (including electrodeposition), airless spray, airassisted airless spray, or other coating application methods capable of achieving a transfer efficiency equivalent to or better than that achieved by HVLP spraying." TSD at 17; *see* Prop. 218 at 81-82, Prop. 219 at 79-80.

The TSD indicated that the CTG provides "exceptions for specified coatings or uses of those coatings that exempt them from either the VOM limits, the application methods, or both." TSD at 10; *see* CTG Miscellaneous Coatings at 30-31. The TSD attributed these exemptions "to these coatings requiring a higher VOM content in order to meet performance specifications." TSD at 10. The Agency indicated that these exemptions are reflected in its proposal. *Id.* at 10-11; *see*, *e.g.*, Prop 218 at 82 (subsection 218.219(c) exempting specified operations from application method limitations).

<u>Use of Low VOM Coatings and Add-On Controls.</u> The TSD noted that "[a]n affected source may also choose to combine the use of low-VOM coatings with add-on controls." TSD at 14 (§2.3.2); *see* Davis Test. at 2. This compliance option limits VOM emissions "in terms of mass of VOM emitted per volume of coatings solids applied." TSD at 14. The CTG intended this option "for use by facilities employing a combination of low-VOM coatings, specific application methods, and add-on controls. . . ." *Id.* The TSD listed "the equivalent VOM limits in terms of mass of VOM per volume of solids." TSD at 10, 14, 15-16 (Table 2.2); *see* CTG Miscellaneous Coatings at 36-37 (Table 7, 8). The CTG derived these limits from those based upon mass per volume of coating, "assuming a VOM density of 883 g/L." TSD at 14.

The CTG also recommended "one or more of the following application methods: electrostatic application, HVLP spray, flow coat, roller coat, dip coat (including electrodeposition), airless spray, air-assisted airless spray, or other coating application methods capable of achieving a transfer efficiency equivalent to or better than that achieved by HVLP spraying." TSD at 17; *see* Prop. 218 at 81-82, Prop. 219 at 79-80.

90% Capture and Control Efficiency. The TSD noted that, instead of using low-VOM coatings, "a source may opt to install and operate an add-on capture and control system that provides an overall control efficiency of at least 90%." TSD at 17 (§2.3.3); *see* Davis Test. at 2. Capture and control devices available to sources in this category "include oxidizers, absorbers, and adsorbers." SR at 9. The TSD expected this option to achieve VOM emissions reductions "that are equal to or greater than the limits" under the two preceding compliance options. TSD at 17. Under the Agency's proposal, sources complying through this option need not meet VOM content limits described above or employ recommended application methods. *Id*.

In testimony at the second hearing on behalf of the ACA, Mr. Halcomb noted that, unlike the automotive or aerospace industries, large pleasure craft are painted where they are built and not in controlled environments where it is possible to capture overspray. Tr.2 at 35.

He indicated that, in the pleasure craft industry, capture and control devices are not widely used. *Id.* at 36. He further indicated that "very few" yacht businesses in North America use such devices." *Id.*

<u>Work Practices.</u> In addition to VOM content and emission limits, the CTG recommended work practices for these operations. TSD at 19 (§2.5); *see* Davis Test. at 2. The CTG stated that "[t]he work practices address coating activities and cleaning activities, and are intended to further reduce VOM emissions from the source category." TSD at 19. The TSD indicated that "[t]he proposed regulation includes the recommended work practices from the CTG in their entirety." *Id.* Specifically, the CTG recommended work practices for coating-related activities including the following:

(1) store all VOM-containing coatings, thinners, and coating-related waste materials in closed containers; (2) ensure that mixing and storage containers used for VOM-containing coatings, thinners, and coating-related waste materials are kept closed at all times except when depositing or removing those materials; (3) minimize spills of VOM-containing coatings, thinners, and coating-related waste materials; and (4) convey VOM-containing coatings, thinners, and coating-related waste materials from one location to another in closed containers or pipes. *Id*.

The CTG also recommended work practices for cleaning materials including the following:

(1) store all VOM-containing cleaning materials and used shop towels in closed containers; (2) ensure that storage containers used for VOM-containing cleaning materials are kept closed at all times except when depositing or removing those materials; (3) minimize spills of VOM containing cleaning materials; (4) convey VOM-containing cleaning materials from one location to another in closed containers of pipes; and (5) minimize VOM emission from cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers. *Id*.

Automobile and Light-Duty Truck Assembly Coatings

The Agency stated that it relied on the CTG for this category "to determine the appropriate level of control and the feasibility of those measures." TSD at 25 (§3.3). The Agency further stated that the CTG intended "to provide recommendations for RACT control of the affected coating operations. . . ." *Id.* The Agency claimed that its proposed regulations in this category are consistent with the recommendations in the CTG. *Id.*

<u>Emission Limits.</u> The CTG recommended "VOM emission limits for coating operations; work practices for storage and handling of coatings, thinners, and waste materials; and work practices for handling and use of cleaning materials." TSD at 25; *see* SR at 9. The Agency argued that the CTG reflects "current practices that the USEPA considers to be RACT,

and were supplied to the USEPA by member and non-member companies of the Alliance of Automobile Manufacturers in 2008." TSD at 25, citing CTG Auto and Truck; *see* Davis Test. at 3.

The TSD reported that VOM limits for automobile and light-duty truck coatings are listed by assembly coating process operations: electrodeposition primer (EDP), primer-surfacer, topcoat, final repair, and combined primer-surfacer and topcoat. TSD at 26 (Table 3.1). For EDP operations, the VOM emission limit is based on the solids turnover ratio (R_T). That ratio "is defined as the ratio of total volume of coating solids that is added to the EDP system in a calendar month divided by the total design capacity of the EDP system." *Id.* The CTG also recommended limits "for a number of miscellaneous materials used in auto and light-duty truck assembly coating." *Id.* The following materials have a recommended VOM emission limit: glass bonding primer, adhesive, cavity wax, sealer, deadener, gasket/gasket sealing material, underbody coating, trunk interior coating, bed liner, weatherstrip adhesive, and lubricating wax/compound. *Id.* at 27 (Table 3.2).

Work Practices. In addition to VOM emission limits, the CTG recommended work practices for these operations. TSD at 28 (§3.5); *see* Davis Test. at 3. The CTG stated that the recommended practices "address coating activities and cleaning activities, and are intended to further reduce VOM emissions from the source category." TSD at 28. The TSD indicated that "[t]he proposed regulation includes the recommended work practices from the USEPA CTG in their entirety." *Id.* Specifically, the CTG recommended work practices for coating-related and cleaning activities including the following:

(1) store all VOM-containing coatings, thinners, and coating-related waste materials in closed containers; (2) ensure that mixing and storage containers used for VOM-containing coatings, thinners, and coating-related waste materials are kept closed at all times, except when depositing or removing these materials; (3) minimize spills of VOM-containing coatings, thinners, and coating-related waste materials; (4) convey VOM-containing coatings, thinners, and coating-related waste materials from one location to another in closed containers or pipes; and (5) minimize VOM emissions from cleaning of storage, mixing, and conveying equipment. *Id*.

The CTG also recommended development and implementation of "a work practice plan to ensure that VOM emissions are minimized from the following operations: vehicle body wiping; coating line purging; flushing of coating systems; cleaning of spray booth grates; cleaning of spray booth walls; cleaning of spray both equipment; cleaning external spray booth areas; and other housekeeping measures (*e.g.*, keeping solvent-laden rags in closed containers)." *Id.* The Agency stated that, if a source has in place a work practices plan pursuant to specified federal authority, then the proposed regulations do not require a new one. *Id.*, citing 72 Fed. Reg. 20227-37 (Apr. 24, 2007); *see* Prop. 218 at 80.

Miscellaneous Industrial Adhesives

The Agency stated that it relied on the CTG for this category "to determine the appropriate level of control and the feasibility of those measures." TSD at 31 (§4.3). The CTG based its recommendations in this category "upon rules currently in effect in California and the Ozone Transport Commission" jurisdictions. *Id.* at 32. The TSD stated that "USEPA believes these measures to be RACT, and the Illinois EPA concurs." *Id.*

<u>Emission Limits.</u> The TSD described pollution prevention and add-on control equipment as "[t]he two most common emission control techniques for reducing VOM emissions from miscellaneous industrial adhesives." TSD at 31.

[P]ollution prevention measures involve the use of lower VOM adhesives, higher solids content adhesives, higher efficiency application methods, and work practices to reduce waste and minimize emissions during cleaning operations. Add-on controls for capture and control of VOM emissions are systems similar to those used for a variety of processes that generate VOM emissions, and involve capture and oxidation or recovery. *Id.* at 31-32.

The TSD listed the VOM emission limits recommended in the CTG and incorporated into the Agency's proposal. *Id.* at 33 (Table 4.1). In his testimony on behalf of the Agency, Mr. Davis stated that the CTG "indicates that there are compliant products or feasible control options for compliance for each of the adhesive categories and processes regulated by the proposed amendments. Davis Test, at 3.

The Agency argued that, in order to provide sources with flexibility in complying, it followed the CTG in recommending three control options. *Id.* at 32. The first "involves the use of low VOM adhesives and adhesive primers." *Id.*; *see* Prop. 218 at 102-04, Prop. 219 at 101-03, Davis Test. at 3, SR at 9. The second relied on "use of a combination of low VOM adhesives and primers and add-on controls to achieve emissions equivalent to the VOM content limits of the first option." TSD at 32; *see* Prop. 218 at 104-06, Prop. 219 at 103-04, Davis Test. at 3. The third allowed a source to "employ add-on controls to achieve a control efficiency of 85% as an alternative to the prescribed emission limits of the first control option." TSD at 32; *see* Prop. 218 at 106, Prop. 219 at 104-05, Davis Test. at 3. The TSD stated that "[t]his 85% control efficiency criteria is expected to achieve emission reductions of VOM that are equal to or greater than the prescribed emission limits for the industrial adhesives." TSD at 32.

Application Method Limitations and Work Practice Requirements. The TSD indicated that, in addition to emission limits recommended by the CTG and incorporated into the proposal, the CTG also recommended work practices to reduce VOM emissions from this category. TSD at 34; *see* Davis Test. at 3. The Agency reported that its proposal includes these recommended practices "in their entirety." TSD at 35. Specifically, the CTG recommended the following work practices regarding adhesives:

(1) store all VOM-containing adhesives, adhesive primers, and process-related waste materials in closed containers; (2) ensure that mixing and storage containers used for VOM-containing adhesives, adhesive primers, and process-related waste materials are kept closed at all times, except when depositing or removing these materials; (3) minimize spills of VOM-containing adhesives, adhesive primers, and process-related waste materials; and (4) convey VOM-containing adhesives, adhesive primers, and process-related waste materials from one location to another in closed containers or pipes. *Id.* at 35.

The CTG also recommended the following work practices with regard to cleaning materials:

(1) store all VOM-containing cleaning materials and used shop towels in closed containers; (2) ensure that storage containers used for VOM-containing cleaning materials are kept closed at all times except when depositing or removing these materials; (3) minimize spills of VOM-containing cleaning materials; (4) convey VOM-containing cleaning materials from one location to another in closed containers or pipes; and (5) minimize VOM emission from cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers. *Id.* at 35.

Fiberglass Boat Manufacturing Materials

The TSD stated that the CTG recommends what it considers to be RACT for sources in the fiberglass boat manufacturing materials category. TSD at 37 (§5.2). The Agency stated that it concurs with USEPA's RACT determination for this category. TSD at 43 (§5.3). The Agency further stated that it "concurs with the determination that the recommendations of the CTG are technically feasible because these recommended control measures are merely based on controls currently in place at affected sources" as a result of a 2001 NESHAP. *Id.*; *see* Davis Test. at 4. In his pre-filed testimony on behalf of the Agency, Mr. Davis stated that "it should be noted that Illinois currently has no affected sources in the NAAs in Illinois, and therefore the limits could only be applied to new sources in this category in the future." Davis Test. at 4. The Agency also assumed "that any source that intended to commence operation of a source in this category in an Illinois non-attainment area would necessarily consider the proposed regulation in the planning of source operations, and that the proposed controls would be technically feasible for any new source." TSD at 43.

The TSD noted that control measures for this category "are intended to reduce emissions of monomer VOM." *Id.* The TSD indicated that "[s]tyrene and methyl methacrylate ("MMA") are the primary monomer VOMs used in gel coats and resins for the manufacture of fiberglass boats." *Id.* at 38. The Agency cited the CTG to state that

[a] monomer is a volatile organic compound that partially combines with itself, or other similar compounds, by a cross-linking reaction to become a part of the cured resin. A fraction of each monomer compound evaporates during resin and

gel coat application and curing. Not all of the styrene and MMA evaporate, because a majority of these compounds are bound in the cross-linking reaction between polymer molecules in the hardened resin or gel coat and become part of the finished product. *Id.* at 37-38, citing CTG Fiberglass Boat at 7.

The TSD stated that "[n]on-monomer VOM is generally less than 5% of a resin or gel coat formulation." TSD at 38. Although the Agency's proposal did not directly limit non-monomer VOM, "if a product is found to contain greater than 5% non-monomer VOM, the percentage exceeding 5% will be added to the monomer VOM content of a product of the purposes of compliance." *Id*.

The TSD noted that the CTG recommended and the Agency proposed three control options in order to provide sources with compliance flexibility. TSD at 37; *see* Davis Test. at 4. The TSD claimed that these options are similar to those for other categories, including low-VOM materials, add-on controls, an emissions averaging option, and recommended work practices. *Id.* at 37, 38; *see* SR at 9, Davis Test. at 4. The TSD further claimed that "[o]ther control options are specific to this category and include the use of vapor suppressed resins and gel coats, the use of non-atomizing resin application, and various closed molding operations." TSD at 38, citing CTG Fiberglass Boat; *see* SR at 9.

<u>Use of Low Monomer VOM Manufacturing Methods.</u> The TSD noted that the "CTG recommends a compliance option for sources using low monomer VOM resins and gel coats." TSD at 38 (§5.2.1); *see* Davis Test. at 4. The TSD indicated that "[a] source may meet the requirements by using low monomer VOM products that meet the emission limits given for each material used in a given operation, or the VOM content for all materials used on a covered operation that can be averaged on a weight-adjusted basis." TSD at 38, citing CTG Fiberglass Boat at 26-27. The TSD listed these VOM content limits, which are "based upon the material type and the application method used." TSD at 38; *see id.* at 39 (Table 5.1 Compliant Materials Monomer VOM Content Recommendations for Open Molding Resin and Gel Coat).

The TSD stated that the recommended VOM content limits "would be considered met if all materials of a certain type meet the applicable monomer VOM content limit for a specific application method on a weighted-average basis." TSD at 38. The TSD provided an Equation 1 sources use "to determine weighted-average monomer VOM content for a particular open molding resin or gel coat material." *Id.*, citing CTG Fiberglass Boat at 27. The TSD further provided that "[t]he weighted average monomer VOM content would be determined based on a 12-month rolling average." TSD at 38.

Emissions Averaging Option. The TSD noted that the CTG recommended a second compliance option, which averages "the monomer VOM emissions for all operations that a source chooses to include in an averaging group." TSD at 39; *see* Davis Test. at 4. The Agency indicated that operations outside the averaging group could meet VOM emission limits either through the use of low monomer VOM materials or through add-on controls. TSD at 39.

The TSD provided an Equation 2, which provided a source-specific monomer VOM limit for the operations a source includes in the averaging option. TSD at 39-40. The TSD stated that, "[a]fter a monomer VOM limit for a source's averaged operations has been determined using Equation 2, an emission average is determined on a 12 month rolling-average basis and calculated at the end of each month." *Id.* at 40.

The TSD also provided an Equation 3. *Id.* at 41. The TSD stated that, "[a]t the end of the first 12 month period, and at the end of each subsequent month, the monomer VOM emissions from the source's averaged operations are calculated, using Equation 3, to determine whether these emissions exceed the source's limit." *Id.* at 40. The TSD also provided an Equation 4. *Id.* at 41-42. For each operation averaged through Equation 3, Equation 4 calculates the weighted-average monomer VOM emission rate for the previous 12-month period for each open molding resin and gel coat operations included in the average. *Id.* at 41; *see* CTG Fiberglass Boat at 29-30. The TSD also provided a table listing formulas to use in calculating monomer VOM emission rates for resins and gel coats to use in Equation 4. TSD at 42 (Table 5.2 Monomer VOM Emission Rate Formulas for Open Molding Operations).

Add-On Controls. The TSD stated that, if an operation requires use of materials that do not meet VOM limits, "a source may opt to use add-on control equipment to reduce VOM emissions to below the limit determined by Equation 2." TSD at 42 (§5.2.3); *see id.* at 40 (Equation 2). The TSD provided that "[a] source would be considered to be compliant if measured emissions at the outlet of a control device were less than the applicable emission limit for that operation." *Id.* at 42-43; *see* Davis Test. at 4.

Work Practice Requirements. The TSD stated that the CTG "also recommends work practices for fiberglass boat manufacturing materials." TSD at 43; see Davis Test. at 4. The Agency's proposal included these recommendations "in their entirety." *Id.* at 44. The CTG addressed resin and gel coat mixing containers by recommending that "all containers with a capacity of 55 gallons or greater should have a cover with no visible gaps in place at all times. This does not apply to containers smaller than 55 gallons, or when material is being manually added or removed from a container" *Id.* at 43-44. The CTG also recommended "the use of low-VOM and low vapor pressure cleaning materials." *Id.* at 44. Specifically, the CTG recommended "that VOM cleaning solvents should contain no more than 5% VOM by weight, or have a composite vapor pressure of no more than 0.50 mm Hg at 68° F." *Id.*

Economic Reasonableness and Cost Effectiveness

Particularly in its Technical Support Document, the Agency addressed the economic reasonableness of various approaches to controlling VOM emissions from Group IV product categories. *See* TSD at 17-18, 27, 34, 43. The Agency determined that compliance with its proposal is economically reasonable. TSD at 4; *see* SR at 8. The Agency argued that "[a]ffected sources can meet the requirements in the proposed amendments through a number of readily available control techniques." SR at 8.

During the first hearing, the Board noted the Agency's statement that it "had relied on USEPA's cost estimates to evaluate the economic impact of the proposed regulations." Tr.1 at 36, citing TSD at 4. The Board asked the Agency to comment on whether it had "made any efforts to collect economic or VOM emissions reduction data from the sources impacted by the proposed regulations to compare the cost effectiveness of the USEPA's estimates." *Id.* at 36-37. The Agency responded that it had not done so. *Id.* at 37. When the Board asked whether potentially affected sources had taken issue with the economic information it had relied on, the Agency responded that it did not think that they had. *Id.* The Agency added that, "[i]n a few cases in these rules, a lot of these reductions have taken place because the CTG is catching up with NESHAP or catching up with industrial norms." *Id.* The Agency opined that both projected costs and projected emission reductions may be high because affected facilities may already be complying with the proposed requirements. *Id.* at 37-38.

In the subsections below, the Board addresses the record on the issue of the economic reasonableness of proposed control techniques.

Miscellaneous Metal and Plastic Parts Coatings

The Agency stated that it "relied upon the cost analysis conducted by the USEPA for the CTGs for miscellaneous metal and plastic parts coatings to determine that the proposed regulations are cost effective." TSD at 17 (§2.4). The TSD first noted that USEPA used the 2002 National Emissions Inventory database to estimate that there are 1,269 facilities in the ozone nonattainment areas nationwide emitting at or above the recommended 15 pounds per day applicability threshold. TSD at 18. These 1,269 facilities emitted an estimated total of 22,108 tons of VOM per year. *Id.* "The USEPA also estimated the average cost of compliance with the CTGs for this emission category to be \$10,500 per source, and a cost effectiveness of \$1,758 per ton of VOM reduced." *Id.*, citing CTG Miscellaneous Coatings at 39-40; *see* Davis Test. at 4. In his pre-filed testimony on behalf of the Agency, Mr. Davis stated that "[a]nalysis conducted by the USEPA for the CTG for this source category indicates that there are compliant products or feasible control options for compliance. . . ." Davis Test. at 2. Based on USEPA estimates, the TSD projected that each affected source on average would reduce VOM emissions by 5.97 tons annually, with "an estimated reduction of 662 tons of VOM in Illinois NAAs." TSD at 18.

The TSD further noted that, of the 1,269 potentially affected sources nationwide, 155 are situated in Illinois nonattainment areas, and 111 of those "remained in operation in 2007." TSD at 18. Although the TSD noted that "the source emission data is generally not specific enough to determine whether a source is emitting 15 pounds of VOM per day specifically from miscellaneous metal and plastic parts coatings," the Agency conservatively included all 111 potentially affected sources in its cost estimate. *Id.* Based on USEPA's \$10,500 per source average cost of compliance, the Agency expected statewide compliance costs to be approximately \$1,165,500. *Id.*; *see* David Test. at 4. Although the Agency believes that this amount "is almost certainly an over-estimate of potential costs," it accepted USEPA's estimated cost effectiveness of \$1,758 per ton as "reasonable for control of VOM." TSD at 18.

Automobile and Light-Duty Truck Assembly Coatings

The TSD noted that, in this source category, "[a]ffected sources have reduced VOM emissions from coating operations in response to the New Source Performance Standards ("NSPS"), the 2004 NESHAP for this category, and various State rules." TSD at 27, citing 72 Fed. Reg. 20227-37 (Apr. 24, 2007) (NESHAP); see Davis Test. at 5. The TSD indicated that the CTG's recommendations "were derived from information supplied to the USEPA by the Alliance of Automobile Manufacturers, and reflect measures currently being implemented at affected sources." TSD at 27; see Davis Test. at 3. In addition, the TSD projected "that the additional work practices recommended in the CTG will result in a net cost savings to sources, as implementing these work practices reduces the amount of coating and cleaning materials used." TSD at 27; see Davis Test. at 5. Accordingly, the TSD stated that "[t]he USEPA estimates that there will be no additional cost for implementation of the control techniques guidelines for auto and light-duty truck assembly coating." TSD at 27; see Davis Test. at 5.

Miscellaneous Industrial Adhesives

The Agency stated that it "relied upon the cost analysis conducted by the USEPA for the CTGs for the miscellaneous industrial adhesives and determined that the proposed regulations are cost effective." TSD at 34 (§4.4). The TSD first noted that USEPA used the 2002 National Emissions Inventory database to estimate that there are 180 sources in the ozone nonattainment areas nationwide emitting at or above the recommended 15 pounds per day applicability threshold, 12 of which are in Illinois. *Id.* Those 180 sources emit an estimated 4,881 tons of VOM per year. *Id.*

The TSD reported that, in order to develop cost estimates, USEPA relied upon a 1993 study performed by the Ventura County Air Pollution Control District. TSD at 34. That study assumed that sources would comply through VOM limits rather than add-on controls, "because sources in currently regulated areas have already implemented the use of these low VOM adhesives, and the reformulated products should be readily available today." *Id.*; *see* Davis Test. at 3. The study estimated that each affected sources would annually spend approximately \$3,356 in 1997 dollars to comply with the proposed regulations. TSD at 34; *see* Davis Test. at 5. The TSD reported that USEPA thus "estimated the cost effectiveness on a per ton basis of \$265 per ton of VOM reduced." TSD at 34; *see* Davis Test. at 5. The Agency estimated that, with 12 affected sources in Illinois, "the total cost statewide for the proposed regulations will be approximately \$40,272 annually." *Id.* The Agency considered "these figures for cost effectiveness and total statewide cost to be reasonable for control of VOM." *Id.*; *see* Davis Test. at 5.

Fiberglass Boat Manufacturing Materials

The TSD stated that, "[b]ecause there are currently no sources in Illinois that will be affected by the proposed regulation of this source category, there will be no associated economic impact for sources in Illinois." TSD at 43 (§5.4); *see* Davis Test. at 5. The TSD cited the CTG to add that "USEPA expects sources in this category will incur little if any increased costs due to

the control recommendations." TSD at 43; *see* Davis Test. at 5. The Agency concurred "with the USEPA determination of the economic reasonableness of the measures." *Id.*

During the first hearing, the Board asked the Agency "whether fiberglass boat manufacturing facilities subject to the proposed rules would also be subject to the additional state VOM requirements like the 8-pound-per-hour rule?" Tr.1 at 35; *see* 35 Ill. Adm. Code 215.301 (Use of Organic Material). The Agency responded that "[s]ources subject to the Illinois EPA's proposal regarding fiberglass boat manufacturing materials are also subject to all other applicable state VOM requirements, including the 8 lb/hour rule." PC 1 at 2 (¶6).

Also during the first hearing, the Board asked the Agency to "comment on whether additional state requirements could deter any new facilities from being constructed in Illinois non-attainment areas." Tr.1 at 36. The Board also sought Agency "comment on the merits of exempting fiberglass boat manufacturing facilities complying with the proposed regulations from additional state VOM control requirements like the 8-pound-per-hour rule." *Id.* The Agency first responded that it did not recommend exempting sources subject to its proposal from other state requirements. PC 1 at 2 (¶7). The Agency indicated that a NESHAP already regulates those sources located inside and outside Illinois NAAs. *Id.* The Agency argued that its proposal is based largely upon this NESHAP and generally reflects current industry practices. *Id.* The Agency claimed that, "while the 8 lb/hr rules may deter new sources from operating in Illinois in general, exempting sources in the NAAs alone from the 8 lb/hr rules would incentivize sources to operate within the NAAs, and put attainment area sources (which would still be required to comply with both the NESHAP and the 8 lb/hr rule) at a disadvantage." *Id.*

The Agency further indicated that is "is aware of two fiberglass molding operations located in Illinois attainment areas that currently operate with adjusted standards." PC 1 at 2 (¶7); see 415 ILCS 5/28.1 (2008) (Adjusted standards in rules of general applicability). The Agency claimed that "[o]btaining an adjusted standard would also be an option for a new source located in an Illinois NAA, and would be considered by the Agency and the Board on a case by case basis." PC 1 at 2 (¶7). The Agency stated that, in the meantime, it "does not recommend exempting a source operating in a NAA from the 8 lb/hr rule based solely on theoretical difficulties the source may or may not face in complying with such rule." *Id.* at 2-3.

Summary of Technical Feasibility and Economic Reasonableness

In a letter dated March 18, 2010, the Board requested that DCEO conduct an economic impact study of the Agency's rulemaking proposal. *See* 415 ILCS 5/27(b) (2008). In a response dated April 1, 2010, and received by the Board on April 7, 2010, DCEO Director Warren Ribley stated in pertinent part that, "[a]t this time, the Department is unable to undertake such an economic impact study. Therefore, I must respectfully decline your request." Although the hearing officer during the first hearing sought testimony "regarding either the request from the Board or the response to that request from DCEO," no participant offered such testimony. Tr.1 at 51.

In his testimony on behalf of the Agency, Mr. Davis indicated that, with regard to feasibility and reasonableness, the Agency "relied heavily on the analysis of the USEPA that was conducted for the purposes of the CTGs for these source categories." Davis Test. at 6; *see id.* at 2, 4. He further indicated that the Agency "generally concurs" with USEPA's recommendations. *Id.* Mr. Davis claimed that the proposed "amendments are both technically feasible and economically reasonable." *Id.* at 2; *see* TSD at 4, SR at 8. On the issue of economic reasonableness, he stated that "the economic impact that the proposed amendments will have on affected sources is reasonable for achieving RACT control of VOM, and cost effective on a per ton basis for control of VOM in the Illinois ozone non-attainment areas." Davis Test. at 6; *see* TSD at 17-18, 27, 34, 43.

Regarding technical considerations, he stated that "the proposed VOM limits for the four source categories affected are feasible, and that it most cases flexibility in compliance options has been provided." Davis Test. at 6; *see* SR at 8-9; TSD at 9-17, 25-27, 31-33, 43. He claimed that "[i]n many cases the limits proposed have been in place in other regions of the U.S. for a number of years." Davis Test. at 5. He added that, "[i]n other cases, such as for automobile and light duty truck assembly coatings and fiberglass boat manufacturing material, the proposed limits are in line with what USEPA considers to be current industry standards for the source categories." *Id*.

During the course of this proceeding, the Agency moved to amend its proposal. *See* Mot. Amend. The Board granted that motion, adopting amendments including, but not limited to, entirely new categories of coatings and corresponding VOM content limits for them. *See id.* at 5-8. The Board notes that Agency proposed these amendments specifically in response to testimony of and information supplied by regulated entities. *See id.* at 5, 7. In addition, the Agency's post-hearing comments recommended additional amendments for the Board's consideration. These recommendations include, but are not limited to, a one-year extension of the compliance deadline and an emissions averaging alternative for pleasure craft coating operations. *See id.* at 2, 6-21. Again, the Board notes that these recommendations stem from a request at hearing and from testimony by a regulated entity. *See id.* at 2, 6-7. In addition, the Board observes that the comments of other participants lend support to the Agency's recommendations. *See, e.g.*, PC 2 at 2-6, PC 3 at 2, 4-6, PC 5 at 2-3. In all significant respects, those recommendations are reflected in the Board's order below.

Having reviewed the record in this proceeding, and particularly in light of amendments such as those described in the preceding paragraph, the Board finds as it did in procedding to second notice that the proposed regulations, amended according to the Agency's motion to amend and recommendations in post-hearing comments, are economically reasonable and technically feasible. Consequently, the Board proceeds to final adoption of the regulations. In the following section of its opinion, the Board summarizes the adopted regulations on a section-by-section basis.

SUMMARY OF ADOPTED REGULATIONS

Part 211: Definitions and General Provisions

Subpart A: General Provisions

<u>Section 211.101 Incorporations by Reference</u>. Existing Section 211.201 incorporates by reference a number of materials. 35 Ill. Adm. Code 211.201. The Board incorporates by reference five additional sets of materials, as new definitions adopted in Subpart B refer to them. SR at 11; *see* Prop. 211 at 14-15; *see also* Prop. 211 at 18-39 (proposing new and amended definitions).

In a question during the first hearing, the Board noted that the Agency's proposal sought to incorporate two specifications by the American Architectural Manufacturers Association (AAMA). Tr.1 at 38; *see* Prop. 211 at 15. The Board asked the Agency to supplement its proposal with the address or contact information for the AAMA "for the benefit of any interested party who would wish to get a copy of the specifications." Tr.1 at 38, citing 5 ILCS 100/5-75(a) (2008). The Agency responded that "[t]he AAMA's address is 1827 Walden Office Square, Suite 550, Schaumburg, IL 60173-4268." PC 1 at 3 (¶8). The Board's order below includes this supplemental information.

<u>Section 211.102 Abbreviations and Conversion Factors.</u> Existing Section 211.102 provides abbreviations and conversion factors used in Part 211. 35 Ill. Adm. Code 211.102. The Board adds abbreviations for five new terms, as proposed new definitions in Subpart B employ those abbreviations. SR at 11; *see* Prop. 211 at 15-17; *see also* Prop. 211 at 18-39 (proposing new and amended definitions).

Subpart B: Definitions

Section 211.200 Acrylonite-Butadiene-Styrene (ABS) Welding. The Board adopts a Section 211.200 defining "Acrylonite-Butadiene-Styrene (ABS) Welding," as the definition is necessitated by the addition of Subpart JJ to Parts 218 and 219. SR at 11; *see* Prop. 218 at 101-13, Prop. 219 at 99-112. The Agency's originally proposed definition provided in its entirety that "[a]crylonite butadiene styrene (ABS) welding' means, for purposes of Subpart JJ of Parts 218 and 219, any process to weld acrylonite-butadiene-styrene pipe." Prop. 211 at 18.

In a question during the first hearing, the Board noted that, in this section, "the heading uses hyphenation to link the three terms that are part of the definition. Yet the substance in the definition and the text of the definition does not do so." Tr.1 at 39. The Board requested that Agency address that inconsistency. *Id.* In its motion to amend, the Agency acknowledged the Board's request and recommended "amending Section 211.200 to make the title of the Section consistent with the definition" by adding hyphenation to the text. Mot. Amend at 4 (\P 4). The Board has granted the motion, and the adopted regulations below reflect this amendment.

Section 211.233 Adhesion Primer. The Board adds a Section 211.233 defining "adhesion primer," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 11; *see* Prop. 218 at 28-82, Prop. 219 at 29-80. The adopted definition provides in its entirety that "'[a]dhesion primer' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, a coating that is applied to a polyolefin part to promote the adhesion of a subsequent coating. An adhesion primer should be clearly identified as an adhesion primer or adhesion promoter on its accompanying material safety data sheet." Prop. 211 at 18.

Section 211.235 Adhesive Primer. The Board adds a Section 211.235 defining "adhesive primer," as the definition is necessitated by the addition of Subpart JJ to Parts 218 and 219. SR at 11; *see* Prop. 218 at 101-13, Prop. 219 at 99-112. The adopted definition provides in its entirety that "[a]dhesive primer' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, any product applied to a substrate, prior to the application of an adhesive, to provide a bonding surface." Prop. 211 at 18.

Section 211.260 Aerosol Adhesive and Adhesive Primer. The Board adds a Section 211.260 defining "aerosol adhesive and adhesive primer," as the definition is necessitated by the addition of Subpart JJ to Parts 218 and 219. SR at 12; see Prop. 218 at 101-13, Prop. 219 at 99-112. The adopted definition provides in its entirety that "'[a]erosol adhesive and adhesive primer' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, an adhesive or adhesive primer packaged as an aerosol product in which the spray mechanism is permanently housed in a non-refillable can designed for handheld application without the need for ancillary hoses or spray equipment." Prop. 211 at 18.

Section 211.481 Ammunition Sealant. In testimony pre-filed for the second hearing on May 7, 2010, Olin stated that its Winchester Division in East Alton "manufactures small arms ammunition and ammunition components for military, law enforcement and commercial customers worldwide." Olin Test. at 1. Olin further stated that, in its manufacturing processes, "Olin uses sealants containing volatile organic materials ("VOM") to assure that the ammunition will perform safely and effectively. . . ." *Id.* at 1-2. Olin indicated that emissions of VOM from its sealant operations are subject to an air permit with requirements based upon Subparts F and TT of Part 219. *Id.* at 2; *see* 35 Ill. Adm. Code 219.204-219.217, 219.980-219.288. Olin argued that, if the proposed definition of the term "military specification coating" includes ammunition, "then many of the sealants used by Olin may fall under this new definition and, thus, be subject to the limits in this category." *Id.* at 3. Olin further argued that it is not technically feasible to comply with the proposed limits and also meet military requirements for many of its sealants. *Id.*

In post-hearing comments filed on May 17, 2010, the Agency responded that it "does not intend 'military specification coating' to include these sealants." PC 1 at 1 (¶4); see Tr.1 at 29. The Agency stated that "[p]rimer sealants used in ammunition manufacturing are currently regulated under Subpart TT of Parts 218 and 219, and the Agency intends that they continue to be regulated as such. Mouth waterproofing sealants and cap sealants used in ammunition manufacturing are currently regulated as clear coatings or extreme performance coatings under Section 218/219.204(j)." *Id* at 1-2.

In its motion to amend its proposal also filed on May 17, 2010, the Agency stated that,

[b]ased on discussions with a representative of Olin, and on information contained in Olin's testimony regarding the unique circumstances surrounding coatings/sealants used in ammunition manufacturing, the Agency recommends adding a separate coatings category to Part 218/219.204(q)(1) for Ammunition Sealants. The Agency also recommends adding several definitions to Part 211 to define terms relevant to ammunition sealants. . . . Mot. Amend at 5.

Among those definitions, the Agency proposed to provide that "[a]mmunition sealant' means, for purposes of 35 Ill. Adm. Code Parts 218.204(q)(1) and 219.204(q)(1), a coating applied in the manufacture of ammunition, including cap sealants and mouth waterproofing sealants. Primer sealants and ejection cartridge sealants are not included within this category." *Id*.

In its post-hearing comments, Olin noted that the Agency had proposed to add this definition and expressed its support for the Agency's motion to amend. PC 2 at 2. Olin stated that, while the motion addressed concerns regarding cap sealants and mouth waterproofing sealants, it "still has concerns with the feasibility of the proposed limits as they may relate to Ejection Cartridge Sealants and Primer Sealants." *Id.* at 3. Olin argued that, "without additional changes to the proposed rule, if Ejection Cartridge Sealants and Primer Sealants are classified as coatings they could be subject to either the "Military Specification Coating" limitations . . . or the "All Other Coatings" limitation. . . ." PC 2 at 3.

Olin stated that, after the second hearing, it continued to discuss issues pertaining to ejection cartridge sealants and primer sealants with the Agency. PC 2 at 3. Olin reports that, as a result of those discussions, the Agency agreed to propose additional changes to three definitions, including this one. *Id.* Specifically, Olin expected the Agency to amend this definition to provide that "[a]mmunition sealant means, for purposes of 35 Ill. Adm. Code 218.204(q)(1) and 219.204(q)(1), a coating applied in the manufacture of ammunition, including cap sealants and mouth waterproofing sealants. Primer sealants and ejection cartridge sealants are not include within this category." *Id.* Olin states that it supports this proposed amendment and that incorporating the change "would resolve the potential issues Olin had with the Ejection Cartridge Sealants and Primer Sealants." *Id.* at 4.

In its post-hearing comments, the Agency proposed to amend this definition in this manner. PC 3 at 5. Having reviewed the record, the Board adopts the definition proposed by Olin and the Agency, which is reflected in the order below.

Section 211.492 Antifoulant Coating. The Board adds a Section 211.492 defining "antifoulant coating," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 12; *see* Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that

'[a]ntifoulant coating' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, any coating applied to the underwater portion of a pleasure craft to prevent or reduce the attachment of biological organisms, and registered with the United States Environmental Protection Agency as a pesticide under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. Section 136), incorporated by reference in Section 211.101 of this Part. Prop. 211 at 18; *see id.* at 14-15 (Incorporations by Reference).

Section 211.540 Architectural Structure. The Board adds a Section 211.540 defining "architectural structure," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 12; *see* Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that "'[a]rchitectural structure' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, a free-standing, immobile outdoor construction, which may be permanent or temporary, including but not limited to buildings, bridges, dams, and electricity pylons." Prop. 211 at 18-19.

Section 211.715 Bedliner. The Board adds a Section 211.715 defining "bedliner," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 12; see Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that "[b]edliner' means, for purposes of 35 III. Adm. Code Parts 218 and 219, a multi-component coating applied to a cargo bed after the application of topcoat and outside of the topcoat operation to provide additional durability and chip resistance." Prop. 211 at 19.

In a question during the first hearing, the Board asked whether the Agency's proposed language should refer specifically to the cargo bed of an automobile or a light-duty truck. Tr. 1 at 39. The Agency responded that "[t]he CTG for Miscellaneous Automobile and Light-Duty Truck Assembly Coatings and the CTG for Miscellaneous Metal and Plastic Parts Coatings both contain a similar definition for 'bedliner.'" PC 1 at 3 (¶9). The Agency continued that

[t]he only difference is that the automobile/light-duty truck definition applies at facilities that manufacture automobiles and light-duty trucks. The miscellaneous metal and plastic parts definition applies at all other facilities. Consequently, the Agency does not recommend restricting the definition of 'bedliner' to automobile and light-duty truck facilities. *Id*.

Having reviewed the substance of the Agency's comment, the Board declined to amend the definition originally proposed by the Agency.

<u>Section 211.735 Black Coating.</u> The Board adds a Section 211.735 defining "black coating," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 12; *see* Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that

'black coating' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, a coating which meets both of the following criteria, based on Cielab color space, 0/45 geometry:

- a) Maximum lightness of 23 units. For spherical geometry, specular included, maximum lightness of 33 units; and
- b) Saturation of less than 2.8, where saturation equals the square root of $A^2 + B^2$. Prop. 211 at 19.

Addressing another definition, the Agency stated that "CIE stands for *Comission Internationale de l'Eclairage* (International Commission on Illumination). It is an independent international board that sets various lighting standards. 'CIELAB' is one of two systems adopted by CIE in 1976 as models that show uniform color spacing in their values." PC at 3 (¶10) (addressing proposed new Section 211.5400).

<u>Section 211.820 Business Machines Plastic Parts.</u> The existing definition of "business machine plastic parts" provides that the term

means the plastic housings and other exterior plastic components of electronic office equipment and of medical and musical equipment, including, but not limited to the following: computers, monitors, printers and keyboards, facsimile machines, copiers, microfiche readers, cellular and standard phones, and pencil sharpeners. This definition excludes internal electrical components of business machines. 35 Ill. Adm. Code 211.820; *see* Prop. 211 at 19.

The Board amends Section 211.820, as amendment is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 12; *see* Prop. 218 at 28-82, Prop. 219 at 29-80. The Agency originally proposed to re-designate the entire existing definition as subsection (a) and provide that it applies "[p]rior to May 1, 2011." Prop. 211 at 19. In post-hearing comments filed on June 4, 2010, the Agency noted a request at the second hearing "that the Agency provide additional time for sources to comply with the proposal." PC 3 at 2. The Agency recommended "extending the compliance deadline one year from May 1, 2011, to May 1, 2012." *Id.* Having reviewed the record in this proceeding, the Board concurred with the Agency's recommendation, and the extension is reflected in the order below.

The Agency also originally proposed to add a subsection (b) providing in its entirety that the term means,

[o]n and after May 1, 2011, a device that uses electronic or mechanical methods to process information, perform calculations, print or copy information, or convert sound into electrical impulses for transmission, including devices listed in standard industrial classification numbers 3572, 3573, 3574, 3579, and 3661, and photocopy machines, a subcategory of standard industrial classification number 3861. *Id*.

As noted above, the Board has concurred in extending the compliance deadline to May 1, 2012, and the extension is reflected in the adoption of subsection (b) in the order below.

Section 211.825 Camouflage Coating. The Board adds a Section 211.825 defining "camouflage coating," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 12; *see* Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that "[c]amouflage coating' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, a coating used, principally by the military, to conceal equipment from detection." Prop. 211 at 20.

Section 211.880 Cap Sealant. In testimony pre-filed on May 7, 2010, for the second hearing, Olin stated that its Winchester Division in East Alton "manufactures small arms ammunition and ammunition components for military, law enforcement and commercial customers worldwide." Olin Test. at 1. Olin further stated that, in its manufacturing processes, "Olin uses sealants containing volatile organic materials ("VOM") to assure that the ammunition will perform safely and effectively. . . ." *Id.* at 1-2. Olin stated that its emissions of VOM are subject to an air permit with requirements based upon Subparts F and TT of Part 219. *Id.* at 2; *see* 35 Ill. Adm. Code 219.204-219.217, 219.980-219.288. Olin argued that, if the proposed term "military specification coating" includes ammunition, "then many of the sealants used by Olin may fall under this new definition and, thus, be subject to the limits in this category." *Id.* at 3. Olin further argued that it is not technically feasible to comply with the proposed limits and also meet military requirements for many of its sealants. *Id.*

Olin's pre-filed testimony illustrated cartridge assembly and sealant operations. Olin Test. at 7-8. Olin described cap sealant as the material "applied to the seal the annular crevice between the primer and shellcase after the primer has been inserted into the empty shellcase in order to assure that the ammunition will perform safely and effectively under extreme weather conditions and other extreme atmospheric and environmental conditions." *Id.* Olin claimed that "[r]eformulation of the Cap Sealants to meet current restrictions relied heavily upon the use of acetone (a non-VOM)." *Id.* at 9. Olin argued that "[f]urther substitution of acetone would require additional testing and approvals because of the affect that acetone has on drying time and moisture content." *Id.*

Olin indicated that, if feasible, the process of reformulation to comply with the proposed VOM limits would take 3 to 4 years. Olin Test. at 11; *see id.* at 6. Olin further indicated that, if reformulation is not feasible, estimates from its last reformulation suggest that "it would take at least 34 months to install appropriate control equipment." *Id.* at 7. As a suggested resolution of its issues, Olin proposed "[t]hat the military specification coating definition in proposed 35 Ill. Adm. Code 211.3785 be amended to exclude ammunition sealants." *Id.* at 11.

In post-hearing comments filed on May 17, 2010, the Agency responded that it "does not intend 'military specification coating' to include these sealants." PC 1 at 1 (¶4); see Tr.1 at 29. The Agency stated that "cap sealants used in ammunition manufacturing are currently regulated as clear coatings or extreme performance coatings under Section 218/219.204(j)." *Id* at 1-2.

In the motion to amend its proposal also filed on May 17, 2010, the Agency stated that,

[b]ased on discussions with a representative of Olin, and on information contained in Olin's testimony regarding the unique circumstances surrounding coatings/sealants used in ammunition manufacturing, the Agency recommends adding a separate coatings category to Part 218/219.204(q)(1) for Ammunition Sealants. The Agency also recommends adding several definitions to Part 211 to define terms relevant to ammunition sealants. . . . Mot. Amend at 5.

Among those several definitions, the Agency proposed that "[c]ap sealant means, for purposes of 35 Ill. Adm. Code 218.204(q)(1) and 219.204(q)(1), a coating applied in the manufacture of ammunition to seal the annular crevice between a primer cap and a shellcase." *Id.* at 6. Testifying on behalf of Olin at the second hearing, Mr. Sutton stated that the motion to amend "addresses our concerns on the cap sealant. . . ." Tr.2 at 8-9; *see also* PC 2 at 3. Addressing the Agency's motion to amend in its post-hearing comments, Olin stated that the proposed amendments "conform the proposed rule to the Agency's intent that Cap Sealants and Mouth Waterproofing Sealants continue to be subject to their current limits." PC 2 at 3.

Having granted the Agency's motion to amend above under "Preliminary Matter," the Board includes the definition in its order below.

Section 211.954 Cavity Wax. The Board adds a Section 211.954 defining "cavity wax," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 12-13; see Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that "'[c]avity wax' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, a coating applied into the cavities of the vehicle primarily for the purpose of enhancing corrosion protection." Prop. 211 at 20.

Section 211.965 Ceramic Tile Installation Adhesive. The Board adds a Section 211.965 defining "ceramic tile installation adhesive," as the definition is necessitated by the addition of Subpart JJ to Parts 218 and 219. SR at 13; *see* Prop. 218 at 101-13, Prop. 219 at 99-112. The definition provides in its entirety that "[c]eramic tile installation adhesive' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, any adhesive used in the installation of ceramic tiles." Prop. 211 at 20.

<u>Section 211.1128 Closed Molding.</u> The Board adds a Section 211.1128 defining "closed molding," as the definition is necessitated by the addition of Subpart II to Parts 218 and 219. SR at 13; *see* Prop. 218 at 82-101, Prop. 219 at 80-99. The definition provides in its entirety that

'[c]losed molding' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, any molding process in which pressure is used to distribute the resin through reinforcing fabric placed between two mold surfaces to either saturate the fabric or fill the mold cavity. The pressure may be clamping pressure, fluid pressure, atmospheric pressure, or vacuum pressure used either alone or in combination. The mold surfaces may be rigid or flexible. Closed molding includes, but is not

limited to, compression molding with sheet molding compound, infusion molding, resin injection molding, vacuum assisted resin transfer molding, resin transfer molding, and vacuum assisted compression molding. Processes in which a closed mold is used only to compact saturated fabric or remove air or excess resin from the fabric (such as in vacuum bagging), are not considered closed molding. Open molding steps, such as application of a gel coat or skin coat layer by conventional open molding prior to a closed molding process, are also not closed molding. Prop. 211 at 20.

<u>Section 211.1455 Contact Adhesive.</u> The Board adds a Section 211.1455 defining "contact adhesive," as the definition is necessitated by the addition of Subpart JJ to Parts 218 and 219. SR at 13; *see* Prop. 218 at 101-13, Prop. 219 at 99-112. The definition provides in its entirety that

'[c]ontact adhesive' means, for purposes of 35 III. Adm. Code Parts 218 and 219, an adhesive that meets the criteria below. 'Contact adhesive' does not include rubber cements that are primarily intended for use on paper substrates or vulcanizing fluids that are designed and labeled for tire repair only.

- a) The adhesive is designed for application to both surfaces to be bonded together;
- b) The adhesive is allowed to dry before the two surfaces are placed in contact with each other;
- c) The adhesive forms an immediate bond that is impossible, or difficult, to reposition after both adhesive-coated surfaces are placed in contact with each other; and
- d) The adhesive does not need sustained pressure or clamping of surfaces after the adhesive coated surfaces have been brought together using sufficient momentary pressure to establish full contact between both surfaces. Prop. 211 at 20-21.

Section 211.1560 Cove Base. The Board adds a Section 211.1560 defining "cove base," as the definition is necessitated by the addition of Subpart JJ to Parts 218 and 219. SR at 13; see Prop. 218 at 101-13, Prop. 219 at 99-112. The definition provides in its entirety that "[c]ove base' means, for purposes of Subpart JJ of Parts 218 and 219, a floor trimming unit, generally made of vinyl or rubber, having a concave radius on one edge and a convex radius on the opposite edge that is used in forming a junction between the bottom wall course and the floor or to form an inside corner.." Prop. 211 at 21.

<u>Section 211.1565 Cove Base Installation Adhesive.</u> The Board adds a Section 211.1565 defining "cove base installation adhesive," as the definition is necessitated by the addition of Subpart JJ to Parts 218 and 219. SR at 13; *see* Prop. 218 at 101-13, Prop. 219 at 99-

112. The definition provides in its entirety that "'[c]ove base installation adhesive' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, any adhesive used for the installation of cove base or wall base on a wall or vertical surface at floor level." Prop. 211 at 21.

Section 211.1655 Cyanoacrylate Adhesive. The Board adds a Section 211.1655 defining "cyanoacrylate adhesive," as the definition is necessitated by the addition of Subpart JJ to Parts 218 and 219. SR at 13; *see* Prop. 218 at 101-13, Prop. 219 at 99-112. The definition provides in its entirety that "'[c]yanoacrylate adhesive' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, any adhesive with a cyanoacrylate content of at least 95 percent by weight." Prop. 211 at 21.

<u>Section 211.1700 Deadener.</u> The Board adds a Section 211.1700 defining "deadener," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 13; *see* Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that "'[d]eadener' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, a coating applied to selected vehicle surfaces primarily for the purpose of reducing the sound of road noise in the passenger compartment." Prop. 211 at 21.

Section 211.1872 Ejection Cartridge Sealant. In testimony pre-filed on May 7, 2010, for the second hearing, Olin stated that its Winchester Division in East Alton "manufactures small arms ammunition and ammunition components for military, law enforcement and commercial customers worldwide." Olin Test. at 1. Olin further stated that, in its manufacturing processes, "Olin uses sealants containing volatile organic materials ("VOM") to assure that the ammunition will perform safely and effectively. . . ." *Id.* at 1-2. Olin stated that its emissions of VOM from its sealant operations are subject to an air permit with requirements based upon Subparts F and TT of Part 219. *Id.* at 2; *see* 35 Ill. Adm. Code 219.204-219.217, 219.980-219.288. Olin argued that, if the proposed term "military specification coating" includes ammunition, "then many of the sealants used by Olin may fall under this new definition and, thus, be subject to the limits in this category." *Id.* at 3. Olin further argued that it is not technically feasible to comply with the proposed limits and also meet military requirements for many of its sealants. *Id.*

Olin's pre-filed testimony illustrated cartridge assembly and sealant operations. Olin Test. at 7-8. Olin described ejection cartridge sealant as the material "used to provide a waterproof barrier in the assembly of an Ejection Cartridge that is used in military applications in order to assure that the ejection cartridge will perform safely and effectively under extreme weather conditions and other extreme atmospheric and environmental conditions." *Id.* at 8. Olin argued that, if "ejection cartridge sealant operations are included in either the proposed Military Specification Coating or Other Coatings classification, continuing these manufacturing operations may not be technically or economically feasible." *Id.* at 10

Olin indicated that, if feasible, the process of reformulation to comply with the proposed VOM limits would take 3 to 4 years. *Id.* at 11; *see id.* at 6. Olin further indicated that, if reformulation is not feasible, estimates from its last reformulation suggest that "it would take at least 34 months to install appropriate control equipment." *Id.* at 7. As a suggested resolution of

its issues, Olin proposed "[t]hat the military specification coating definition in proposed 35 Ill. Adm. Code 211.3785 be amended to exclude ammunition sealants." *Id.* at 11. Olin also proposed that "the ejection cartridge sealants used in the manufacture of ejection cartridges not be subject to the proposed coating regulations and that they continue to be regulated under 35 Ill. Adm. Code 219, Subpart TT." *Id.* at 11-12.

In post-hearing comments filed on May 17, 2010, the Agency responded that it "does not intend 'military specification coating' to include these sealants." PC 1 at 1 (¶4); see Tr.1 at 29. In the motion to amend its proposal also filed on May 17, 2010, the Agency stated that,

[b]ased on discussions with a representative of Olin, and on information contained in Olin's testimony regarding the unique circumstances surrounding coatings/sealants used in ammunition manufacturing, the Agency recommends adding a separate coatings category to Part 218/219.204(q)(1) for Ammunition Sealants. The Agency also recommends adding several definitions to Part 211 to define terms relevant to ammunition sealants. . . . Mot. Amend at 5.

Among those several definitions, the Agency proposed that "[e]jection cartridge sealant means, for purposes of 35 Ill. Adm. Code 218.204(q)(1) and 219.204(q)(1), a sealant applied during the assembly of an ejection cartridge to provide a waterproof barrier between a shellcase and primer, and between a shellcase and nitrocelluslose wad.." *Id.* at 6.

During the second hearing, Mr. Sutton expressed the belief that the Agency intended to regulate ejection cartridge sealants under Subpart TT. Tr.2 at 9; see PC 1 at 1-2 (¶4). However, he indicated that Olin did not "feel that the amended regulation completely addresses those concerns that we had for the ejection cartridge sealants and the primer sealants so that those sealants may still be classified under the other category or under the military specification category. . . ." Tr.2 at 9. In response to a question by the Board, Mr. Sutton elaborated that the Agency had proposed a new definition of "ammunition sealant" that specifically excluded ejection cartridge sealants. Id. at 11, see Mot. Amend at 5. Although Mr. Sutton acknowledged that the Agency also proposed to add a definition for "ejection cartridge sealant," the Agency has defined that material as a coating despite Olin's objection to that definition. Tr.2 at 11-12, citing People v. Olin Corp., PCB 94-17. He expressed the concern that ejection cartridge sealants could possibly be interpreted as a coating and subjected to regulation under Section 219.204(q)(1). Tr.2 at 12-13. He agreed that Olin expected "the Agency to add specific language in the rule to ensure that there won't be any misinterpretation of this sealant category. . . " Id. at 13.

In its post-hearing comments, Olin noted that the Agency had proposed to add a definition of "ejection cartridge sealant" and expressed its support for the Agency's motion to amend. PC 2 at 2; *see* Mot. Amend at 6. Olin stated that, while the motion addressed its concerns regarding cap sealants and mouth waterproofing sealants, it "still has concerns with the feasibility of the proposed limits as they may relate to Ejection Cartridge Sealants and Primer Sealants." PC 2 at 3. Olin argued that, "without additional changes to the proposed rule, if Ejection Cartridge Sealants and Primer Sealants are classified as coatings they could be subject

to either the "Military Specification Coating" limitations . . . or the "All Other Coatings" limitation. . . ." PC 2 at 3.

Olin stated that, after the second hearing, it continued to discuss issues pertaining to ejection cartridge sealants and primer sealants with the Agency. PC 2 at 3. Olin reported that, as a result of those discussions, the Agency agreed to propose additional changes to three definitions, including this one. *Id.* Specifically, Olin expected the Agency to amend this definition to provide that "[e]jection cartridge sealant means, for purposes of 35 III. Adm. Code 218.204(q)(1) and 219.204(q)(1), a sealant applied during the assembly of an ejection cartridge to provide a waterproof barrier between a shellcase and a primer, and between a shellcase and the nitrocellulose wad." *Id.* at 3-4. Olin proposed to strike the word "nitrocellulose" because wads may be made of plastic as well as nitrocellulose. *See* PC 3 at 5. Olin stated that it supports such an amendment and that incorporating the change "would resolve the potential issues Olin had with the Ejection Cartridge Sealants. . . ." *Id.* at 4.

In its post-hearing comments filed on June 4, 2010, the Agency proposed to amend this definition in this manner. PC 3 at 5. Having reviewed the record, the Board concurs in the proposal made by Olin and the Agency, and the order below reflects adoption of this amendment.

Section 211.1876 Electric Dissipating Coating. The Board adds a Section 211.1876 defining "electric dissipating coating," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 14; *see* Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that "'[e]lectric dissipating coating' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, a coating that rapidly dissipates a high-voltage electric charge." Prop. 211 at 22.

The Agency originally proposed to define this term in Section 211.1876. Prop. 211 at 22. In the motion to amend its proposal, the Agency proposed adding a separate category to Part 218/219.204(q)(1) for electrical switchgear compartment coatings. Mot. Amend at 7. The Agency also recommended adding a definition for these coatings, "and changing the section numbers of two definitions that are currently part of the Agency's proposal. . . . *Id.* Specifically, the Agency proposed to re-number this definition as Section 211.1877 in order to add a definition of "electrical switchgear compartment coatings" at Section 211.1876. *Id.* at 6. Although the Board has granted the motion to amend, the Board maintains the original designation of this definition as Section 211.1876 in order to maintain the alphabetical order of the definitions in Part 211.

Section 211.1877 Electric-Insulating Varnish. The Board adds a Section 211.1877 defining "electric-insulating varnish," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 14; see Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that "[e]lectric-insulating varnish' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, a non-convertible coating applied to electric motors, components of electric motors, or power transformers, to provide electrical, mechanical, and environmental protection or resistance." Prop. 211 at 22.

The Agency originally proposed to define this term in Section 211.1877. Prop. 211 at 22. In the motion to amend its proposal, the Agency proposed adding a separate category to Part 218/219.204(q)(1) for electrical switchgear compartment coatings. Mot. Amend at 7. The Agency also recommended adding a definition for these coatings, "and changing the section numbers of two definitions that are currently part of the Agency's proposal. . . ." *Id.* Specifically, the Agency proposed to re-number this definition as Section 211.1878 in order to add a definition of "electrical switchgear compartment coatings" at Section 211.1876. *Id.* at 6. Although the Board has granted the motion to amend, the Board maintains the original designation as Section 211.1877 in order to maintain the alphabetical order of the definitions in Part 211.

<u>Section 211.1878 Electrical Switchgear Compartment Coatings.</u> In the motion to amend its proposal, the Agency stated that,

[i]n response to information provided to the Agency by a stakeholder regarding the unique circumstances surrounding electrical switchgear compartment coatings, the Agency recommends adding a separate category to Part 218/219.204(q)(1) for such coatings. The Agency also recommends adding a definition to Part 211 for these coatings. . . . Mot. Amend at 7.

Specifically, the Agency proposed a definition providing in its entirety that "[e]lectrical switchgear coatings' means coatings applied to metal-enclosed compartments that house assemblies of medium/high voltage switchgear, of greater than 1,000 volts AC, for utility distribution in outdoor use." *Id*.

In its June 1, 2010 response to the Agency's motion to amend, S&C claimed that the Agency's original rulemaking proposal "raised issues regarding use of extreme performance coatings on electrical switchgear components manufactured by S&C." S&C Resp. at 1. S&C reported that it discussed the impact of the proposal with the Agency. *Id.* S&C also reported that, during the first hearing, its counsel "questioned the Illinois EPA on its interpretations of the definition of 'extreme high glass coatings' and 'extreme performance coatings." *Id.*, citing Tr.1 at 18-20, 22-28, 47-49. S&C stated that, after the first hearing, it "continued discussions with the Illinois EPA regarding revisions to the proposal to address the issues raised by S&C...." S&C Resp. at 2.

S&C noted the Agency's motion to amend and the recommendation to define the term "electrical switchgear compartment coatings" in this proposed new section. S&C Resp. at 2; *see* Mot. Amend at 7. S&C stated that it supports the addition of this definition and requested that the Board adopt it. S&C Resp. at 2. As the Board above granted the motion to amend, the Board's order below reflects adoption of this definition. Although the Agency proposed to add it as Section 211.1876, the Board instead designates it as Section 211.1878 in order to maintain the alphabetical order of the definitions in Part 211.

<u>Section 211.1879 Electrodeposition Primer.</u> The Board adds a Section 211.1879 defining "electrodeposition primer," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 14; *see* Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that

'[e]lectrodeposition primer (EDP)' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, a process of applying a protective, corrosion-resistant waterborne primer on exterior and interior surfaces that provides thorough coverage of recessed areas. It is a dip coating method that uses an electrical field to apply or deposit the conductive coating onto the part. The object being painted acts as an electrode that is oppositely charged from the particles of paint in the dip tank. Electrodeposition primer is also referred to as E-coat, Uni-prime, and ELPO Primer." Prop. 211 at 22.

Although the Agency originally proposed to add this definition as Section 211.1878 (Prop. 211 at 22), the Board has granted the Agency's motion to amend and subsequently adopted a definition of "electrical switchgear compartment coating." *See* Mot. Amend at 7. In order to maintain the alphabetical order of the definitions in Part 211, the Board re-designates this definition as Section 211.1879.

Section 211.1880 Electromagnetic Interference/Radio Frequency Interference (EMI/RFI) Shielding Coatings. The existing definition of the term "electromagnetic interference/radio frequency interference (EMI/RFI) shielding coatings" provides that the term means "coatings used on business machine plastic housings to attenuate electromagnetic and radio frequency interference signals that would otherwise pass through the plastic housing." 35 Ill. Adm. Code 211.1880.

The Agency originally proposed to re-designate the entire existing definition as subsection (a) and provide that it applies "[p]rior to May 1, 2011." Prop. 211 at 22. In post-hearing comments filed on June 4, 2010, the Agency noted a request at the second hearing "that the Agency provide additional time for sources to comply with the proposal." PC 3 at 2. The Agency recommended "extending the compliance deadline one year from May 1, 2011, to May 1, 2012." *Id.* Having reviewed the record in this proceeding, the Board concurred with the Agency's recommendation to extend the compliance deadline, and the order below reflects the extension.

The Agency also originally proposed to add a subsection (b) providing in its entirety that the term means, "[o]n and after May 1, 2011, coatings used on electrical or electronic equipment to provide shielding against electromagnetic interference, radio frequency interference, or static discharge." Prop. 211 at 22. As noted above, the Board has concurred in an Agency recommendation to extend this deadline, and the order below reflects the extension.

<u>Section 211.2040 Etching Filler.</u> The Board adds a Section 211.2040 defining "etching filler," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 14; *see* Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that

"'[e]tching filler' means, for purposes of 35 III. Adm. Code Parts 218 and 219, a coating that contains less than 23 percent solids by weight and at least 0.50 percent acid by weight, and is used instead of applying a pretreatment coating followed by a primer." Prop. 211 at 22-23.

Section 211.2055 Ethylene Propylenediene Monomer (EPDM) Roof Membrane.

The Board adds a Section 211.2055 defining "ethylene propylenediene monomer (EPDM) roof membrane," as the definition is necessitated by the addition of Subpart JJ to Parts 218 and 219. SR at 14; *see* Prop. 218 at 101-13, Prop. 219 at 99-112. The definition provides in its entirety that "'[e]thylene propylenediene (EPDM) roof membrane' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, a prefabricated single sheet of elastomeric material composed of ethylene propylenediene monomer that is field applied to a building roof using one layer or membrane material." Prop. 211 at 23.

<u>Section 211.2200 Extreme High-Gloss Coating.</u> The Board adds a Section 211.2200 defining "extreme high-gloss coating," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 14; *see* Prop. 218 at 28-82, Prop. 219 at 29-80; *see also* TR.2 at 24-25. The definition provides in its entirety that

'[e]xtreme high-gloss coating' means

- a) For purposes of 35 Ill. Adm. Code Parts 218.204(q)(1) regarding metal parts and products coatings, a coating which, when tested by ASTM D-523, as adopted in 1980, incorporated by reference in Section 211.101 of this Part, shows a reflectance of 75 or more on a 600 meter;
- b) For purposes of 35 Ill. Adm. Code Section 218.204(q)(5) regarding pleasure craft coatings, any coating which achieves at least 95 percent reflectance on a 600 meter when tested using ASTM D523-89, incorporated by reference in Section 211.101 of this Part." Prop. 211 at 23.

During the first hearing, counsel for S&C noted the degree of reflectance required in subsection (a) for metal parts and products coatings to satisfy this definition. Tr.1 at 18. Counsel inquired how a facility would demonstrate that its coating meets that standard. *Id.* The Agency clarified that records of testing under ASTM D-523 could come from either the facility operator or the manufacturer of the coating. *Id.* at 19.

Also during the first hearing, the Board asked whether the reference in subsection (a) to "ASTM D-523, as adopted in 1980" should refer instead to "ASTM D-523-80." Tr.1 at 19. The Board also asked whether the reference in subsection (a) to "a reflectance of 75 or more" should refer to "75 percent or more." *Id.* The Agency expressed agreement with both of these clarifications. *See id.* at 19-20. In its motion to amend, the Agency proposed to amend subsection (a) as follows: "[f]or purposes of 35 Ill. Adm. Code 218.204(q)(1) regarding metal parts and products coatings, a coating which, when tested by ASTM D-523-80, as adopted in

1980, incorporated by reference in Section 211.101 of this Part, show a reflectance of 75 percent or more on a 600 meter." Mot. Amend at 4-5 (¶5). Having granted the Agency's motion above under "Preliminary Matter," the order below reflects the amendment.

In testimony pre-filed for the second hearing regarding subsection (b), the ACA stated that, "[a]lthough high solids and water-based technologies are available and in use in other industries (e.g., car refinishing and aviation) the controlled application conditions which make the use of these coatings possible in those industries are neither available nor possible for the pleasure craft coating industry." ACA Test. at 9. The ACA stated that these variable conditions "can have an affect on the final gloss level of the product at the point of application." *Id*. Consequently, the ACA proposed to lower the stated gloss level to "at least 90 percent reflectance on a 600 meter" when tested by ASTM D 523-89. *Id*.

During the second hearing, counsel for the Agency asked Mr. Halcomb to explain the basis for this proposal. Tr.2 at 37. Mr. Halcomb stated that "obtaining 95 [percent] is very, very rare just because of application procedures." *Id.* He further stated that it is "more practical for the industry" to meet a high gloss standard of 85 to 90 and an extreme high gloss standard of 90. *Id.* at 38. He indicated that meeting a standard of 91 or 92 depends upon the applicator and a customer's expectations for the quality of the finish. *Id.* Mr. Halcomb indicated that, although the pleasure craft industry has discussed these limits with USEPA, those discussions have not yet generated any explanations or decisions. *See id.*

The Board notes that it has concurred in the Agency's recommendation to extend the compliance deadline by one year to May 2, 2012, allowing sources additional flexibility in complying with the proposal. The Board also notes Mr. Halcomb's indication that industry awaits additional guidance from USEPA on the issue of these limits. In addition, the participants generally agree that the proposed regulations do not apply to any sources operating or planning to operate in either of the two Illinois nonattainment areas. In light of these factors, the Board declines to amend this definition.

Section 211.2210 Extreme Performance Coating. The existing definition of "extreme performance coating" (EPC) provides that the term "means any coating which during intended use is exposed to any or all of the following: ambient weather conditions, temperatures consistently above 95°C (203°F), detergents, abrasive and scouring agents, solvents, or corrosive atmospheres." 35 Ill. Adm. Code 211.2210. The Board amends the definition, as the amendment is necessitated by revisions to Subpart F of Parts 218 and 219 and reflects the recommendation of the CTG. SR at 14; see Prop. 218 at 28-82, Prop. 219 at 29-80.

The Board first re-designates the entire existing definition as subsection (a) and add the provision that it applies "[e]xcept as provided in subsection (b) of this Section." Prop. 211 at 23. The Board then adds a new subsection (b) providing in its entirety that the term means,

(b) [f]or purposes of Sections 218.204(q) and 219.204(q), a coating used on a metal or plastic surface where the coated surface meets, in its intended use, one or more of the criteria listed below. Extreme performance

coatings include, but are not limited to, coatings applied to locomotives, railroad cars, farm machinery, and heavy duty trucks:

- 1) Chronic exposure to corrosive, caustic, or acidic agents, chemicals, chemical fumes, chemical mixtures, or solutions;
- 2) Repeated exposure to temperatures in excess of 121° C (250° F); or
- 3) Repeated heavy abrasion, including mechanical wear and repeated scrubbing with industrial grade solvents, cleansers, or scouring agents. Prop. 211 at 23-24.

During the first hearing, counsel for S&C asked how the Agency determines whether a coating meets this definition. Tr.1 at 22. The Agency responded that it would make that determination based upon whether the coating is "intended for use on an environment that has chronic exposure to corrosive, caustic or acidic agents -- chemicals, mixtures or solutions exposed to high temperatures or heavy abrasion." *Id.* When counsel for S&C inquired whether a facility using EPC makes this determination, the Agency elaborated that "[t]he facility is responsible for using compliant coatings according to the rule. The Agency would make a determination whether the sources are interpreting the rule correctly." *Id.* at 22-23.

Counsel for S&C next inquired about the manner in which the Agency interprets "chronic exposure to corrosive abrasion." Tr.1 at 23. Although the Agency acknowledged that neither it nor USEPA had precisely defined the term, it stated that "[c]hronic exposure is repeated, or regular or repeated exposure to a corrosive agent." *Id.* When counsel for S&C asked whether "regular and repeated" signified daily, weekly, or monthly exposure, the Agency stated that it had not precisely defined that frequency. *Id.* The Board then asked whether there was any difference between the Agency's views of chronic exposure and repeated exposure. *Id.* The Agency responded that, in the context of this proposed definition, it "views chronic exposure as encompassing both repeated exposure as well as ongoing exposure." PC 1 at 1 (¶1).

Counsel for S&C noted that the proposed definition provided that EPCs "include, but are not limited to, coatings applied to locomotives, railroad cars, farm machinery, and heavy duty trucks." Tr.1 at 23; *see* Prop. 211 at 23. Counsel also noted that the proposed definition also referred to "[r]epeated heavy abrasion, including mechanical wear and repeated scrubbing with industrial grade solvents, cleansers, or scouring agents." Tr.1 at 23-24; *see* Prop. 211 at 24. Counsel inquired how the Agency defines or interprets "exposure to repeated heavy abrasion." Tr.1 at 24. The Agency responded that, "[i]n the case of repeated abrasion from an industrial process, you know, you'd have mechanical wear from industrial process or from the repeated cleaning of a surface with solvent or abrasion." *Id.* The Agency based this response on the language of proposed subsection (b)(3). *Id.* The Agency claimed that instances of heavy abrasion "would be fairly apparent," although it acknowledged that it would have to make such determinations "on a case-by-case basis." *Id.* As one example, the Agency indicated that

cleaning equipment with CO₂ at high pressure would constitute heavy abrasion through the use of a scouring agent. *Id.* at 28.

Counsel for S&C indicated that, similar to machinery and trucks, some types of electrical equipment experience exposure to abrasive dust. Tr.1 at 24. Counsel inquired whether the Agency considered this exposure to heavy abrasion. *Id.* The Agency responded that it does not consider "[d]ust normally present in the air" to constitute heavy abrasion. *Id.* The Agency elaborated that it would not consider exposure to roadway dust as heavy abrasion. *Id.* at 26. The Agency suggested that even driving on an unpaved road with heavy dust would not be heavy abrasion because it is not consistent with "mechanical wear and repeated scrubbing with industrial grade solvents, cleansers, or scouring agents." Tr.1 at 27. The Agency re-stated that facilities are responsible for using coatings that comply with the proposed definition, with the Agency determining whether facilities interpret the definition correctly. *Id.* at 27-28.

The Board inquired how the Agency distinguishes "industrial grade solvents, cleansers, or scouring agents" from other types of those materials. Tr.1 at 25; *see* Prop. 211 at 23-24. The Agency responded that industrial grade materials would be unavailable as consumer products. Tr.1 at 25. The Agency opined that the language of subsection (b)(3) excludes "everyday cleaning products" and those "normally used at home." Id. The Agency elaborated that it is not aware of any definition in federal or state regulations that makes this distinction between industrial and other products. PC 1 at 1 (\P 2). However, the Agency also expressed the belief "that certain solvents are marketed and packaged for use in industrial settings and would not be generally available to the average consumer." Id. (\P 3).

Counsel for S&C also noted that, although the current definition re-designated as subsection (a) includes coatings exposed to ambient weather conditions, proposed subsection (b) does not include that language. Tr.1 at 47. Counsel inquired whether "a surface could be exposed to a corrosive agent in the course of exposure to ambient weather conditions?" *Id.* at 48. The Agency suggested that it had not sought to make normal outdoor use the equivalent of chronically corrosive. *Id.* at 49. The Agency expressed the view that, if it defines "chronically corrosive" too broadly, the higher VOM limits may apply to a wider array of coatings, some of which may not be intended for outdoor use. *Id.* at 48-49. The Agency also indicated that USEPA had intentionally excluded ambient weather conditions from proposed subsection (b). *Id.* The Agency attributed to USEPA the view "that there are complaint coatings for outdoor use that would not need the VOM limit for extreme performance coatings." *Id.*

<u>Section 211.2310 Final Repair Coat.</u> The existing definition of "final repair coat" provides that the term "means, with respect to automobile or light-duty truck assembly or manufacturing, a coating which is used to repaint topcoat which is damaged during vehicle assembly." 35 Ill. Adm. Code 211.2310. The Board amends the definition, as the amendment is necessitated by revisions to Subpart F of Parts 218 and 219 and reflects the recommendation of the CTG. SR at 15; *see* Prop. 218 at 28-82, Prop. 219 at 29-80.

First, the Board re-designates the existing definition as subsection (a) and revises it to provide that the term means, "[w]ith respect to automobile or light-duty truck assembly or

manufacturing described in Sections 218.204(a)(1) and 218.219(a)(1), a coating which is used to repaint topcoat which is damaged during vehicle assembly." Prop. 211 at 24. The Board then adds a new subsection (b) providing that the term also means,

[w]ith respect to automobile or light-duty truck assembly or manufacturing described in Section 218.204(a)(2) and 218.219(a)(2), a coating applied to completely assembled motor vehicles or to parts that are not yet on a completely assembled vehicle to correct damage or imperfections in the coating. The curing of the coatings applied in these operations is accomplished at a lower temperature than that used for curing primer-surfacer and topcoat. Prop. 211 at 24.

Section 211.2320 Finish Primer/Surfacer. The Board adds a Section 211.2320 defining "finish primer/surfacer," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 15; *see* Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that "'[f]inish primer/surfacer' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, a coating applied with a wet film thickness of less than 10 mils prior to the application of topcoat for purposes of providing corrosion resistance, adhesion of subsequent coatings, a moisture barrier, or promotion of a uniform surface necessary for filling in surface imperfections." Prop. 211 at 24.

Section 211.2360 Flexible Coating. The existing definition of "flexible coating" provides that the term "means a paint with the ability to withstand dimensional changes." 35 Ill. Adm. Code 211. 2360. The Board adopts two amendments. The Agency originally proposed to re-designate the entire existing definition as subsection (a) and provide that it applies "[p]rior to May 1, 2011." Prop. 211 at 24. In post-hearing comments filed on June 4, 2010, the Agency noted a request at the second hearing "that the Agency provide additional time for sources to comply with the proposal." PC 3 at 2. The Agency recommended "extending the compliance deadline one year from May 1, 2011, to May 1, 2012." *Id.* Having reviewed the record in this proceeding, the Board concurred with the Agency's recommendation to extend the compliance deadline, and the order below reflects the extension.

The Agency also originally sought to add a subsection (b) providing in its entirety that "[o]n and after May 1, 2011, a coating that is required to comply with engineering specifications for impact resistance, mandrel bend, or elongation as defined by the original manufacturer of the equipment being coated." *Id.* As noted above, the Board has concurred in a recommendation to extend the compliance deadline, and the order below adopts this language, including the extension.

Section 211.2367 Flexible Vinyl. The Board adds a Section 211.2367 defining "flexible vinyl," as the definition is necessitated by the addition of Subpart JJ to Parts 218 and 219. SR at 15; *see* Prop. 218 at 101-13, Prop. 219 at 99-112. The definition provides in its entirety that "'[f]lexible vinyl' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, non-rigid polyvinyl chloride plastic with a 5 percent by weight plasticizer content." Prop. 211 at 25.

Section 211.2415 Fog Coat. The Board adds a Section 211.2415 defining "fog coat," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 15; see Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that "[f]og coat' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, a coating that is applied to a plastic part for the purpose of color matching without masking a molded-in texture. A fog coat shall not be applied at a thickness of more than 0.5 mils of coating solids." Prop. 211 at 25.

Section 211.2525 Gasket/Gasket Sealing Material. The Board adds a Section 211.2525 defining "gasket/gasket sealing material," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 15; see Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that "[g]asket/gasket sealing material' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, a fluid applied to coat a gasket or replace and perform the same function as a gasket, including room temperature vulcanization seal material." Prop. 211 at 25.

<u>Section 211.2625 Glass Bonding Primer.</u> The Board adds a Section 211.2625 defining "glass bonding primer," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 15; *see* Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that

'[g]lass bonding primer' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, a primer applied to windshield or other glass, or to body openings, to prepare the glass or body opening for the application of glass bonding adhesives or the installation of adhesive bonded glass, including glass bonding/cleaning primers that perform both functions (cleaning and priming of the windshield or other glass, or body opening) prior to the application of adhesive or the installation of adhesive bonded glass. Prop. 211 at 25.

Section 211.2825 Heat-Resistant Coating. The Board adds a Section 211.2825 defining "heat-resistant coating," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 15; *see* Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that "'[h]eat-resistant coating' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, a coating that must withstand a temperature of at least 204° C (400° F) during normal use." Prop. 211 at 25.

Section 211.2955 High Bake Coating. The Board adds a Section 211.2955 defining "high bake coating," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 15-16; *see* Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that "'[h]igh bake [coating] means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, a coating which is designed to cure only at temperatures of more than 90° C (194° F)." Prop. 211 at 25-26.

<u>Section 211.2956 High Build Primer/Surfacer.</u> The Board adds a Section 211.2956 defining "high build primer surfacer," as the definition is necessitated by revisions to Subpart F

of Parts 218 and 219. SR at 16; see Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that "[h]igh build primer/surfacer' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, a coating applied with a wet film thickness of 10 mils or more prior to the application of a topcoat for purposes of providing corrosion resistance, adhesion of subsequent coatings, a moisture barrier, or promotion of a uniform surface necessary for filling in surface imperfections." Prop. 211 at 26.

Section 211.2958 High Gloss Coating. The Board adds a Section 211.2958 defining "high gloss coating," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 16; *see* Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that "'[h]igh gloss coating' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, any coating which achieves at least 85 percent reflectance on a 600 meter when tested using ASTM Method D 523-89, incorporated by reference at Section 211.101 of this Part." Prop. 211 at 26.

<u>Section 211.2960 High-Performance Architectural Coating.</u> The Board adds a Section 211.2960 defining "high-performance architectural coating," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 16; *see* Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that

'[h]igh-performance architectural coating' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, a coating used to protect architectural subsections and which meets the requirements of the Architectural Aluminum Manufacturer Association's publication number AAMA 2604-05 (Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels), incorporated by reference in Section 211.101 of this Part, or 2605-05 (Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels), incorporated by reference in Section 211.101 of this Part." Prop. 211 at 24.

Section 211.2980 High Temperature Coating. The Board adds a Section 211.2980 defining "high temperature coating," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 16; *see* Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that "[h]igh temperature coating' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, a coating that is certified to withstand a temperature of 538° C (1000° F) for 24 hours." Prop. 211 at 26.

<u>Section 211.3100 Indoor Floor Covering Installation Adhesive.</u> The Board adds a Section 211.3100 defining "indoor floor covering adhesive," as the definition is necessitated by the addition of Subpart JJ to Parts 218 and 219. SR at 16; *see* Prop. 218 at 101-13, Prop. 219 at 99-112. The definition provides in its entirety that

'[i]ndoor floor covering adhesive' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, any adhesive intended by the manufacturer for use in the installation of wood flooring, carpet, resilient tile, vinyl tile, vinyl backed carpet, resilient sheet and roll, or artificial grass. Adhesives used to install ceramic tile and perimeter bonded sheet flooring with vinyl backing onto a non-porous substrate, such as flexible vinyl, are excluded from this category. Prop. 211 at 26-27.

<u>Section 211.3120 In-Line Repair.</u> The Board adds a Section 211.3120 defining "in-line repair," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 16; *see* Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that

'[i]n-line repair' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, the operation performed and coating(s) applied to correct damage or imperfections in the topcoat on parts that are not yet on a completely assembled vehicle. The curing of coatings applied in these operations is accomplished at essentially the same temperature as that used for curing the previously applied topcoat. 'In-line repair' is also referred to as high bake repair or high brake reprocess. In-line repair is considered part of the topcoat operation. Prop. 211 at 27.

<u>Section 211.3240 Laminate.</u> The Board adds a Section 211.3240 defining "laminate," as the definition is necessitated by the addition of Subpart JJ to Parts 218 and 219. SR at 16-17; *see* Prop. 218 at 101-13, Prop. 219 at 99-112. The definition provides in its entirety that "'[l]aminate' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, a product made by bonding together two or more layers of material." Prop. 211 at 27.

Section 211.3505 Lubricating Wax/Compound. The Board adds a Section 211.3505 defining "lubricating wax/compound," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 17; see Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that "'[l]ubricating wax/compound' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, a protective lubricating material applied to vehicle hubs and hinges." Prop. 211 at 27.

<u>Section 211.3640 Marine Coating.</u> The Agency originally proposed to add a Section 211.3640 defining "marine coating," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 17; *see* Prop. 218 at 28-82, Prop. 219 at 29-80. The Agency's proposed definition provided that "'[m]arine coating' means, for purposes of Section 211.4769, any coating, except unsaturated polyester resin (fiberglass) coatings, containing volatile organic materials and applied by brush, spray, roller, or other means to ships and boats." Prop. 211 at 27.

During the first hearing, the Board asked whether this definition could be incorporated into the definition of "pleasure craft surface coating," which refers to "marine coating." Tr. 1 at 40-41; *see infra* at 51. In its motion to amend, the Agency "recommends incorporating the definition of Marine Coating into the definition of Pleasure Craft Surface Coating. . . ." Mot. Amend at 5 (¶6); *see infra* at 51. Having granted the motion to amend above under "Preliminary Matter," the Board reflects this incorporation in the order below.

Section 211.3665 Mask Coating. The Board adda a Section 211.3665 defining "mask coating," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 17; see Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that ""[m]ask coating' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, a thin film coating applied through a template to coat a small portion of a substrate." Prop. 211 at 27.

Section 211.3760 Metallic Coating. The Board adds a Section 211.3760 defining "metallic coating," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 17; *see* Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that "'[m]etallic coating' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, a coating which contains more than 5 grams of pure elemental metal, or a combination of elemental metals, per liter of coating as applied." Prop. 211 at 28.

<u>Section 211.3775 Metal to Urethane/Rubber Molding or Casting Adhesive.</u> The Board adds a Section 211.3775 defining "metal to urethane/rubber molding or casting adhesive," as the definition is necessitated by the addition of Subpart JJ to Parts 218 and 219. SR at 17; *see* Prop. 218 at 101-13, Prop. 219 at 99-112. The definition provides in its entirety that

'[m]etal to urethane/rubber molding or casting adhesive' means, for purposes of 35 III. Adm. Code Parts 218 and 219, any adhesive intended by the manufacturer to bond metal to high density or elastomeric urethane or molded rubber materials, in heater molding or casting processes, to fabricate products such as rollers for computer printers or other paper handling equipment. Prop. 211 at 28.

Section 211.3785 Military Specification Coating. The Board adds a Section 211.3785 defining "military specification coating," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 17; see Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that "'[m]ilitary specification coating' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, a coating which has a formulation approved by a United States Military Agency for use on military equipment." Prop. 211 at 28.

During the first hearing, counsel for IERG noted that the Agency had proposed this definition and asked "whether the Agency intends for that definition to include sealants used in ammunition manufacturing." Tr.1 at 29. In post-hearing comments filed on May 17, 2010, the Agency responded that it "does not intend 'military specification coating' to include these sealants." PC 1 at 1 (¶4).

In testimony pre-filed on May 7, 2010, for the second hearing, Olin stated that its Winchester Division in East Alton "manufactures small arms ammunition and ammunition components for military, law enforcement and commercial customers worldwide." Olin Test. at 1. Olin further stated that, in its manufacturing processes, "Olin uses sealants containing volatile organic materials ("VOM") to assure that the ammunition will perform safely and effectively. . . ." *Id.* at 1-2. Olin stated that its emissions of VOM are subject to an air permit with requirements based upon Subparts F and TT of Part 219. *Id.* at 2; *see* 35 Ill. Adm. Code 219.204-219.217, 219.980-219.288. Olin argued that, if the proposed term "military

specification coating" includes ammunition, "then many of the sealants used by Olin may fall under this new definition and, thus, be subject to the limits in this category." *Id.* at 3. Olin further argued that it is not technically feasible to comply with the proposed limits and also meet military requirements for many of its sealants. *Id.*

In post-hearing comments filed on May 17, 2010, the Agency stated that "[p]rimer sealants used in ammunition manufacturing are currently regulated under Subpart TT of Parts 218 and 219, and the Agency intends that they continue to be regulated as such. Mouth waterproofing sealants and cap sealants used in ammunition manufacturing are currently regulated as clear coatings or extreme performance coatings under Section 218/219.204(j)." PC 1 at 1-2.

In its motion to amend its proposal also filed on May 17, 2010, the Agency stated that,

[b]ased on discussions with a representative of Olin, and on information contained in Olin's testimony regarding the unique circumstances surrounding coatings/sealants used in ammunition manufacturing, the Agency recommends adding a separate coatings category to Part 218/219.204(q)(1) for Ammunition Sealants. The Agency also recommends adding several definitions to Part 211 to define terms relevant to ammunition sealants. . . . Mot. Amend at 5.

Addressing the Agency's motion to amend in its post-hearing comments, Olin stated that it "supports the May 17 Motion." PC 2 at 2. Above under "Preliminary Matter," the Board granted the Agency's motion, which the order below reflects.

Section 211.3820 Miscellaneous Industrial Adhesive Application Operation. The Board adds a Section 211.3820 defining "miscellaneous industrial adhesive application operation," as the definition is necessitated by the addition of Subpart JJ to Parts 218 and 219. SR at 17-18; *see* Prop. 218 at 101-13, Prop. 219 at 99-112. The definition provides in its entirety that "'[m]iscellaneous industrial adhesive application operation' means, for purposes of Subpart JJ of Parts 218 and 219, a regularly occurring industrial process consisting of one or more adhesive applicators and any associated drying area and/or oven wherein an adhesive is applied, dried, and/or cured." Prop. 211 at 28.

Section 211.3925 Mold Seal Coating. The Board adds a Section 211.3925 defining "mold seal coating," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 18; *see* Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that "[m]old seal coating' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, the initial coating applied to a new mold or repaired mold to provide a smooth surface which, when coated with a mold release coating, prevents products from sticking to the mold." Prop. 211 at 28.

<u>Section 211.3961 Motor Vehicle Adhesive.</u> The Board adds a Section 211.3961 defining "motor vehicle adhesive," as the definition is necessitated by the addition of Subpart JJ to Parts 218 and 219. SR at 18; *see* Prop. 218 at 101-13, Prop. 219 at 99-112. The definition

provides in its entirety that "'[m]otor vehicle adhesive' means, for purposes of Subpart JJ of Parts 218 and 219, an adhesive, including glass bonding adhesive, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied for the purpose of bonding two vehicle surfaces together without regard to the substrates involved." Prop. 211 at 28-29.

During the first hearing, the Board noted that this proposed definition applies "to adhesives used at a facility that is not an automobile or light-duty truck assembly facility." Tr.1 at 41. The Board asked the Agency to elaborate on the intent of applying this definition only outside of those facilities. *See id.* The Agency attributed this distinction to the CTG, indicating that the definition intends to address after-market or repair adhesives rather than adhesives used in the assembly of new vehicles. *Id.* at 42.

Section 211.3966 Motor Vehicle Weatherstrip Adhesive. The Board adds a Section 211.3967 defining "motor vehicle weatherstrip adhesive," as the definition is necessitated by the addition of Subpart JJ to Parts 218 and 219. SR at 18; see Prop. 218 at 101-13, Prop. 219 at 99-112. The definition provided in its entirety that "[m]otor vehicle weatherstrip adhesive' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, an adhesive, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to weatherstripping materials for the purpose of bonding the weatherstrip material to the surface of the vehicle." Prop. 211 at 29.

During the first hearing, the Board noted that this proposed definition applies "to adhesives used at a facility that is not an automobile or light-duty truck assembly facility." Tr.1 at 41. The Board asked the Agency to elaborate on the intent of applying this definition only outside of those facilities. *See id.* The Agency attributed this distinction to the CTG, indicating that the definition intends to address after-market or repair adhesives rather than adhesives used in the assembly of new vehicles. *Id.* at 42.

The Agency originally proposed to define this term in Section 211.3967. Prop. 211 at 29. In the motion to amend its proposal, the Agency stated that it "recommends adding a separate coatings category to Part 218/219.204(q)(1) for Ammunition Sealants. The Agency also recommends adding several definitions to Part 211 to define terms relevant to ammunition sealants, and changing the section number of a definition that is currently part of the Agency's proposal. . . ." Mot. Amend at 5. Having granted the motion to amend, the Board proposes to re-number this definition as Section 211.3966 in order to add a definition pertaining to ammunition sealants at Section 211.3967. *Id.* at 6.

Section 211.3967 Mouth Waterproofing Sealant. In testimony pre-filed on May 7, 2010, for the second hearing, Olin stated that its Winchester Division in East Alton "manufactures small arms ammunition and ammunition components for military, law enforcement and commercial customers worldwide." Olin Test. at 1. Olin further stated that, in its manufacturing processes, "Olin uses sealants containing volatile organic materials ("VOM") to assure that the ammunition will perform safely and effectively. . . " *Id.* at 1-2. Olin stated that its emissions of VOM are subject to an air permit with requirements based upon Subparts F and TT of Part 219. *Id.* at 2; *see* 35 Ill. Adm. Code 219.204-219.217, 219.980-219.288. Olin

argued that, if the proposed term "military specification coating" includes ammunition, "then many of the sealants used by Olin may fall under this new definition and, thus, be subject to the limits in this category." *Id.* at 3. Olin further argued that it is not technically feasible to comply with the proposed military specification coating limits and also meet military requirements for many of its sealants. *Id.*

Olin's pre-filed testimony illustrated cartridge assembly and sealant operations. Olin Test. at 7-8. Olin described mouth waterproofing sealant as the material "used to provide a waterproof barrier between the shellcase mouth and the bullet in order to assure that the ammunition will perform safely and effectively under extreme weather conditions and other extreme atmospheric and environmental conditions." *Id.* at 8. Olin claimed that "[r]eformulation of the mouth waterproofing sealants to meet current restrictions relied heavily upon the use of Methylene Chloride (a non-VOM) which had the correct properties for this application." *Id.* at 9. Olin argued that "[a]dditional substitution of Methylene Chloride as a solvent in the mouth waterproofing sealant will increase the East Alton Methylene Chloride hazardous air pollutant ("HAP") emissions, which Olin wants to avoid." *Id.* Olin further argued that reformulation "may also result in an economically infeasible re-design of the entire application and drying process due to increased solids or significant changes in the drying time." *Id.*

Olin indicated that, if feasible, the process of reformulation to comply with the proposed VOM limits would take three to four years. *Id.* at 11; *see id.* at 6 Olin further indicated that, if reformulation is not feasible, estimates from the time of its last reformulation suggest that "it would take at least 34 months to install appropriate control equipment." *Id.* at 7. As a suggested resolution of its issues, Olin proposed "[t]hat the military specification coating definition in proposed 35 Ill. Adm. Code 211.3785 be amended to exclude ammunition sealants." *Id.* at 11.

In post-hearing comments filed on May 17, 2010, the Agency stated that it did not intend for the definition of 'military specification coating' to include sealants used in ammunition manufacturing. PC 1 at 1 (¶4); see Tr.1 at 29. The Agency stated that "[m]outh waterproofing sealants . . . used in ammunition manufacturing are currently regulated as clear coatings or extreme performance coatings under Section 218/219.204(j)." *Id* at 1-2.

In the motion to amend its proposal also filed on May 17, 2010, the Agency stated that,

[b]ased on discussions with a representative of Olin, and on information contained in Olin's testimony regarding the unique circumstances surrounding coatings/sealants used in ammunition manufacturing, the Agency recommends adding a separate coatings category to Part 218/219.204(q)(1) for Ammunition Sealants. The Agency also recommends adding several definitions to Part 211 to define terms relevant to ammunition sealants. . . . Mot. Amend at 5.

Among those several definitions, the Agency proposed a definition providing in its entirety that "[m]outh waterproofing sealant means, for purposes of 35 Ill. Adm. Code 218.204(q)(1) and

219.204(q)(1), a coating applied in the manufacture of ammunition to provide a waterproof barrier between a shellcase mouth and bullet." *Id.* at 6. Testifying on behalf of Olin at the second hearing, Mr. Sutton stated that the motion to amend "addresses our concerns on the . . . mouth waterproofing sealants." Tr.2 at 8-9; *see also* PC 2 at 3. Addressing the Agency's motion to amend in its post-hearing comments, Olin stated that the proposed amendments "conform the proposed rule to the Agency's intent that Cap Sealants and Mouth Waterproofing Sealants continue to be subject to their current limits." PC 2 at 3. Having granted the motion to amend, the Board adopts the definition.

Section 211.3968 Multi-Colored Coating. The Board adds a Section 211.3968 defining "multi-colored coating," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 18; *see* Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that "'[m]ulti-colored coating' means, for purposes of 35 III. Adm. Code Parts 218 and 219, a coating which exhibits more than one color when applied, and which is packaged in a single container and applied in a single coat." Prop. 211 at 29.

Section 211.3969 Multi-Component Coating. The Board adds a Section 211.3969 defining "multi-component coating," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 18; see Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that "[m]ulti-component coating' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, a coating requiring the addition of a separate reactive resin, commonly known as a catalyst or hardener, before application to form an acceptable dry film." Prop. 211 at 29.

Section 211.3975 Multipurpose Construction Adhesive. The Board adds a Section 211.3975 defining "multipurpose construction adhesive," as the definition is necessitated by the addition of Subpart JJ to Parts 218 and 219. SR at 18; *see* Prop. 218 at 101-13, Prop. 219 at 99-112. The definition provides in its entirety that "[m]ultipurpose construction adhesive' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, any adhesive used in the installation or repair of various construction materials, including but not limited to drywall, subfloor, panel, fiberglass reinforced plastic (FRP), ceiling tile, and acoustical tile." Prop. 211 at 29.

Section 211.4052 Non-Convertible Coating. The Board adds a Section 211.4052 defining "non-convertible coating," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 18-19; see Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that "[n]on-convertible coating' means, for purposes of Section 211.1877, a coating that dries by solvent evaporation with no change in the chemical nature of the binder. The coating remains soluble in the original solvent after drying." Prop. 211 at 29.

Section 211.4080 One-Component Coating. The Board adds a Section 211.4080 defining "one-component coating," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 19; see Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that "[o]ne-component coating' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, a coating that is ready for application as it comes out of its container to form an acceptable dry film. A thinner added to a coating to reduce the viscosity is not considered a

component, and therefore does not impact the coating's classification as a one-component or multi-component coating." Prop. 211 at 30.

<u>Section 211.4220 Optical Coating.</u> The Board adds a Section 211.4220 defining "optical coating," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 19; *see* Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that "'[o]ptical coating' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, a coating applied to an optical lens." Prop. 211 at 30.

Section 211.4280 Outdoor Floor Covering Installation Adhesive. The Board adds a Section 211.4280 defining "outdoor floor covering installation adhesive," as the definition is necessitated by the addition of Subpart JJ to Parts 218 and 219. SR at 19; see Prop. 218 at 101-13, Prop. 219 at 99-112. The definition provides in its entirety that "[o]utdoor floor covering installation adhesive' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, any adhesive intended by the manufacturer for use in the installation of floor covering that is not in an enclosure and that is exposed to ambient weather conditions during normal use." Prop. 211 at 30.

<u>Section 211.4455 Pan Backing Coating.</u> The Board adds a Section 211.4455 defining "pan backing coating," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 19; *see* Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that "'[p]an backing coating' means, for purposes of 35 III. Adm. Code Parts 218 and 219, a coating applied to the surface of pots, pans, or other cooking implements that are exposed directly to a flame or other heating elements." Prop. 211 at 30.

Section 211.4540 Perimeter Bonded Sheet Flooring. The Board adds a Section 211.4540 defining "perimeter bonded sheet flooring," as the definition is necessitated by the addition of Subpart JJ to Parts 218 and 219. SR at 19; see Prop. 218 at 101-13, Prop. 219 at 99-112. The definition provides in its entirety that "'[p]erimeter bonded sheet flooring' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, sheet flooring with vinyl backing installed onto a nonporous surface using an adhesive designed to be applied only to a strip of up to four inches wide around the perimeter of the sheet flooring." Prop. 211 at 30.

Section 211.4735 Plastic. The Board adds a Section 211.4735 defining "plastic," as the definition is necessitated by the addition of Subpart JJ to Parts 218 and 219. SR at 19; see Prop. 218 at 101-13, Prop. 219 at 99-112. The definition provides in its entirety that "[p]lastic' means, for purposes of Subpart JJ of Parts 218 and 219, a synthetic material chemically formed by the polymerization of organic (carbon-based) substances. Plastics are usually compounded with modifiers, extenders, and/or reinforcers and are capable of being molded, extruded, cast into various shapes and films, or drawn into filaments." Prop. 211 at 31.

<u>Section 211.4760 Plastic Solvent Welding Adhesive.</u> The Board adds a Section 211.4760 defining "plastic solvent welding adhesive," as the definition is necessitated by the addition of Subpart JJ to Parts 218 and 219. SR at 19-20; *see* Prop. 218 at 101-13, Prop. 219 at 99-112. The definition provides in its entirety that "[p]lastic solvent welding adhesive' means,

for purposes of 35 Ill. Adm. Code Parts 218 and 219, any adhesive used to dissolve the surface of plastic to form a bond between mating surfaces." Prop. 211 at 31.

Section 211.4765 Plastic Solvent Welding Adhesive Primer. The Board adds a Section 211.4765 defining "plastic solvent welding adhesive primer," as the definition is necessitated by the addition of Subpart JJ to Parts 218 and 219. SR at 20; see Prop. 218 at 101-13, Prop. 219 at 99-112. The definition provides in its entirety that "[p]lastic solvent welding adhesive primer' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, any primer used to prepare plastic substrates prior to bonding or welding." Prop. 211 at 31.

Section 211.4768 Pleasure Craft. The Board adds a Section 211.4768 defining "pleasure craft," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 20; see Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that "'[p]leasure craft' means, for purposes of 35 III. Adm. Code Parts 218 and 219, a vessel which is manufactured or operated primarily for recreational purposes, or leased, rented, or chartered to a person or business for recreational purposes." Prop. 211 at 31.

Section 211.4769 Pleasure Craft Surface Coating. The Board adds a Section 211.4769 defining "pleasure craft surface coating," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 20; see Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that "[p]leasure craft surface coating' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, any marine coating, except unsaturated polyester resin (fiberglass) coatings, applied by brush, spray, roller, or other means to a pleasure craft." Prop. 211 at 31.

During the first hearing, the Board asked whether the definition of "marine coating" could be incorporated into this definition. Tr. 1 at 40-41; *see supra* at 44 (definition of "marine coating"). In its motion to amend, the Agency recommended "incorporating the definition of Marine Coating into the definition of Pleasure Craft Surface Coating. . . ." Mot. Amend at 5 (¶6). Specifically, the Agency proposed to provide that "[p]leasure craft surface coating means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, any marine coating, except unsaturated polyester resin (fiberglass) coatings containing volatile organic materials and applied by brush, spray, roller, or other means to a pleasure craft." *Id.* Having granted the motion to amend, the Board adopts the amendment in its order below.

Section 211.4895 Polyvinyl Chloride Plastic (PVC Plastic). The Board adds a Section 211.4895 defining "polyvinyl chloride plastic (PVC plastic)," as the definition is necessitated by the addition of Subpart JJ to Parts 218 and 219. SR at 20; *see* Prop. 218 at 101-13, Prop. 219 at 99-112. The definition provides in its entirety that "'[p]olyvinyl chloride plastic' or 'PVC plastic' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, a polymer of the chlorinated vinyl monomer that contains 57 percent or more chlorine." Prop. 211 at 31.

<u>Section 211.4900 Porous Material.</u> The Board adds a Section 211.4900 defining "porous material," as the definition is necessitated by the addition of Subpart JJ to Parts 218 and 219. SR at 20; *see* Prop. 218 at 101-13, Prop. 219 at 99-112. The definition provides in its entirety that "[p]orous material' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, a

substance that has tiny openings, often microscopic, in which fluids may be absorbed or discharged, including, but not limited to, paper and corrugated paperboard. Porous material does not include wood." Prop. 211 at 32.

<u>Section 211.5012 Prefabricated Architectural Coating.</u> The Board adds a Section 211.5012 defining "prefabricated architectural coating," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 20; *see* Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that "'[p]refabricated architectural coating' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, coatings applied to metal parts and products which are to be used as an architectural structure." Prop. 211 at 32.

Section 211.5061 Pretreatment Coating. The Board adds a Section 211.5061 defining "pretreatment coating," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 20-21; see Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that "[p]retreatment coating' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, a coating which contains no more than 12 percent solids by weight and at least 0.50 percent acid by weight, is used to provide surface etching, and is applied directly to metal surfaces to provide corrosion resistance, adhesion, and ease of stripping." Prop. 211 at 32.

<u>Section 211.5062 Pretreatment Wash Primer.</u> The existing definition of "pretreatment wash primer" at Section 211.5061 provides that the term "means the first coating applied to bare metal if solventborne primers will be applied. This coating contains a minimum of 0.5 percent acid, by weight, is necessary to provide surface etching, and provides corrosion resistance and adhesion. 35 Ill. Adm. Code 211.5061. The Board first re-designates this definition as Section 211.5062 to account for addition of a definition of "pretreatment coating." SR at 21.

The Board also amends the definition, as the amendment is necessitated by revisions to Subpart F of Parts 218 and 219 and reflects the recommendation of the CTG. SR at 21. Specifically, the Board re-designates the entire existing definition as subsection (a) and provides that subsection (a) applies "[f]or purposes of Subpart HH of Parts 218 and 219." Prop. 211 at 32. The Board also adopts a subsection (b) providing in its entirety that the term means, "[f]or the purposes of Subpart F of Parts 218 and 219, a coating which contains no more than 12 percent solids by weights and at least 0.50 percent acids by weight, is used to provide surface etching, and is applied directly to fiberglass and metal surfaces to provide corrosion resistance and adhesion of subsequent coatings." Prop. 211 at 32.

Section 211.5075 Primer Sealant. In testimony pre-filed on May 7, 2010, for the second hearing, Olin stated that its Winchester Division in East Alton "manufactures small arms ammunition and ammunition components for military, law enforcement and commercial customers worldwide." Olin Test. at 1. Olin further stated that, in its manufacturing processes, "Olin uses sealants containing volatile organic materials ("VOM") to assure that the ammunition will perform safely and effectively. . . ." *Id.* at 1-2. Olin stated that its emissions of VOM from its sealant operations are subject to an air permit with requirements based upon Subparts F and TT of Part 219. *Id.* at 2; *see* 35 Ill. Adm. Code 219.204-219.217, 219.980-219.288. Olin argued that, if the proposed term "military specification coating" includes

ammunition, "then many of the sealants used by Olin may fall under this new definition and, thus, be subject to the limits in this category." *Id.* at 3. Olin further argued that it is not technically feasible to comply with the proposed limits for "Military Specification Coatings" and also meet military requirements for many of its sealants. *Id.*

Olin's pre-filed testimony illustrated cartridge assembly and sealant operations. Olin Test. at 7-8. Olin described primer sealant as the material "applied to assembled primers to maintain the primer assembly and prevent the explosive priming mix from dusting during the transfer of primers in the Primer Manufacturing area and during subsequent ammunition assembly operations." *Id.* at 7. Olin stated that "[t]he sealant allows primers to be handled safely and stored in extreme weather conditions and other extreme atmospheric and environmental conditions, thereby assuring proper performance when assembled into a finished round." *Id.*

Olin's pre-filed testimony also addressed issues pertaining to reformulation of primer sealants. Olin Test. at 8-9. Olin stated that primer sealants are made using a base compound with nitrocellulose in an alcohol base." Id. at 8. Olin characterized this base as "a critical component of the sealant as it is responsible for controlling the evaporation or drying rate and residual moisture." Id. at 9. Olin argued that "[u]sing a substitute solvent with too quick a drying solvent could result in moisture problems and a substitute solvent drying too slowly could result in incomplete bonds with the primer." Id. Olin indicated that, if feasible, the process of reformulation to comply with the proposed VOM limits would take 3 to 4 years. *Id*. at 11; see id. at 6. Olin further indicated that, if reformulation is not feasible, estimates from its last reformulation suggest that "it would take at least 34 months to install appropriate control equipment." Id. at 7. Olin argued that, if primer sealant operations "are included in either the proposed Military Specification Coating or Other Coatings classification, continuing these manufacturing operations may not be technically or economically feasible." *Id.* at 10. As a suggested resolution of its issues, Olin proposed "[t]hat the military specification coating definition in proposed 35 Ill. Adm. Code 211.3785 be amended to exclude ammunition sealants." Id. at 11. Olin also proposed that primer sealants used in ammunition manufacturing "not be subject to the proposed coating regulations and that they continue to be regulated under 35 Ill. Adm. Code 219, Subpart TT." Id. at 11-12.

In post-hearing comments filed on May 17, 2010, the Agency responded that it "does not intend 'military specification coating' to include these sealants." PC 1 at 1 (¶4); see Tr.1 at 29. The Agency stated that "[p]rimer sealants used in ammunition manufacturing are currently regulated under Subpart TT of Parts 218 and 219, and the Agency intends that they continue to be regulated as such." Pc 1 at 1.

In the motion to amend its proposal, the Agency stated that,

[b]ased on discussions with a representative of Olin, and on information contained in Olin's testimony regarding the unique circumstances surrounding coatings/sealants used in ammunition manufacturing, the Agency recommends adding a separate coatings category to Part 218/219.204(q)(1) for Ammunition

Sealants. The Agency also recommends adding several definitions to Part 211 to define terms relevant to ammunition sealants. . . . Mot. Amend at 5.

Specifically, the Agency proposed a definition providing in its entirety that "[p]rimer sealant means, for purposes of 35 Ill. Adm. Code 218.204(q)(1) and 219.204(q)(1), a sealant applied in the manufacture of ammunition to assembled primers to maintain the primer assembly and prevent explosive priming mix from dusting during the transfer of primers." *Id.* at 6. The Agency also proposed a definition providing in its entirety that "ammunition sealant' means, for purposes of 35 Ill. Adm. Code 218.204(q)(1) and 219.204(q)(1), a coating applied in the manufacture of ammunition, including cap sealants and mouth waterproofing sealants. Primer sealants and ejection cartridge sealants are not included within this category." *Id.* at 5.

During the second hearing, Mr. Sutton expressed the belief that the Agency intended to regulate primer sealants under existing Subpart TT. Tr.2 at 9; see PC 1 at 1-2 (¶4). However, he indicated that Olin did not "feel that the amended regulation completely addresses those concerns that we had for the . . . primer sealants so that those sealants may still be classified under the other category or under the military specification category. . . ." Tr.2 at 9. In response to a question by the Board, Mr. Sutton elaborated that the Agency had proposed a new definition of "ammunition sealant" that specifically excluded primer sealants. Id. at 11, see Mot. Amend at 5. Although Mr. Sutton acknowledged that the Agency also proposed to add a definition for "primer sealant," the Agency has defined that material as a coating despite Olin's objection to that definition. Tr.2 at 11-12, citing People v. Olin Corp., PCB 94-17. Mr. Sutton expressed the concern that primer sealants could possibly be interpreted as a coating and subjected to regulation under Section 219.204(q)(1). Tr.2 at 12-13. He agreed that Olin expected "the Agency to add specific language in the rule to ensure that there won't be any misinterpretation of this sealant category. . . ." Id. at 13.

In its post-hearing comments filed on June 3, 2010, Olin noted that the Agency had proposed to add a definition of "primer sealant" and expressed its support for the Agency's motion to amend. PC 2 at 2; *see* Mot. Amend at 6. Olin stated that, while the motion addressed its concerns regarding cap sealants and mouth waterproofing sealants, "Olin still has concerns with the feasibility of the proposed limits as they may relate to Ejection Cartridge Sealants and Primer Sealants." PC 2 at 3. Olin argued that, "without additional changes to the proposed rule, if Ejection Cartridge Sealants and Primer Sealants are classified as coatings they could be subject to either the "Military Specification Coating" limitations . . . or the "All Other Coatings" limitation. . . ." PC 2 at 3.

Olin stated that, after the second hearing, it continued to discuss issues pertaining to primer sealants with the Agency. PC 2 at 3. Olin reported that, as a result of those discussions, the Agency agreed to propose additional changes to three definitions, including this one. *Id.* Specifically, Olin expected the Agency to amend this definition to provide that "[p]rimer sealant means, for purposes of 35 Ill. Adm. Code 218.204(q)(1) and 219.204(q)(1), a sealant applied in the manufacture of ammunition to assembled primers to maintain the primer assembly and prevent explosive priming mix from dusting during the transfer of primers." *Id.* at 4. Olin states

that it supports such an amendment and that incorporating the change "would resolve the potential issues Olin had with . . . Primer Sealants." *Id.* at 4.

In its post-hearing comments filed June 4, 2010, the Agency proposed to amend this definition in this manner. PC 3 at 5-6. Having reviewed the record, the Board concurred in the proposal made by Olin and the Agency, and the order below reflects this amendment.

<u>Section 211.5090 Primer Surfacer Coat.</u> The existing definition of "primer surface coat" provides in its entirety that

- a) 'Primer surfacer coat' means, for purposes of 35 Ill. Adm. Code 215.204(a), 218.204(a), and 219.204(a), a coating used to touch up areas on the surface of automobile or light-duty truck bodies not adequately covered by the prime coat before application of the top coat. The primer surfacer coat is applied between the prime coat and topcoat. An anti-chip coating applied to main body parts (*e.g.*, rocker panels, bottom of doors and fenders, and leading edge of roof) is a primer surfacer coat. The primer surfacer coat is also referred to as a "guide coat."
- b) 'Primer surfacer coat' means, for purposes of 35 Ill. Adm. Code Part 218, Subpart HH and Part 219, Subpart HH, a coating applied to motor vehicles, mobile equipment, or their parts and components at motor vehicle refinishing operations that fills in surface imperfections and builds a thickness in order to allow sanding. 35 Ill. Adm. Code 211.5090.

The Board amends the definition, as the amendment is necessitated by revisions to Subpart F of Parts 218 and 219 and reflects the recommendation of the CTG. SR at 21. The Board first amends subsection (a) to provide that the term has the specified meaning for purposes of 35 Ill. Adm. Code 215.204(a), 218.204(a)(1) and 219.204(a)(1). Prop. 211 at 32-33. The Board also adds a subsection (c) providing in its entirety that

'[p]rimer-surfacer coat' means, for purposes of 35 Ill. Adm. Code Sections 218.204(a)(2) and 219.204(a)(2), an intermediate protective coating applied over the electrodeposition primer and under the topcoat. Primer-surfacer provides adhesion, protection, and appearance properties to the total finish. Primer-surfacer may also be called guide coat or surface. Primer-surfacer operations may include other coating(s) (e.g., anti-chip, lower-body anti-chip, chip-resistant edge primer, spot primer, blackout, deadener, interior color, basecoat replacement coating, etc.) that are applied in the same spray booth(s). Prop. 211 at 33.

Section 211.5400 Red Coating. The Board adds a Section 211.5400 defining "red coating," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 21; see Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that

'[r]ed coating' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, a coating which meets all of the following criteria:

- a) Yellow limit: the hue of hostaperm scarlet
- b) Blue limit: the hue of monastral red-violet;
- c) Lightness limit for metallics: 35 percent aluminum flake;
- d) Lightness limit for solids: 50 percent titanium dioxide white;
- e) Solids red: hue angle of -11 to 38 degrees and maximum lightness of 23 to 45 units; and
- f) Metallic reds: hue angel of -16 to 35 degrees and maximum lightness of 28 to 45 units.

These criteria are based on Cielab color space, 0/45 geometry. For spherical geometry, specular included, the upper limit is 49 units. Prop. 211 at 33.

During the first hearing, the Board asked the Agency to clarify the term "Cielab" in this proposed definition. Tr.1 at 43. The Agency responded that "CIE stands for *Comission Internationale de l'Eclairage* (International Commission on Illumination). It is an independent international board that sets various lighting standards. 'CIELAB' is one of two systems adopted by CIE in 1976 as models that show uniform color spacing in their values." PC 1 at 3 (¶10).

Section 211.5520 Reinforced Plastic Composite. The Board adds a Section 211.5520 defining "reinforced plastic composite," as the definition is necessitated by the addition of Subpart JJ to Parts 218 and 219. SR at 21; see Prop. 218 at 101-13, Prop. 219 at 99-112. The definition provides in its entirety that "[r]einforced plastic composite' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, a composite material consisting of plastic reinforced with fibers." Prop. 211 at 34.

Section 211.5550 Repair Coat. The existing definition of "repair coat" provides that the term "means, with respect to coating wood furniture, coatings used to correct imperfections or damage to furniture surface." 35 Ill. Adm. Code 211.5550. The Board amends the definition, as necessitated by revisions to Subpart F of Parts 218 and 219 and to reflect the recommendation of the CTG. SR at 21.

The Board first re-designates the entire existing definition as subsection (a). Prop. 211 at 34. The Board also adds a new subsection (b) providing in its entirety that the term means, "[f]or purposes of 35 Ill. Adm. Code Section 218.204(a) and 219.204(q), a coat used to re-coat portions of previously coated product which has sustained mechanical damage to the coating following normal coating operation." *Id*.

Section 211.5800 Rubber. The Board adds a Section 211.5800 defining "rubber," as the definition is necessitated by the addition of Subpart JJ to Parts 218 and 219. SR at 21-22; see Prop. 218 at 101-13, Prop. 219 at 99-112. The definition provides in its entirety that "[r]ubber' means, for purposes of Subpart JJ of Parts 218 and 219, any natural or manmade rubber substrate, including but not limited to, styrene-butadiene rubber, polychloroprene (neoprene), butyl rubber, nitrile rubber, chlorosulfonated polyethylene and ethylene propylene diene terpolymer." Prop. 211 at 34.

<u>Section 211.5890 Sealer.</u> The existing definition of "sealer" provides that the term "means a coating containing binders which seals wood prior to the application of the subsequent coatings." 35 Ill. Adm. Code 211.5890. The Board amends the definition, as the amendment is necessitated by revisions to Subpart F of Parts 218 and 219 and reflects the recommendation of the CTG. SR at 22.

First, the Board re-designates the entire existing definition as subsection (a) and provides that it applies "[e]xcept as provided in subsection (b) of this Section." Prop. 211 at 34. The Board also adds a subsection (b) providing in its entirety that,

[f]or purposes of 35 Ill. Adm. Code Section 218.204(a)(and (q), and 219.204(a) and (q), 'sealer' means a high viscosity material generally, but not always, applied in the paint shop after the body has received an electrodeposition primer coating and before the application of subsequent coatings (e.g., primer-surfacer). The primary purpose of sealer is to fill body joints completely so that there is no intrusion of water, gases, or corrosive materials into the passenger area of the body compartment. Such materials are also referred to as sealant, sealant primer, or caulk. *Id*.

Section 211.5985 Sheet Rubber Lining Installation. The Board adds a Section 211.5985 defining "sheet rubber lining installation," as the definition is necessitated by the addition of Subpart JJ to Parts 218 and 219. SR at 22; see Prop. 218 at 101-13, Prop. 219 at 99-112. The definition provides in its entirety that "[s]heet rubber lining installation' means, for purposes of Subpart JJ of Parts 218 and 219, the process of applying sheet rubber liners by hand to metal or plastic substrates to protect the underlying substrate from corrosion or abrasion. These operations also include laminating sheet rubber to fabric by hand." Prop. 211 at 35.

Section 211.5987 Shock-Free Coating. The Board adds a Section 211.5987 defining "shock-free coating," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 22; see Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that "[s]hock-free coating' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, a coating applied to electrical components to protect the user from electric shock. The coating has characteristics of being low capacitance and high resistance to breaking down under high voltage." Prop. 211 at 35.

<u>Section 211.6012 Silicone-Release Coating.</u> The Board adds a Section 211.6012 defining "silicone-release coating," as the definition is necessitated by revisions to Subpart F of

Parts 218 and 219. SR at 22; *see* Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that "[s]ilicone-release coating' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, any coating which contains silicone resin and is intended to prevent food from sticking to metal surfaces such as baking pans." Prop. 211 at 35.

Section 211.6015 Single-Ply Roof Membrane. The Board adds a Section 211.6015 defining "single-ply roof membrane," as the definition is necessitated by the addition of Subpart JJ to Parts 218 and 219. SR at 22; *see* Prop. 218 at 101-13, Prop. 219 at 99-112. The definition provides in its entirety that "'[s]ingle-ply roof membrane' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, a prefabricated single sheet of rubber, normally ethylene-propylenediene terpolymer, that is field applied to a building roof using one layer of membrane material. Single-ply roof membrane does not include membranes prefabricated from EPDM." Prop. 211 at 35.

Section 211.6017 Single-Ply Roof Membrane Adhesive Primer. The Board adds a Section 211.6017 defining "single-ply roof membrane adhesive primer," as the definition is necessitated by the addition of Subpart JJ to Parts 218 and 219. SR at 22; *see* Prop. 218 at 101-13, Prop. 219 at 99-112. The definition provides in its entirety that "[s]ingle-ply roof membrane adhesive primer' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, any primer labeled for use to clean and promote adhesion of the single-ply roof membrane seams or splices prior to bonding." Prop. 211 at 35.

<u>Section 211.6020 Single-Ply Roof Membrane Installation and Repair Adhesive.</u> The Board adds a Section 211.6020 defining "single-ply roof membrane installation and repair adhesive," as the definition is necessitated by the addition of Subpart JJ to Parts 218 and 219. SR at 22-23; *see* Prop. 218 at 101-13, Prop. 219 at 99-112. The definition provides in its entirety that

'[s]ingle-ply roof membrane installation and repair adhesive' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, any adhesive labeled for use in the installation or repair of single-ply roof membrane. Installation includes, as a minimum, attaching the edge of the membrane to the edge of the roof and applying flashings to vents, pipes, and ducts that protrude through the membrane. Repair includes gluing the edges of A-4 torn membrane together, attaching a patch over a hole, and reapplying flashings to vents, pipes, or ducts installed through the membrane." Prop. 211 at 35-36.

<u>Section 211.6063 Solar-Absorbent Coating.</u> The Board adds a Section 211.6063 defining "solar-absorbent coating," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 23; *see* Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that "[s]olar-absorbent coating' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, a coating which has as its prime purpose the absorption of solar radiation." Prop. 211 at 36.

Section 211.6065 Solids Turnover Ratio (R_T). The Board adds a Section 211.6065 defining "solids turnover ratio (R_T)," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 23; see Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that "'[s]olids turnover ratio (R_T)" means, for purposes of 35 III. Adm. Code Parts 218 and 219, the ratio of total volume of coating solids that is added to the EDP system in a calendar month divided by the total volume design capacity of the EDP system." Prop. 211 at 36.

Section 211.6400 Stencil Coat. The existing definition of "Stencil Coat" provides that the term "means a coating that is applied over a stencil on a plastic part at a thickness of 1 mil or less of coating solids. Stencil coats are most frequently letters, numbers, or decorative designs." 35 Ill. Adm. Code 211.6400. The Board amends the definition, as amendment is necessitated by revisions to Subpart F of Parts 218 and 219 and to reflect the recommendation of the CTG. SR at 23.

The Agency originally sought to re-designate the entire existing definition as subsection (a) and provide that it applies "[p]rior to May 1, 2011." Prop. 211 at 36. In post-hearing comments filed on June 4, 2010, the Agency noted a request at the second hearing "that the Agency provide additional time for sources to comply with the proposal." PC 3 at 2. The Agency recommended "extending the compliance deadline one year from May 1, 2011, to May 1, 2012." *Id.* Having reviewed the record in this proceeding, the Board concurref with the Agency's recommendation to extend the compliance deadline, and the extension is reflected in the order below.

The Agency also proposed a new subsection (b) providing in its entirety that the term means, "[o]n and after May 1, 2011, an ink or pigmented coating which is rolled or brushed onto a template or stamp in order to add identifying letters, symbols, and/or numbers." *Id.* As noted above, the Board has concurred in extending the compliance deadline, and this extension is reflected in the adopted definition in the order below.

<u>Section 211.6425 Structural Glazing.</u> The Board adds a Section 211.6425 defining "structural glazing," as the definition is necessitated by the addition of Subpart JJ to Parts 218 and 219. SR at 23; *see* Prop. 218 at 101-13, Prop. 219 at 99-112. The definition provides in its entirety that "'[s]tructural glazing' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, a process that includes the application of adhesive to bond glass, ceramic, metal, stone, or composite panels to exterior building frames." Prop. 211 at 36.

Section 211.6460 Subfloor. The Board adds a Section 211.6460 defining "subfloor," as the definition is necessitated by the addition of Subpart JJ to Parts 218 and 219. SR at 23; *see* Prop. 218 at 101-13, Prop. 219 at 99-112. The definition provides in its entirety that "'[s]ubfloor' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, subflooring material over floor joists, including any load bearing joists. Subflooring is covered by a finish surface material." Prop. 211 at 37.

Section 211.6585 Thin Metal Laminating Adhesive. The Board adds a Section 211.6585 defining "thin metal laminating adhesive," as the definition is necessitated by the addition of Subpart JJ to Parts 218 and 219. SR at 23; see Prop. 218 at 101-13, Prop. 219 at 99-112. The definition provides in its entirety that "[t]hin metal laminating adhesive' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, any adhesive intended by the manufacturer for use n bonding multiple layers of metal to metal or metal to plastic in the production of electronic or magnetic components in which the thickness of the bond line(s) is less than 0.25 millimeters." Prop. 211 at 37.

Section 211.6640 Tire Repair. The Board adds a Section 211.6640 defining "tire repair," as the definition is necessitated by the addition of Subpart JJ to Parts 218 and 219. SR at 23-24; *see* Prop. 218 at 101-13, Prop. 219 at 99-112. The definition provides in its entirety that "'[t]ire repair' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, a process that includes expanding a hole, tear, fissure, or blemish in a tire casing by grinding or gouging, applying adhesive, and filling the hole or crevice with rubber." Prop. 211 at 37.

<u>Section 211.6670 Topcoat.</u> The existing definition of "topcoat" provides in its entirety that the term "means a coating applied to a substrate in a multiple coat operation other than prime coat, primer surfacer coat or final repair coat." 35 Ill. Adm. Code 211.6670. The Board amends the definition, as the amendment is necessitated by revisions to Subpart F of Parts 218 and 219 and reflects the recommendation of the CTG. SR at 24.

First, the Board re-designates the entire existing definition as subsection (a) and provides that it applies "[e]xcept as provided in subsections (b) and (c) of this Section." Prop. 211 at 37. The Board also adds a new subsection (b) providing in its entirety that the term means, "[f]or purposes of Section 218.204(a)(2) and 219.204(a)(2), the final coating system applied to provide the final color and/or a protective finish. The topcoat may be a monocoat color or basecoat/clearcoat system. In-line repair and two-tone are part of topcoat." *Id.* Finally, the Board also adds a new subsection (c) providing in its entirety that the term means, "[f]or purposes of Sections 218.204(1)(5) and 219.204(q)(5), any final coating applied to the interior or exterior of a pleasure craft." *Id.*

Section 211.6690 Topcoat Operation. The existing definition of "topcoat operation" provides that the term "means the application area(s), flash-off area(s), and oven(s) used to apply and dry or cure the topcoat (except final off-line repair) on automobile or light-duty truck bodies or body parts on a single assembly line." 35 Ill. Adm. Code 211.6690. The Board amends the definition, as the amendment is necessitated by revisions to Subpart F of Parts 218 and 219 and to reflect the recommendation of the CTG. SR at 24. Specifically, the Board adds to the existing definition one additional sentence stating that "[a] topcoat operation may include other coatings (e.g., blackout, interior color, etc.) that are applied in the same spray booth(s)." Prop. 211 at 37-38.

<u>Section 211.6720 Touch-Up Coating.</u> The existing definition of "touch-up coating" provides that the term "means, for purposes of motor vehicle refinishing operations, a coating applied by brush or hand held, non-refillable aerosol cans to repair minor surface damage and

imperfections." 35 Ill. Adm. Code 211.6720. The Board amends the definition, as the amendment is necessitated by revisions to Subpart F of Parts 218 and 219 and to reflect the recommendation of the CTG. SR at 24.

First, the Board re-designates the entire existing definition as subsection (a) and provides that it applies "[e]xcept as provided in subsection (b) of this Section." Prop. 211 at 38. The Board also adds a new subsection (b) providing in its entirety that the term means, "[f]or purposes of Sections 218.204(q) and 218.219(q), a coating used to cover minor coating imperfections appearing after the main coating operation." *Id*.

Section 211.6740 Translucent Coating. The Board adds a Section 211.6740 defining "translucent coating," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 24; *see* Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that "[t]ranslucent coating' means, for purposes of 35 III. Adm. Code Parts 218 and 219, a coating which contains binders and pigment, and is formulated to form a colored, but not opaque film." Prop. 211 at 38.

Section 211.6780 Trunk Interior Coating. The Board adds a Section 211.6780 defining "trunk interior coating," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 24; see Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that "'[t]runk interior coating' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, a coating outside of the primer-surfacer and topcoat operations applied to the trunk interior to provide chip protection." Prop. 211 at 38.

Section 211.6825 Underbody Coating. The Board adds a Section 211.6825 defining "underbody," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 24; see Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that "'[u]nderbody coating' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, a coating applied to the undercarriage or firewall to prevent corrosion and/or provide chip protection." Prop. 211 at 38.

<u>Section 211.6885 Vacuum Metalizing Coating.</u> The Board adds a Section 211.6885 defining "vacuum metalizing coating," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 25; *see* Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that

'[v]acuum metalizing coating' means:

a) For purposes of Sections 218.204(q)(1) and (q)(2) and 218.219(q)(1) and (q)(2), the undercoat applied to the substrate on which the metal is deposited or the overcoat applied diretly to the metal film;

b) For purposes of Sections 218.204(q)(3) and (q)(4) and 218.219(q)(3) and (q)(4), the topcoat and basecoat used in a vacuum-metalizing operation. Prop. 211 at 38-39.

Section 211.7220 Waterproof Resorcinal Glue. The Board adds a Section 211.7220 defining "waterproof resorcinal glue," as the definition is necessitated by the addition of Subpart JJ to Parts 218 and 219. SR at 25; *see* Prop. 218 at 101-13, Prop. 219 at 99-112. The definition provides in its entirety that "'[w]aterproof resorcinal glue' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, a two-part resorcinal-resin-based adhesive designed for applications where the bond line must be resistant to conditions of continuous immersion in fresh or salt water." Prop. 211 at 39.

Section 211.7240 Weatherstrip Adhesive. The Board adds a Section 211.7240 defining "weatherstrip adhesive," as the definition is necessitated by revisions to Subpart F of Parts 218 and 219. SR at 25; *see* Prop. 218 at 28-82, Prop. 219 at 29-80. The definition provides in its entirety that "[w]eatherstrip adhesive' means, for purposes of 35 Ill. Adm. Code Parts 218 and 219, an adhesive, used at an automobile or light-duty truck assembly coating facility, applied to weatherstripping materials for the purpose of bonding the weatherstrip material to the surface of the vehicle." Prop. 211 at 39.

Parts 218 and 219: Organic Material Emission Standards and Limitations for the Chicago and Metro East Areas

Subpart A: General Provisions

Existing Subpart A establishes general provisions pertaining to VOM emissions standards and limitations for the two Illinois NAAs. *See* 35 Ill. Adm. Code 218.100-218.114, 219.100-219.113, Prop. 218 at 9-28, Prop. 219 at 9-28. On a section-by-section basis below, the Board summarizes its adopted amendments to Subpart A.

<u>Section 218/219.105 Test Methods and Procedures</u>. Existing Section 218/219.105 establishes test methods and procedures pertaining to VOM emissions. 35 Ill. Adm. Code 218.105, 219.105; *see* Prop. 218 at 9-25, Prop. 219 at 9-25. The Board amends subsection (b) "by updating the testing protocol for automobile and light-duty truck primer-surfacer and topcoat operations." SR at 25; *see* Prop. 218 at 12, Prop. 219 at 11-12.

The Agency's original proposal provided that, on and after May 1, 2011, affected sources must follow the topcoat protocol issued by USEPA in September 2008. *See* Prop. 218 at 12, Prop. 219 at 11-12. In post-hearing comments filed on June 4, 2010, the Agency noted a request at the second hearing "that the Agency provide additional time for sources to comply with the proposal." PC 3 at 2. The Agency recommended "extending the compliance deadline one year from May 1, 2011, to May 1, 2012." *Id.* Having reviewed the record in this proceeding, the Board concurred with the Agency's recommendation to extend the compliance deadline, and the extension is reflected in the order below.

Section 218/219.106 Compliance Dates. Existing Section 218/219.106 establishes compliance dates for the requirements of Parts 218 and 219. 35 Ill. Adm. Code 218.106, 219.106; see Prop. 218 at 25-26, Prop. 219 at 25-26. Originally, the Agency proposed adding a subsection (e) to Section 218.106 and a subsection (c) to Section 219.106 to "establish May 1, 2011, as the compliance date for sources subject to the rulemaking proposal." SR at 25; see Prop. 218 at 26, Prop. 219 at 26.

In post-hearing comments filed on June 4, 2010, the Agency noted a request at the second hearing "that the Agency provide additional time for sources to comply with the proposal." PC 3 at 2. The Agency recommended "extending the compliance deadline one year from May 1, 2011, to May 1, 2012." *Id.* Having reviewed the record in this proceeding, the Board concurred with the Agency's recommendation to extend the compliance deadline, and the extension is reflected in the order below.

The Board also amends Section 219.106(a) in order to provide a cross-reference to the compliance date established in the new subsection (c). SR at 25; see Prop. 219 at 25.

Section 218/219.112 Incorporations by Reference. Existing Section 218/219.112 incorporates various materials by reference. 35 Ill. Adm. Code 218.112, 219.112. The Board adds "subsections (cc), (dd), (ee), and (ff) to Section 218.112 and subsections (aa), (bb), (cc), and (dd) to Section 219.112, which incorporate by reference several documents mentioned in Illinois EPA's proposed amendment to Parts 218 and 219." SR at 25-26; *see* Prop. 218 at 28, Prop. 219 at 28-29.

Subpart F: Coating Operations

Existing Subpart F of Parts 218 and 219 establishes various requirement pertaining to coating operations. 35 Ill. Adm. Code 218.204-218.217, 219.204-219.217; *see* Prop. 218 at 28-82, Prop. 219 at 29-80. On a section-by-section basis below, the Board summarizes adopted amendments to Subpart F.

<u>Section 218/219.204 Emission Limitations.</u> The Board first amends the introductory paragraph of this section in order to refer to new and revised subsections. SR at 26, Prop. 218 at 29, Prop. 219 at 29.

<u>Subsection (a).</u> The Board amends subsection (a) to "to restrict the VOM content of automobile and light-duty truck coatings to the limitations set forth in the CTG, and to separate the limits that are applicable to such coatings prior to the new compliance date from those applicable on and after the new compliance date." SR at 26; *see* Prop. 218 at 29-33, Prop. 219 at 29-33.

First, the Board in provisions pertaining to electrodeposition primer operations defines "electrodeposition" to mean "a water-borne dip coating process in which opposite electrical charges are applied to the substrate and coating. The coating is attracted to the substrate due to the electrochemical potential difference that is created." Prop. 218 at 30, Prop. 219 at 30; see SR

at 26. Second, the Board specifies "how compliance with the amended VOM content limitations for primer-surfacer, topcoat, and combined primer-surfacer and topcoat operations shall be demonstrated." SR at 26; *see* Prop. 218 at 31-32, Prop. 219 at 31-32. Third, the Board specifies the testing required for those operations. SR at 26; *see* Prop. 218 at 31-32, Prop. 219 at 31-32. Fourth, the Board adopts "an equation for determining occurrence weighted average for final repair coat operations." SR at 26; *see* Prop. 218 at 32-33, Prop. 219 at 32-33. Fifth, the Board also provides that the amended regulations "shall not apply to materials supplied in containers with a net volume of 0.47 liters (16 oz) or less, or a net weight of .45 kg (1 lb) or less." Prop. 218 at 30, Prop. 219 at 30; *see* SR at 26.

The Agency originally proposed a compliance date of May 1, 2011. Prop. 218 at 29-30, Prop. 219 at 29-30. In post-hearing comments filed on June 4, 2010, the Agency noted a request at the second hearing "that the Agency provide additional time for sources to comply with the proposal." PC 3 at 2. The Agency recommended "extending the compliance deadline one year from May 1, 2011, to May 1, 2012." *Id.* Having reviewed the record in this proceeding, the Board concurred with the Agency's recommendation to extend the compliance deadline, and the extension is reflected in the adopted regulations in the order below.

<u>Subsection (j).</u> The Agency originally proposed to amend this subsection "to specify that the limitations in [subsection] (j) are only applicable to miscellaneous metal parts and products coatings prior to May 1, 2011, and that on and after such date, the limitations in subsection (q) shall apply." SR at 26; *see* Prop. 218 at 35-37, Prop. 219 at 35-36.

In post-hearing comments filed on June 4, 2010, the Agency noted a request at the second hearing "that the Agency provide additional time for sources to comply with the proposal." PC 3 at 2. The Agency recommended "extending the compliance deadline one year from May 1, 2011, to May 1, 2012." *Id.* Having reviewed the record in this proceeding, the Board concurred with the Agency's recommendation to extend the compliance deadline, and the extension is reflected in the adopted regulations in the order below.

<u>Subsections 218.204 (n), 219.204(m).</u> The Agency originally proposed to amend these corresponding subsections to specify that they apply "to plastic parts coatings (automotive/transportation) prior to May 1, 2011, and that on and after such date, the limitations in subsection (q) shall apply." SR at 27; *see* Prop. 218 at 40-41, Prop. 219 at 39-40.

In post-hearing comments filed on June 4, 2010, the Agency noted a request at the second hearing "that the Agency provide additional time for sources to comply with the proposal." PC 3 at 2. The Agency recommended "extending the compliance deadline one year from May 1, 2011, to May 1, 2012." *Id.* Having reviewed the record in this proceeding, the Board concurred with the Agency's recommendation to extend the compliance deadline, and the extension is reflected in the adopted regulations in the order below.

<u>Subsections 218.204(o), 219.204 (n).</u> The Agency originally proposed to amend these corresponding subsections to specify that they apply "to plastic parts coatings (business

machines) prior to May 1, 2011, and that on and after such date, the limitations in subsection (q) shall apply." SR at 27; see Prop. 218 at 41-42, Prop. 219 at 40-41.

In post-hearing comments filed on June 4, 2010, the Agency noted a request at the second hearing "that the Agency provide additional time for sources to comply with the proposal." PC 3 at 2. The Agency recommended "extending the compliance deadline one year from May 1, 2011, to May 1, 2012." *Id.* Having reviewed the record in this proceeding, the Board concurred with the Agency's recommendation to extend the compliance deadline, and the extension is reflected in the adopted regulations in the order below.

<u>Subsection (q).</u> The Board adds this subsection, "which sets forth VOM content limitations, definitions, and exclusions for metal parts and products coatings; plastic parts and products – miscellaneous coatings; plastic parts and products – automotive/transportation coatings; plastic parts and products – business machine coatings; pleasure craft surface coatings; and motor vehicle materials coatings." SR at 27; *see* Prop. 218 at 42-51, Prop. 219 at 41-50; *see also* Davis Test. at 2.

In its post-hearing comments filed on May 17, 2010, the Agency noted that the Board had asked why this subsection was not instead designated in alphabetical order as subsection (o) or (p). PC 1 at 3 (¶13); see Tr.1 at 46-47. The Agency stated that it proposed in docket R10-8 to add a new subsection addressing flat wood paneling coatings. PC 1 at 3; see Reasonably Available Control Technology (RACT) for Volatile Organic Material Emissions from Group II Consumer & Commercial Products: Proposed Amendments to 35 Ill. Adm. Code 211, 218, and 219, R10-8 (June 17, 2010) (adopting regulations). The Agency stated that, "[i]n Part 219, the category is in a subsection lettered as '(o)' and in 218, it is lettered '(p)' (because there is one more existing coating category in Part 218 than in Part 219)." *Id.* The Agency elaborated that, "[i]n the present rulemaking, the Agency, assuming that R10-8 will eventually be finalized, used '(q)' for the next coating category. Many coating subcategories are addressed in (q), and the Agency believed using the same subsection letter for both Parts 218 and 219 would reduce confusion and simplify references." *Id.* at 3-4.

In addressing a question during the first hearing, Mr. Davis indicated that, although the Agency's proposal included an emissions averaging option for fiberglass boat manufacturing materials, the proposal did not include emission averaging as a compliance option for miscellaneous metal and plastic parts and other coatings. Tr.1 at 31, 34; *see* Prop, 218 at 85-89 (proposed subsection 218.891(c)), Prop. 219 at 83-87 (proposed Section 219.891(c)).

Also during the first hearing, the Board asked why the Agency had proposed definitions for two terms in this subsection instead of proposing them under Part 211. Tr.1 at 43-44. Regarding "marine engine coating," Mr. Davis suggested that the Agency had sought to define the term in this section in order to distinguish it from the separate definition of "marine coating" proposed in Part 211. *Id.* at 44. Regarding "corrosion resistant basecoat," Mr. Davis suggested that the Agency may have sought to define the term in this section in order in order to distinguish it from separate definitions of the same term in other provisions. *Id.* at 44-45. In post-hearing comments filed on May 17, 2010, the Agency indicated that it had "included these two

definitions in (q)(1) because the definitions are currently part of 218/219.204(j), which sets forth the existing metal parts and products coatings limitations." PC 1 at 3 (¶11). The Agency stated that it has "kept the definitions in Section 218/219.204 for consistency's sake, but has no objection to moving the definitions into Part 211 instead." PC 1 at 3 (¶11). The Board recognized the Agency's view that carrying these definitions forward from subsection (j) provides a measure of consistency and declined to add these two definitions to Part 211.

In its testimony pre-filed on May 7, 2010, for the second hearing, Olin noted that, beginning May 1, 2011, the Agency's original proposal would replace the existing limits under subsection (j) with new limits in this subsection (q). Olin Test. at 6, citing 35 Ill. Adm. Code 219.204(j). Olin characterized this compliance deadline of approximately one year as "completely infeasible." *Id.* In this regard, the Board noted that the Agency's post-hearing comment filed on June 4, 2010, "recommends extending the compliance date one year, from May 1, 2011, to May 1, 2012." PC 3 at 2. The Board further noted that the Agency's and Olin's post-hearing comments recommend various substantive amendments that appear to resolve the questions and issues raised by Olin in the course of this proceeding. *See* PC 2 at 2-7, PC 3 at 4-6. Accordingly, the Board declined to extend the compliance deadline beyond the May 1, 2012 date recommended in the Agency's post-hearing comments.

In its post-hearing comments, Olin noted that the Agency had proposed to add definitions and a separate coatings category and expressed its support for the Agency's motion to amend. PC 2 at 2; *see* Mot. Amend at 6. Olin nonetheless stated that it "still has concerns with the feasibility of the proposed limits as they may relate to Ejection Cartridge Sealants and Primer Sealants." PC 2 at 3. Olin argued that the proposal required additional changes if ejection cartridge sealants and primer sealants are not to be classified as either "Military Specification Coatings" or "All Other Coatings." PC 2 at 3.

Olin states that, after the second hearing, it continued to discuss issues pertaining to ejection cartridge sealants and primer sealants with the Agency. PC 2 at 3. Olin reported that, as a result of those discussions, it expected the Agency to amend the introductory paragraph of this subsection to provide in pertinent part that "[t]he limitations in this subsection (q) do not apply to aerosol coating products, or primer sealants and ejection cartridge sealants used in ammunition manufacturing. Primer sealants and ejection cartridge sealants shall instead be regulated under Subpart TT of this Part." PC 2 at 4. In its post-hearing comment filed June 4, 2010, the Agency proposed to amend this paragraph in this manner. Having reviewed the record, the Board concurred in the Agency's proposal, and the amendment is reflected in the adopted regulations in the order below.

Subsection (q)(1)(A). In a post-hearing comment filed on June 4, 2010, Electro-Motive Diesel, Inc. (EMD) indicated that it performs paint coating at a facility in McCook, Cook County. PC 6 at 1. EMD notes that the existing subsection (j) addressing miscellaneous metal parts and products coating "includes a general category under (j)(1) for "Clear coating." *Id.*, citing 35 Ill. Adm. Code 218.204. EMD stated that coating lines now subject to subsection (j) will be required to comply with subsection (q) on and after May 1, 2011. PC 6 at 1. The Board

noted that it has concurred in the Agency's recommendation to extend this compliance deadline to May 1, 2012. *See* PC 3 at 2.

EMD stated that "the only 'Clear coating' category in [subsection] (q) of the proposed amendments is at (q)(1)(AA) 'Marine engine coating." PC 6 at 1. EMD argued that excluding a "Clear coating" category from subsection (q) "will greatly affect future paint coating needs" at its facility. *Id*. EMD suggested that, to make the proposed subsection (q) consistent with the current subsection (j), the Board should add a "Clear coating" category. *Id*. EMD first suggested placing this category, including the same VOM content limits, in proposed Section 218.204(q)(1)(A), "General one component coatings." *Id*. That subsection contains separate limits for air dried and baked coatings. *Id.*, *see* Prop. 218 at 42. EMD then suggested, if this addition is not possible, that the Board add the clear coating category, including the same VOM content limits, as a new subsection (q)(1)(CC) specifically addressing "Diesel-Electric Locomotive Coating Lines in Cook County." PC 6 at 2.

The Board noted that existing Section 218/219.204(j), Miscellaneous Metal Parts and Products Coating, establishes in subsection (1) VOM content limits for the category of "Clear coating." 35 Ill. Adm. Code 218.204(j)(1), 219.204(j)(1). The Board also noted that, although the CTG recommends VOM content limits for 25 categories of metal parts and products coatings, those recommendations do not include the category of "Clear coating." CTG Miscellaneous Coatings at 33 (Table 2). The Agency's proposal included each of these 25 categories listed in the CTG and also added VOM content limits for the categories of "Steel pail and drum interior coating," "Marine engine coating," and "All other coatings." Prop. 218 at 42-46, Prop. 219 at 41-44. In its motion to amend granted above under "Preliminary Matter," the Agency proposed to add subsections establishing VOM content limits for the categories of "Ammunition Sealants" and "Electrical Switchgear Compartment Coatings." Mot. Amend at 6-7.

Although EMD does not elaborate on how "[t]he exclusion of a 'Clear coating' category in [subsection] (q) will greatly affect future painting needs" at its facility, it appeared likely that EMD expects that coatings used in its operations will become categorized under "All other coatings," "General one component" coatings, or another category with more restrictive VOM limits. The record before the Board did not demonstrate that these more restrictive limits would constitute RACT for "Clear coatings" generally or for material used by EMD in its operations. Consequently, the Board generally concurred that it was appropriate to add VOM limits for a "Clear coatings" category to the proposed Section 218/219(q)(1). Although EMD proposed a new category for "Diesel-Electric Locomotive Coating Lines," the Board had not adopted and did not have before it a definition of that term. Accordingly, the Board added VOM limits for "Clear coatings" under subsection (q)(1)(A) so that they apply to clear coatings within the category of "General one component coatings." This addition is reflected in the adopted regulations in the order below.

<u>Subsection (q)(1)(BB).</u> As noted above, in testimony pre-filed on May 7, 2010, Olin stated that the Agency's original proposal would replace the existing limits under subsection (j) with new limits in this subsection (q) beginning May 1, 2011. Olin Test. at 6, citing 35 Ill. Adm.

Code 219.204(j). Olin further stated that it is "uncertain how the Agency will classify operations that make ammunition using sealants that need to meet military specifications." Olin Test. at 10. Olin argued that it may not be technically or economically feasible to meet both the proposed Military Specification Coating limits and military performance standards. *Id.* at 5.

Olin further stated that the proposed addition of an All Other Coatings category may make sealant operation now subject to 35 Ill. Adm. Code 219 Subpart TT subject to more stringent limits under Subpart F. Olin Test. at 5. Specifically, Olin expressed the concern that the Agency may classify primer sealant and ejection cartridge operations under this proposed All Other Coatings category. *Id.* Olin argued that these operations "are unique to ammunition manufacture and alternate sealants are not currently available. *Id.* at 5-6. Olin further argued that application of the proposed emission limits for the All Other Coatings category may make these operations economically and technically infeasible. *Id.* at 5-6.

In its testimony pre-filed on May 7, 2010, for the first hearing, Olin proposed two resolutions to these issues. First, Olin suggested "[t]hat the military specification coating definition in proposed 35 Ill. Adm. Code 211.3785 be amended to exclude ammunition sealants." Olin Test. at 11. Olin claimed that, if the Board adopted this suggestion, then "many of Olin's ammunition sealants would continue to be classified as 'Extreme Performance Coatings' regulated under proposed 35 Ill. Adm. Code 219.204(q)(1)(G) and others would be regulated under other subsections or subparts of 35 Ill. Adm. Code Part 219." *Id.* Second, Olin suggested that "the primer sealants used in ammunition manufacturing and the ejection cartridge sealants used in the manufacture of ejection cartridges not be subject to the proposed coating regulations and that they continue to be regulated under 35 Ill. Adm. Code Part 219, Subpart TT." *Id.* at 11-12.

In post-hearing comments filed on May 17, 2010, the Agency indicated that it did not intend the proposed "Military Specification Coating" category to include sealants used in ammunition manufacturing. PC 1 at 1 (¶4). The Agency stated that "[p]rimer sealants used in ammunition manufacturing are currently regulated under Subpart TT of Part 218 and 219, and the Agency intends that they continue to be regulated as such." *Id.* In its motion to amend also filed on May 17, 2010, the Agency stated that, "[b]ased on discussions with a representative of Olin, and on information contained in Olin's testimony regarding the unique circumstances surrounding coatings/sealants used in ammunition manufacturing, the Agency recommends adding a separate coatings category" for ammunition sealants. Mot. Amend at 5-6 (¶7) (proposing Section 218/219.204(q)(1)(BB)).

During the second hearing, Mr. Sutton stated that the Agency' motion to amend its proposal had addressed Olin's concerns about classification of cap sealants and mouth waterproofing sealants. Tr.2 at 8-9. However, Mr. Sutton indicated that the Agency had not fully addressed Olin's concerns about classification of primer sealants and ejection cartridge sealants. *Id.* at 9. He opined that, even as amended, the Agency's proposal could still be interpreted to classify those two sealants either as military specification coatings or other coatings. *Id.* In its post-hearing comments filed on June 4, 2010, the Agency agreed "that such an interpretation is possible." PC 3 at 5. The Agency's comment recommended that the Board

amend "Section 218/219.204(q) to provide that subsection (q) does not apply to primer sealants and ejection cartridge sealants. . . ." *Id.* at 5-6. The Agency also recommended amending three definitions in Part 211 in order to make them consistent with the amendment to subsection (q). *Id.*

The Agency expressed the belief that the motion to amend and the recommendations in its post-hearing comments filed on June 4, 2010 "resolve all of the concerns set forth in Olin's pre-filed testimony, as well as the concerns Olin expressed to the Agency following the hearing." PC 3 at 5. In its post-hearing comments filed June 3, 2010, Olin expressed its support for the Agency's May 17, 2010 motion to amend. PC 2 at 2. Olin also stated that incorporating specific additional changes, which are also reflected in the Agency's post-hearing comment, "would resolve the potential issues Olin had with the Ejection Cartridge Sealants and Primer Sealants." *Id.* at 4. The Board granted the Agency's motion to amend above under "Preliminary Issue" and has incorporated the recommendations made in the Agency's post-hearing comments into the adopted regulations in the order below. Having reviewed the Agency's and Olin's post-hearing comments, the Board finds that the record supports the amendments suggested in them and also incorporates them into the order below.

<u>Subsection (q)(1)(CC).</u> In its motion to amend, the Agency noted that it had received information "regarding the unique circumstances surrounding electrical switchgear compartment coatings." Mot. Amend at 7 (\P 8). The Agency responded to that information by recommending the addition of "a separate category to Part 218/219.204(q)(1) for such coatings." *Id.* The Agency also proposed to add to Part 211 a definition of "electrical switchgear compartment coatings." *Id.*

In its response to the Agency's motion, S&C stated that, after the Agency filed its original rulemaking proposal, it "engaged in a series of discussions with the Illinois EPA regarding the impact of the proposed amendments in the facility's coating operations." S&C Resp. at 1. S&C further states that, after it had participated in the first hearing, it "continued discussions with the Illinois EPA regarding revisions to the proposal to address the issues raised by S&C regarding coatings for the electrical switchgear compartments that it manufactures." *Id.* at 1-2. S&C noted that the Agency's motion to amend proposes both to define "electrical switchgear compartment coatings" and to add a new subsection (q)(1)(CC) establishing VOM emissions limits for that category. *Id.* at 2, citing Mot. Amend at 7. S&C stated that it supported the Agency's proposed amendments and requested that the Board adopt the Agency's amendments as proposed. S&C Resp. at 2. Having granted the Agency's motion above under "Preliminary Matter," the Board includes the amendments in the adopted regulations in the order below.

<u>Subsection (q)(2).</u> In this provision addressing miscellaneous plastic parts and products, the Agency proposed exemptions from proposed limitations. *See* Prop. 218 at 46, Prop. 219 at 45. One exemption applied to "any individual coating category used in volumes less than 189.2 liters (50 gallons) in any one calendar year, if the total usage of all such coatings does not exceed 756.9 liters (200 gallons) per calendar year per source and substitute complaint coatings are not available." Prop. 218 at 46, Prop. 219 at 45. During the first hearing, counsel for S&C asked

whether this exemption applies "solely to the total usage of coatings for plastic parts and products, or does the exemption apply more broadly such as to other categories like metal parts?" Tr.1 at 20-21. The Agency responded that "[t]he exemption is just for plastic parts." *Id.* at 21. The Agency stated that the CTG included an exemption for this category and not for metal parts. *Id.*

During the first hearing, counsel for S&C indicated that some coatings must satisfy certain requirements based on their function and noted that the Agency's proposed exemption requires that no substitute coating is available. Tr.1 at 21. On behalf of the Agency, Mr. Rory Davis indicated that, if no available substitute coating "serves the same function as the original coating," then that original coating would meet the criterion for the exemption. *Id.* Mr. Davis elaborated that a source may clarify their eligibility for this exemption by relying on industry resources or by asking "their coating supplier if there are available compliant coatings that meet the specifications they're looking for." *Id.* at 21-22. Mr. Davis stated that, "[i]f a source makes a good faith effort to determine whether there was a compliant coating, that would satisfy the criteria." *Id.*

<u>Subsection (q)(2)(A).</u> Subsection (q)(2)(A) establishes, among other provisions, a VOM content limit of 2.3 lb/gal for general one component coatings. Prop. 218 at 46, Prop. 219 at 45. In testimony offered at the second hearing, Mr. Robert Raymond of Rayvac stated that, for his firm's plastic coating operations, the Agency's proposed limit "will be difficult to reach." Exh. 4 at 2; see Tr.2 at 53. His testimony proposed either that sources such as Rayvac "be allowed to continue operations under existing regulations" or that the Agency revise its proposed VOM content limit to 3.5 or 4 lb/gallon. Exh. 4 at 2; see Tr.2 at 53. Mr. Raymond also requested an extension of the compliance deadline, stating that "[t]he short compliance period of May 2011 does not give enough time to test alternatives." Exh. 4 at 2. During the second hearing, Mr. Raymond indicated that higher limits specifically applicable to automotive and transportation plastic parts and to miscellaneous plastic parts might apply to his operations and might be reasonably attainable. See Tr. 2 at 56-62. Mr. Raymond expressed willingness to discuss applicability of those higher limits with the Agency. Tr.2 at 62-63.

In its post-hearing comments filed June 4, 2010, the Agency indicated its willingness to work with source such as Rayvac to categorize coatings and determine VOM content limits applicable to them. PC 3 at 3. The Agency also noted that it had proposed to extend the compliance deadline, "in part to provide sources like Rayvac additional time to work with the Agency, properly categorize their coatings, and determine a compliance strategy." *Id.*; *see* PC 3 at 2 (recommending extension to May 1, 2012). The Agency argued on the basis of these factors that "the VOM limit for 'general one component' coatings should not be changed." *Id.* at 4. Having reviewed the record, the Board concluded that the issues raised by Mr. Raymond on behalf of Rayvac could be addressed without amending the proposed VOM limit for general one component coatings and declined to amend the limit.

<u>Subsection (q)(5).</u> The Agency originally proposed in this subsection to establish VOM content limits for "Pleasure Craft Surface Coatings." Prop. 218 at 50, Prop. 219 at 49. Specifically, the Agency proposed limits for eight separate coatings within this category. *Id*.

In testimony pre-filed on May 7, 2010 for the second hearing, Mr. James Sell on behalf of ACA stated that, although the pleasure craft industry continues to develop lower-VOM coatings, "high solids and water based technologies have not been immediately successful in providing compliant coatings which also meet technical and customer demands." ACA Test. at 4. He argued that coating manufacturer will not have available a full range of compliant products in time to meet the Agency's proposed compliance deadline. *Id.* at 3, 4-5. He further argued that "end-use customers will have insufficient time to adapt their working practices to accommodate new coating products -- one of the strategies advocated by the CTG." *Id.* at 5.

ACA's pre-filed testimony stressed the significance of the pleasure craft coatings industry, particularly the market for large yachts and for refit/repair services. ACA Test. at 3, 5-6. ACA claimed that, "[i]f boats can not be completed to the aesthetic standards demanded in North America (due to limitations on products and/or applications), it is highly likely that businesses in this sector, including charter business, will be lost to South America, Mexico and Europe." *Id.* at 5. ACA argued that the Agency's proposed VOM limits "will significantly limit any competitive advantages for US pleasure craft builders with cost, technical, and aesthetic requirements severely compromised." *Id.* at 6. ACA further argued that the proposal places "additional pressure on an industry already in decline in the US. . . ." *Id.*

Mr. Sell's pre-filed testimony argued that "[t]he aesthetic properties that topcoats give to the topsides of pleasure craft are of primary importance to boat owners" and "should not be underestimated or dismissed." ACA Test. at 9. He further argued that "[i]f boat owners cannot achieve the desired super-glossy, mirror-like finish, they will not settle for an inferior solution -- they will simply have their boats painted elsewhere." *Id.*; *see* Tr.2 at 26 He claimed that the pleasure craft coating market has not generally accepted high solids topcoats because "users have found the finish that these products provide to be inferior to traditional, higher VOC containing products." ACA Test. at 9; *see* Tr.2 at 26. He also claimed that some low-VOM topcoats provide less durability, requiring more frequent reapplication and possibly higher overall VOM emissions. *Id.* Finally, he argued that, although industries such as aviation and auto refinishing employ high solids and water-based coatings, those industries rely upon controlled application conditions that are not available for pleasure craft coating. *Id.*; *see* Tr.2 at 35-36.

ACA's pre-filed testimony objected to USPA's recommendation in the CTG that the South Coast Air Quality Management District's pleasure craft coating Rule 1106.1 constitutes RACT. ACA Test. at 1; see CTG Miscellaneous Coatings at 25-26, E-3 (Appendix E: Summary of California Air District Requirements for VOC Emissions from Pleasure Craft Surface Coating); see also TSD at 9, Prop. 218 at 50, Prop. 219 at 49. ACA argued that "the Rule 1106.1 limits do not represent RACT for the national pleasure craft coating industry." ACA Test. at 2.

First, ACA argued that the proposed VOM content limits "are too restrictive to allow coating manufacturers to produce products which meet both technical and customer requirements. The industry does not currently have compliant coatings to sell in states and areas where they will be required if guidance in the CTG on pleasure craft coating operations is followed." ACA Test. at 3; *see* Exh. 3 at 3, Tr.2 at 19, 26-27. Second, ACA claimed that the

Agency's proposal did not provide the industry sufficient time to produce coatings that satisfy both the requirements of pleasure craft owners and the proposed VOM content limits. ACA Test. at 3; see Exh. 3 at 3, Tr.2 at 19-20, 24-27. Third, ACA argued that Rule 1106.1 was adopted in an ozone NAA classified as "Severe" and does not constitute RACT for a NAA classified as "Moderate." ACA Test. at 3, 4; see Exh. 3 at 3, Tr.2 at 20. Fourth, ACA claimed that, "[e]ven in the State of California, only five other Districts have found the need to introduce rules which regulate the VOC content of pleasure craft coatings. . . ." ACA Test. at 4; Exh. 3 at 3, Tr.2 at 20. Fifth, ACA suggested that Rule 1106.1 is outdated, stating that it now "requires an additional specialty category to allow for recent regulatory developments resulting from the International Maritime Organisation (IMO) Antifouling Systems Convention (2001)." ACA Test. at 4; see Exh. 3 at 3-4, Tr. 2 at 21. In addition, ACA stated that, "[a]s a technical matter, Rule 1106.1 was developed on the basis of the "best available retrofit control technology" (BARCT) under the California Clean Air Act, which is more stringent than the national RACT standard." ACA Test. at 2. ACA claime that, "[w]hile a long-lived BARCT standard may evolve into a national RACT standard with the passage of time and with industry effort to improve technology and application techniques, this has not occurred with [Rule] 1106.1 standards." Id. Finally, ACA stated that "[t]he pleasure craft industry was not given the normal opportunity to consult with the [US] EPA sufficiently during the drafting of the CTG." Id. at 9; see also id at 1-2.

ACA proposed specific modifications to the recommendations in the CTG. ACA initially proposed to "[r]egulate VOM emissions from facilities using pleasure craft coatings by including an averaging approach as a compliance option." ACA Test. at 6-7, 10; *see* Exh. 3 at 4, Tr.2 at 21, 29-30, 40. ACA argued that "[t]his strategy works well since it allows facilities to use a combination of high and low VOC products providing, at the end of the year, the average value is below a certain target level." ACA Test. at 6. ACA noted that "[t]his approach requires affected facilities to maintain an inventory of all products used in their surface coatings operations," but claimed that these recordkeeping requirements are consistent with those for other VOM emission regulations. *Id.* ACA claimed that this proposed averaging approach "could replace the current CTG category-and-limit approach, or it could be offered as an alternative compliance option to a category-and-limit approach." *Id.* ACA noted that European regulations incorporate averaging, which provides greater flexibility to pleasure craft builders and painters. *Id.*; *see* Exh. 3 at 4, Tr.2 at 21, 40.

In the event that the Board did not adopt an averaging approach, ACA proposed specific modifications of the recommendations in the CTG. ACA Test. at 7-9, 10. In support of extending the compliance deadline, ACA argued that it did not have an adequate opportunity to persuade USEPA that the requirements of Rule 1106.1 should not have been included in the CTG as RACT. ACA Test. at 7. ACA claimed that additional time is necessary "for paint manufacturers to develop and introduce lower-VOC coatings, and for customers to adjust their operations to the use of these new coatings." *Id.* Specifically, ACA argued that "industry requires an interim period of at least *four years* (until August 2013) to allow sufficient time for coating manufacturers and users to adequately prepare." *Id.* (emphasis in original); *see* Exh. 3 at 4, Tr.2 at 21-22, 27, 33, 41.

ACA also argued that, during this interim period, the VOM limit for the "Finish Primer/Surfacer" coating category "should be revised from 420 g/l to 600g/l." ACA Test. at 8 (emphasis in original); see Exh. 3 at 4-5, Tr.2 at 34. In making this suggestion, ACA stressed aesthetic expectations in the pleasure craft market. ACA Test. at 7. ACA stressed that "[i]ntroducing high solids/low VOC primers that provide a smooth, easy-to-sand surface necessary to provide the aesthetics demanded by owners will require significant time to develop and evaluate." *Id.* ACA argued that this suggested revision will ensure that products meeting these demands can continue to be supplied in the ozone NAAs. *Id.* at 8.

In addition to revising that limit for a four-year interim period, ACA proposed permanent changes to the product categories and VOM emission limits drawn from Rule 1106.1 and included in the CTG. ACA Test. at 8; see Tr.2 at 31. First, ACA suggested that Rule 1106.1 is outdated and should reflect the new coating category of "Antifouling Sealer/Tie Coat" originating from the IMO Antifouling Systems Convention. *Id.*; see Exh. 3 at 5. ACA proposed to define this type of coating as one "applied over Biocidal antifouling coating for the purpose of preventing release of biocides into the environment and/or to promote adhesion between an antifouling and a primer or other antifoulings." ACA Test. at 8. ACA claimed that "[t]his coating type is required to promote adhesion of biocide-free, non-stick foul release coatings when applied to vessels." *Id.* ACA argued that these coatings "contain a high degree of polymeric material (hence need a higher VOC content to maintain an acceptable application viscosity) so the coating can form a flexible yet complete barrier over an underlying paint film." *Id.* ACA further argued that the maximum VOM content for this proposed category should be 420 g/l "in order to facilitate adequate penetration into an underlying paint film for maximum adhesion." *Id.*

Second, ACA addressed the category of "Other substrate antifoulant coating." *See* Prop. 218 at 50, Prop, 219 at 49 (proposing limit of 0.33 kg/l). ACA argued that

[i]t is possible to reduce the VOC content of antifouling coatings to a certain level, after which product performance becomes significantly compromised, *i.e.*, the coating begins to foul after a much shorter time as the performance lifetime of the product is reduced. If this happens the antifouling must be reapplied more frequently resulting in greater overall VOC contribution. This nullifies the merit of producing the lower VOC antifouling in the first instance. ACA Test. at 8.

ACA claimed that the NESHAP for shipbuilding and repair, the CTG, and SCAQMD Rule 1106 all provide a VOM content limit for this category of 400 g/l. *Id.* (citations omitted). ACA argued that "[t]his limit is more suitable to represent RACT for this category," ACA proposed to amend the Agency's proposed limit from 330 g/l to 400 g/l. *Id.* at 8-9; *see* Exh. 3 at 5.

Third, the ACA addressed the category of "Extreme high gloss coating - topcoat." *See* Prop. 218 at 50, Prop. 219 at 49 (proposing limit of 0.49 kg/l). ACA claimed that high solids coatings in this category "have not been well received" and that low-VOM topcoats "provide reduced durability." ACA Test. at 9. ACA argued that extreme high gloss topcoats account for "less than 40% of the overall VOC burden and less than 10% of the total yacht coatings on an

annualized basis." *Id.* ACA claimed that "restricting the VOC of the other coating categories and setting the VOC limit for Extreme High Gloss topcoats to 600 g/l, provides individual states with a balanced VOC reduction strategy that is appropriate to the challenge and that does not seriously impact the competitiveness of the industry in the state." *Id.*; *see* Exh. 3 at 5.

Fourth, the ACA also sought to revise the Agency's proposed definition of "Extreme high gloss coating - topcoat." *See* Prop, 211 at 23. ACA stated that "application of topcoats is undertaken in a variety of environmental conditions which can have an effect on the final gloss level of the product at the point of application. ACA Test. at 9. ACA suggested that, in order to account for this variation, "the gloss level stated in the definition of the Extreme High Gloss Topcoats category be lowered slightly to read 'Extreme high gloss coating means any coating which achieves *greater than 90* percent reflectance on a 600 meter when tested by ASTM Method D 523-89." *Id.* (emphasis in original); *see* Exh. 3 at 5, Tr.2 at 37-38.

As the final element of its proposal, the ACA noted that USEPA is "currently determining a Maximum Available Control Technology (MACT) Standard to control Hazardous Air Pollutant (HAP) emissions from pleasure craft coating operations in the U.S." ACA Test. at 9. ACA stated that pleasure craft coating manufacturers have participated in developing this standard. *Id.* ACA further stated that the industry seeks to make the recommendations in the CTG consistent with the MACT standard expected in 2011. *Id.*; *see* Exh. 3 at 5, Tr.2 at 22-23.

As noted below in addressing Sections 218.207(m) and 219.207(l), the Agency in its post-hearing comments filed on June 4, 2010 recommended an emissions averaging compliance option for pleasure craft surface coating operations. PC 3 at 7; see infra at 78-79. The Agency claimed that its emissions averaging proposal satisfies ACA's objections and makes unnecessary any increase in proposed VOM limitations. PC 3 at 19. First, the Agency argued that this alternative provides significant flexibility because it allows averaging across seven different coating categories, which Subpart F does not generally allow. PC 3 at 19. Second, the Agency noted that ACA proposed raising VOM limitations as an alternative to averaging. Id., citing ACA Test. at 10, Tr. 2 at 29. Third, the Agency claimed that including "an averaging option will address the guidance anticipated from USEPA concerning pleasure craft coatings." PC 3 at 19. Fourth, the Agency argued that it has proposed to extend the compliance deadline by one year, allowing the industry to develop complaint coatings. *Id.* at 20. Finally, the Agency claimed that neither it nor Mr. Halcomb on behalf of ACA is aware "of any pleasure craft surface coating operations currently located in Illinois nonattainment areas." Id. at 21, citing Tr.2 at 32. The Agency concluded that an averaging option and an extended compliance deadline will "fill in any gaps that remain" between existing coatings and its proposed VOM limitations. PC 3 at 21.

In its post-hearing comments filed June 4, 2010, ACA sought to clarify the "Industry Proposal" offered in Mr. Sell's pre-filed testimony. *See* ACA Test. at 9-10 (Summary). ACA stated that it summary "has apparently been taken to mean that the industry would accept all of the proposed limits so long as it can average them." PC 4 at 3. ACA indicated that "[t]hat was not the intent of the statement." *Id.* ACA elaborated that it refers to the European Solvent Emissions Directive (SED), which "does not specify VOM limits for individual products or coating operations." *Id.* (citation omitted). Instead, SED assigns total authorized annual VOM

emissions to various operations, which "in turn determine the annual coatings usages that will keep them at or under their assigned limit." *Id.* Suggesting that SED offers greater flexibility, ACA argued that "the US system, at least with respect to coatings, operates by assigning a limit for each coating line or product first, and then allows them to go higher on some of the limits if these are compensated for by lower VOC contents in other products below the complaint limits." *Id.* ACA clarified its summary by indicating that, if the proposal does not include averaging based on an SED system, then there must be an accurate determination of whether proposed VOM content limits constitute RACT. *Id.* at 4.

ACA nonetheless reported that one pleasure craft operation conducted an emission averaging exercise with the limits in Rule 1106.1. PC 4 at 4. ACA reported that, "based on the initial results for that one operation, is appears that averaging even with the [Rule 1106.1] limits seems to result in a compliant averaging regime even using the US approach, at least for that operation." *Id.* ACA accounted for this result by stating that "primers can have lower VOC content than the specified limits in Rule 1106.1." *Id.* ACA argued that the American system of averaging does not determine whether specific VOM content limits constitute RACT and may provide no flexibility to an operation that "primarily refurbishes pleasure craft and thus may not use the same amount of primer as one that builds exclusively from scratch." *Id.* ACA reported that "[o]ne member has done a quick review of this issue based on usages of an operation that largely refurbishes and has found that the US averaging regime will not work there." *Id.*

In addition, ACA's post-hearing comment proposed for the first time the addition of another coating category. ACA stated that "pretreatment wash primer" is a coating which has evolved since the adoption of Rule 1106.1. PC 4 at 4. ACA sought to define that term as "a coating which contains no more than 25 percent solids, by weight, and at least 0.1 percent acids, by weight; is used to provide surface etching; and is applied directly to fiberglass and metal surfaces to provide corrosion resistance and adhesion of subsequent coatings." *Id.* ACA proposed a VOM limit of 420 g/l as RACT for pretreatment wash primers.

ACA suggested that, if averaging is based upon VOM limits "that are in fact RACT," then averaging may provide both flexibility to and reduced VOM emissions from pleasure craft operations. PC 4 at 4. ACA indicated that it seeks to meet with the Agency in order "to discuss this in a full blown technology review." *Id.* In this regard, ACA noted that USEPA's Office of Air Quality Planning and Standards (OAQPS) recently issued a memorandum on the CTG for Miscellaneous Metal and Plastic Parts Coatings (MMPPC) in response to an industry request to reconsider some of its recommended emission limits. *Id.* at 1-2; *see id.*, Att. 1. That memorandum states in pertinent part that

[a]fter careful evaluation of the issues raised by the pleasure craft industry, OAQPS is recommending that the pleasure craft industry work with state agencies during their RACT rule development process to assess what is reasonable for the specific sources regulated because the CTG impose no legally binding requirements on any entity, including pleasure craft coating facilities. . . . The CTG are intended to provide state and local air pollution control authorities with information to assist them in determining RACT for VOC. Based on available

information and data, EPA has provided recommendations for RACT for MMPPC operations, including pleasure craft coating operations, in the MMPPC CTG. States can use the recommendations from MMPPC CTG to inform their own determination as to what constitutes RACT for VOC for pleasure craft coating operations in their particular ozone nonattainment areas. *Id.*, Att. 1; *see* CTG Miscellaneous Coatings at 1 (Introduction).

In addressing pleasure craft coatings, the Board noted that the Agency had recommended in its post-hearing comments an extension of the compliance deadline from May 1, 2011, to May 1, 2012. PC 3 at 2. The Board concurred in that recommendation, and the extension is reflected in the adopted regulations in the order below. As operations will have an additional year to comply with the requirements of this proposed subsection, the Board concluded that the extended deadline made the proposed regulations more feasible and reasonable. The Board also noted that the Agency had proposed an emissions averaging alternative for pleasure craft surface coating operations. Id. at 8-10, 14-16. Although ACA favored a different approach to emissions averaging, it has acknowledged that the proposal provides a meaningful compliance alternative to at least one coatings operation. Furthermore, ACA's own post-hearing comment indicated that a complete technical review of VOM limits remains to be performed. See PC 4 at 4. Also, although ACA has provided a link to the European SED in support of its position on averaging (id. at 3), the provisions of that directive have not been specifically addressed at hearing or in comments in this proceeding. In addition, the Board noted that the participants have generally agreed that these requirements do not apply to any sources operating or planning to operate in either of the two Illinois nonattainment areas. See PC 3 at 21, Tr.2 at 32. Having considered these factors and reviewed the record on pleasure craft coatings, the Board declined to amend the VOM emission limits or the averaging provisions originally proposed by the Agency. Also, the Board declined to propose a new definition or VOM limits for "pretreatment wash primer," which were offered for the first time in post-hearing comments.

Section 218/219.205 Daily-Weighted Average Limitations.

<u>Introductory Paragraph.</u> The Board amends this language to refer to new Sections 218.205(j) and 219.205(i)." See SR at 27; Prop. 218 at 51, Prop. 219 at 50.

<u>Subsection (a).</u> Existing subsection (a) provides in its entirety that "[n]o owner or operator of a coating line subject to only one of the limitations from among Section 218.204(a)(1), (a)(4), (d), (e), (f), (i), or, prior to May 1, 2011, (c) of this Subpart shall apply coatings on any such coating line, during any day, whose daily-weighted average VOM content exceeds the emission limitation to which the coatings are subject." 35 Ill. Adm. Code 218.205(a), 219.205(a). The Board amends this subsection to provide that it "applies to Section 218/219.204(a)(1)(A), (a)(1)(D), (a)(2)(A), (a)(2)(E), and (a)(2)(F), among other listed subsections." SR at 27, see Prop. 218 at 51, Prop. 219 at 50.

In post-hearing comments filed on June 4, 2010, the Agency noted a request at the second hearing "that the Agency provide additional time for sources to comply with the proposal." PC 3 at 2. The Agency recommended "extending the compliance deadline one year from May 1,

2011, to May 1, 2012." *Id.* Having reviewed the record in this proceeding, the Board concurred with the Agency's recommendation to extend the compliance deadline, and the extension is reflected in the adopted regulations in the order below.

<u>Subsection (b).</u> The Board had proposed to amend this subsection to provide that its limitations "only apply to miscellaneous parts and products coatings prior to May 1, 2011." SR at 27, see Prop. 218 at 51-52, Prop. 219 at 50-51.

In post-hearing comments filed on June 4, 2010, the Agency noted a request at the second hearing "that the Agency provide additional time for sources to comply with the proposal." PC 3 at 2. The Agency recommended "extending the compliance deadline one year from May 1, 2011, to May 1, 2012." *Id.* Having reviewed the record in this proceeding, the Board concurred with the Agency's recommendation to extend the compliance deadline, and the extension is reflected in the adopted regulations in the order below.

<u>Subsections 218.205(g), 219.205(f).</u> The Board had proposed to amend these corresponding subsections to provide that their limitations "only apply to plastic parts coatings prior to May 1, 2011." SR at 27, *see* Prop. 218 at 55, Prop. 219 at 53.

In post-hearing comments filed on June 4, 2010, the Agency noted a request at the second hearing "that the Agency provide additional time for sources to comply with the proposal." PC 3 at 2. The Agency recommended "extending the compliance deadline one year from May 1, 2011, to May 1, 2012." *Id.* Having reviewed the record in this proceeding, the Board concurred with the Agency's recommendation to extend the compliance deadline, and the extension is reflected in the adopted regulations in the order below.

<u>Subsection 218.205(j,) 219.205(i)</u>. The Board adds these corresponding subsections, which as originally proposed "set forth the requirements for miscellaneous metal parts and products coatings lines, plastic parts and products coating lines, pleasure craft surface coating lines, and motor vehicle materials coating lines utilizing the daily weighted averaging alternative on and after May 1, 2011." SR at 28; *see* Prop. 218 at 56, Prop. 219 at 54-55.

In post-hearing comments filed on June 4, 2010, the Agency noted a request at the second hearing "that the Agency provide additional time for sources to comply with the proposal." PC 3 at 2. The Agency recommended "extending the compliance deadline one year from May 1, 2011, to May 1, 2012." *Id.* Having reviewed the record in this proceeding, the Board concurred with the Agency's recommendation to extend the compliance deadline, and the extension is reflected in the adopted regulations in the order below.

Section 218/219.207 Alternative Emission Limitations.

<u>Subsection (a).</u> The Board amends this subsection to refer to Sections 218.207(l) and 219.207(k). SR at 28; *see* Prop. 218 at 56-57, Prop. 219 at 55. The Board also excludes from the alternative emission limitations option those motor vehicle materials coating lines subject to proposed Section 218/219.204(q)(6). SR at 28; *see* Prop. 218 at 56, Prop. 219 at 55.

In its post hearing comment filed June 4, 2010, the Agency recommended an emissions averaging compliance option for pleasure craft surface coating operations at subsection (m). PC 3 at 7. In order to effectuate this option, the Agency proposed to amend this subsection by adding a final sentence providing in its entirety that "[t]he owner or operator of a pleasure craft surface coating operation subject to Section 218.204(q)(5)(A) through (G) of this Subpart may also comply with subsection (m) of this Section, rather than with Section 218.204 of this Subpart." PC 3 at 8. The Board adopts this provision in its order below.

<u>Subsection (b).</u> The Board amends this subsection "to provide for sources complying with a proposed emission limitation in Section 218/219.204 that is already in terms of weight of VOM per volume of solids." SR at 28; Prop. 218 at 57, Prop. 219 at 55-56.

<u>Subsection (c).</u> The Board amends this subsection "to include references to certain amended VOM content limitations." SR at 28; see Prop. 218 at 58, Prop. 219 at 56.

<u>Subsections 218.207(l), 219.207(k).</u> The Agency originally proposed to add Sections 218.207(l) and 219.207(k), "which set forth the requirements for miscellaneous metal parts and products coating lines, plastic parts and products coating lines, and pleasure craft surface coating lines utilizing the alternative emissions limitation on and after May 1, 2011." SR at 28; *see* Prop. 218 at 60, Prop. 219 at 58. In post-hearing comments filed on June 4, 2010, the Agency noted a request at the second hearing "that the Agency provide additional time for sources to comply with the proposal." PC 3 at 2. The Agency recommended "extending the compliance deadline one year from May 1, 2011, to May 1, 2012." *Id.* Having reviewed the record in this proceeding, the Board concurred with the Agency's recommendation to extend the compliance deadline, and the extension is reflected in the adopted regulations in the order below.

Subsection (1) provides that a capture and control device must "provide at least 90 percent reduction in the overall emissions of VOM from the coating line." Prop. 218 at 60, Prop. 219 at 58. During the first hearing, the Board noted that "add-on controls for miscellaneous industry adhesives must achieve a capture and control efficiency of 85 percent." Tr.1 at 30, citing Davis Test. at 3. The Board asked the Agency to "explain the rationale for requiring a lower efficiency for adhesives as compared to 90 percent for miscellaneous metal and plastic parts." Tr.1 at 30. The Agency responded that USEPA determined the different efficiencies and that the Agency took them directly from the CTG. *Id.* at 31. In its post-hearing comments filed on May 17, 2010, the Agency elaborated that it "is unaware of the analyses employed by USEPA in arriving at these particular efficiency requirements." PC 1 at 2 (¶5). The Agency stated that it had "requested the information from USEPA, and will supplement its post-hearing comments when such information is available." *Id.*

<u>Subsection 218.207(m), 219.207(l).</u> As noted above, the Agency in its post-hearing comments filed on June 4, 2010 recommended an emissions averaging compliance option for pleasure craft surface coating operations. PC 3 at 7. The Agency proposed to add that option as a new subsection (m) to Section 218.207 and subsection (l) to Section 219.207. The subsections provide in pertinent part that "[c]oating operations utilizing this alternative shall comply with a

source-specific VOM emissions limit on a 12-month rolling average bases, calculated at the end of each calendar month." *Id.* at 8, 14. Subsection (1) provides an Equation 1, which determines the total allowable source-specific VOM mass emission limit to be included in the emissions average. *Id.* at 8, 8-9, 14. Subsection (2) provides an Equation (2), which determines total actual VOM emissions from the operations included in the emissions average. Subsection (3) provides an Equation (3), which determines the weighted-average VOM content for each coating included in the emissions average for the preceding 12 months. *Id.* at 10, 15-16.

The Agency described averaging as an alternative to requiring that "sources comply with a specified VOM limitation for each coating applied. . . ." PC 3 at 19. The Agency elaborated that this alternative "will allow sources to continue using low volume, high-VOM coatings that NPCA [on behalf of ACA] argues are necessary to comply with customer specifications regarding appearance, as sources can then average with high volume, low-VOM coatings used in the source's operations to bring the source's total actual VOM emissions below the mass emission limit." *Id*, citing Tr.2 at 29-30.

The Agency claimed that the proposed emissions averaging satisfies ACA's objections and makes unnecessary any increase in proposed VOM limitations. PC 3 at 19. First, the Agency argued that this alternative provides significant flexibility because it allows averaging across seven different coating categories, which Subpart F does not generally allow. PC 3 at 19. Second, the Agency noted that ACA proposed raising VOM limitations as an alternative to averaging. *Id.*, citing ACA Test. at 10, Tr. 2 at 29. Third, the Agency claimed that including "an averaging option will address the guidance anticipated from USEPA concerning pleasure craft coatings." PC 3 at 19. Fourth, the Agency argued that it has proposed to extend the compliance deadline by one year, allowing the industry to develop complaint coatings. *Id.* at 20. Finally, the Agency claimed that neither it nor Mr. Halcomb on behalf of ACA is aware "of any pleasure craft surface coating operations currently located in Illinois nonattainment areas." *Id.* at 21, citing Tr.2 at 32. The Agency concluded that an averaging option and an extended compliance deadline will "fill in any gaps that remain" between existing coatings and its proposed VOM limitations. PC 3 at 21.

The Agency stated that it has "provided James Sell, David Halcomb, and several other pleasure craft industry representatives a draft of the proposed Section 218.207(m) regarding averaging." PC 3 at 7. The Agency further stated that, "[w]hen given the opportunity to comment on the Agency's proposed language at a subsequent conference call, pleasure craft representatives did not express any objection to such language." *Id*.

Having reviewed the record, the Board concurred in the amendments to Section 218.207 recommended by the Agency, and the order below reflects those amendments.

Section 218/219.208 Exemptions from Emission Limitations.

<u>Subsection (a).</u> The Agency originally proposed to amend this subsection "to provide that, on and after May 1, 2011, for applicability purposes VOM emissions from heavy off-highway vehicle products coating lines shall be combined with VOM emissions from

miscellaneous metal parts and products coating lines and plastic parts and products coating lines." SR at 28-29; *see* Prop. 218 at 60-61, Prop. 219 at 59. In post-hearing comments filed on June 4, 2010, the Agency noted a request at the second hearing "that the Agency provide additional time for sources to comply with the proposal." PC 3 at 2. The Agency recommended "extending the compliance deadline one year from May 1, 2011, to May 1, 2012." *Id.* Having reviewed the record in this proceeding, the Board concurs with the Agency's recommendation to extend the compliance deadline, and the extension is reflected in the adopted regulations in the order below.

<u>Subsection (b).</u> Existing subsection (b) addresses applicability for wood furniture coating lines. 35 Ill. Adm. Code 218.208(b), 219.208(b). Section 218.208(b)(1).provides in pertinent part that

[t]he limitations of this Subpart [F] shall apply to a source's wood furniture coating lines if the source contains process emission units, not regulated by Subparts B, E, F (excluding Section 218.204(l) of this Subpart), H (excluding Section 218.405 of this Part), Q, R, S, T (excluding Section 218.486 of this Part), V, X, Y, or BB of this Part, which as a group both:

- A) Have a maximum theoretical emissions of 91 Mg (100 tons) or more per calendar year of VOM if no air pollution control equipment were used; and
- B) Are not limited to less than 91 MG (100 tons) of VOM per calendar year if no air pollution control equipment were used, through production or capacity limitations contained in a federally enforceable permit or SIP revision. 35 Ill. Adm. Code 218.208(b)(1).

Section 219.208(b)(1) is identical, except that it applies Subpart F to a source's wood furniture coating lines if the source contains process emission units not regulated by Subpart Z. 35 Ill. Adm. Code 219.208(b)(1). Subpart Z addresses dry cleaners. 35 Ill. Adm. Code 218.601-218.613, 219.601-219.613.

During the first hearing, the Board requested that the Agency account for the discrepancy on Subpart Z between these two subsections (b)(1). Tr.1 at 45-46. In its post-hearing comments filed May 17, 2010, the Agency stated that it had "reviewed prior rulemaking and determined that, when these regulations were first promulgated in Part 218 in 1991, Subpart Z was in fact referenced in Section 218.208(b)(1)." PC 1 at 3 (¶12). The Agency further stated that it "is unaware of any subsequent rulemaking that proposed deletion of Subpart Z from Part 218, and is therefore uncertain as to why it is no longer referenced." *Id*.

<u>Subsections (c), (d).</u> The Agency originally proposed "amending subsection (c) and adding subsection (d) to provide that the exclusions contained in such subsections shall only apply to miscellaneous metal parts and products, plastic parts coatings for automotive/transportation, and plastic parts coatings for business machines until May 1, 2011."

SR at 29; *see* Prop. 218 at 62, Prop. 219 at 60-61. In post-hearing comments filed on June 4, 2010, the Agency noted a request at the second hearing "that the Agency provide additional time for sources to comply with the proposal." PC 3 at 2. The Agency recommended "extending the compliance deadline one year from May 1, 2011, to May 1, 2012." *Id.* Having reviewed the record in this proceeding, the Board concurred with the Agency's recommendation to extend the compliance deadline, and the extension is reflected in the adopted regulations in the order below.

<u>Subsection (e).</u> The Board re-designates the existing subsection (d) as subsection (e) and corrects cross-references within it. SR at 29; *see* Prop. 218 at 62-63, Prop. 219 at 61-61.

Section 218/219.210 Compliance Schedule.

<u>Introductory Paragraph.</u> The Board amends this language to refer to the proposed addition of subsection (g). SR at 29; *see* Prop. 218 at 63, Prop. 219 at 62.

<u>Subsection (g).</u> The Board adds a subsection (g), "which provides that, on and after a date consistent with Section 218/219.106, sources subject to the proposed limitations in Section 218/219.204(a) or (q), or subject to the limitations in Section 218/219.219, shall comply with such limitations, as well as all other applicable provisions in Subpart F." SR at 29; *see* Prop. 218 at 64, Prop. 219 at 63.

Section 218/219.211 Recordkeeping and Reporting.

<u>Subsection (c).</u> The Board first amends this subsection "to include references to the amended VOM content limitations for automobile and light-duty truck coatings." SR at 29; *see* Prop. 218 at 67, Prop. 219 at 65. Second, the Board adopts the requirement that, "for certain automobile and light-duty truck lines, VOM content information shall be maintained and/or reported in terms of weight of VOM per volume of solids or coatings, as applicable, as applied each day on each coating line." SR at 29; *see* Prop. 218 at 68-69, Prop. 219 at 66-67. Third, the Board also adopts the requirement "that coating lines subject to Section 218/219.204(a)(2)(A) shall maintain and/or report the solids turnover ratio of each electrodeposition primer operation." SR at 29-30; *see* Prop. 218 at 68-69, Prop. 219 at 66-67. Fourth, the Board requires that "[s]ubject printing lines shall also maintain certified product data sheets for each coating applied on each line." SR at 30; *see* Prop. 218 at 68-69, Prop, 219 at 66-67.

In its post-hearing comment filed on June 4, 2010, the Agency proposed to add an emissions averaging compliance option for pleasure craft surface coating operations. PC 3 at 6-10, 14-16. To effectuate that option, the Agency also recommended amending Section 218/219.211 "to set forth recordkeeping and reporting requirements for sources utilizing the averaging alternative." *Id.* at 7. The Agency proposed to amend subsection (c)(3)(B), which addresses notification of changing compliance methods, to include a reference to averaging. *Id.* at 11, 17. Having concurred in the recommendation to propose an averaging plan, the Board also concurs in amending subsection (c) in this manner, and the amendment is reflected in the adopted regulations in the order below.

<u>Subsection (d).</u> The Board amendd this subsection "to provide that, for coating lines that are subject to Section 218/219.204(a)(2)(A) or (q) and that are utilizing the daily weighted averaging alternative, VOM content information shall be maintained and/or reported in terms of weight of VOM per volume of solids or coatings, as applicable, as applied each day on each coating line." SR at 30; *see* Prop. 218 at 69-71, Prop. 219 at 68-70.

In its post-hearing comment filed on June 4, 2010, the Agency proposed to add an emissions averaging compliance option for pleasure craft surface coating operations. PC 3 at 6-10, 14-16. To effectuate that option, the Agency also proposed to amend Section 218/219.211 "to set forth recordkeeping and reporting requirements for sources utilizing the averaging alternative." *Id.* at 7. The Agency proposed to amend subsection (d)(3)(B), which addresses notification of changing compliance methods, to include a reference to averaging. *Id.* at 11, 17. Having concurred in the recommendation to propose an averaging plan, the Board also concurs in amending subsection (d) in this manner, and the amendment is reflected in the adopted regulations in the order below.

<u>Subsection (e).</u> The Board amends this subsection "to provide that coating lines complying pursuant to Section 218.207(l) or 219.207(k) shall comply with the recordkeeping and reporting requirements set forth in subsection (e)." SR at 30; *see* Prop. 218 at 71, Prop. 219 at 70. The Board also amends cross-references. SR at 30; *see* Prop. 218 at 7-73, Prop. 219 at 70-71.

<u>Subsection (f).</u> The Board amends this subsection addressing primer surface and topcoat operations to include references to the amended VOM content limitations for automobile and light-duty truck coatings. Prop. 218 at 73-75, Prop. 219 at 71-73.

<u>Subsection (g).</u> The Board adds subsection (g), "which establishes recordkeeping and reporting requirements for coating lines subject to the work practices set forth in Section 218/219.219." SR at 30; *see* Prop. 218 at 75, Prop. 219 at 73-74.

Originally, the Agency proposed that the owner or operator of a subject coating line must submit a certification to the Agency "[b]y May 1, 2011, or upon initial start-up, whichever is later. . . ." Prop. 218 at 75, Prop. 219 at 73. In post-hearing comments filed on June 4, 2010, the Agency noted a request at the second hearing "that the Agency provide additional time for sources to comply with the proposal." PC 3 at 2. The Agency recommended "extending the compliance deadline one year from May 1, 2011, to May 1, 2012." *Id.* Having reviewed the record in this proceeding, the Board concurred with the Agency's recommendation to extend the compliance deadline, and the extension is reflected in the adopted regulations in the order below.

<u>Subsection (h).</u> In its post-hearing comment filed on June 4, 2010, the Agency proposed to add an emissions averaging compliance option for pleasure craft surface coating operations. PC 3 at 6-10, 14-16. To effectuate that option, the Agency also proposed to amend Section 218/219.211 "to set forth recordkeeping and reporting requirements for sources utilizing the averaging alternative." *Id.* at 7. Subsection (1) provides that owners and operators of subject coating operations must perform and submit to the Agency results of tests and calculations

demonstrating compliance with the averaging alternative. PC 3 at 12, 17-18. Subsection (2) provides that the owner or operator must collect and record specified information on a monthly basis. *Id.* at 12, 18. Subsection (3) provides that the owner or operator must also collect and record specified information at the end of the first 12-month averaging period and at the end of each subsequent month. *Id.* at 12, 18-19. Having concurred in the recommendation to propose an averaging plan, the Board also concurs in amending subsection (h) in this manner, and the amendment is reflected in the adopted regulations in the order below.

<u>Section 218/219.212 Cross-Line Averaging to Establish Compliance for Coating Lines.</u>

The Board amends this section "to provide that the cross-line averaging alternative is not available to coating lines subject to the revised VOM content limitations." SR at 30; *see* Prop. 218 at 75, Prop. 219 at 74.

Section 218/219.219 Work Practice Standards for Automobile and Light-Duty Truck Assembly Coatings and Miscellaneous Metal and Plastic Parts Coatings.

The Board adds this section, "which sets forth work practice requirements for VOM-containing coatings, thinners, coating-related waste materials, cleaning materials, and cleaning-related activities associated with automobile and light-duty truck assembly coating lines or miscellaneous metal or plastic parts coating lines." SR at 30-31; *see* Prop. 218 at 79-82, Prop. 219 at 78-80. Subsections (b) and (c) establish "application method requirements for certain coating lines described in Section 218/219(q)" and exemptions from those requirements. SR at 31; *see* Prop. 218 at 81-82, Prop. 219 at 79-80.

In post-hearing comments filed on June 3, 2010, Olin addressed subsection (b)(6), which requires application of coatings on lines described in Section 218/219.204(g) using specified application methods. PC 3 at 4; *see* Prop. 218 at 80-81, Prop. 219 at 79-80. Olin indicated that Section 218/219.219 would apply to Cap Sealants and Mouth Waterproofing Sealants subject to 218/219.204(q) PC 2 at 5.

Olin stated that "application of Cap Sealants and Mouth Waterproofing Sealants onto ammunition does not follow standard coating operations because the sealant is only applied to a very small, precise area of the ammunition." PC 2 at 5. Olin indicated that it has typically applied these sealants through a Capper machine, by which "a pin or plunger is dipped in the sealant and is then moved close enough to the small precise part of the ammunition where the sealant then wicks onto the appropriate area." *Id.* Olin acknowledged that the process is similar to the process proposed to be defined as "flow coating." *Id.* Subsection 218/219.219(b)(6)(C) defines that term as "a non atomized technique of applying coating to a substrate with a fluid nozzle with no air supplied to the nozzle." Prop. 218 at 81, Prop. 219 at 80. Olin distinguished its process by stating that "the coating is not applied through or with a fluid nozzle. No air is supplied to the aid the transfer of the sealant." PC 2 at 5. Olin characterized its typical process as "an efficient and effective method to transfer the sealant to the ammunition, without the addition of air or other gases." *Id.* Olin further characterized its wicking method as "an efficient

method to transfer the sealant to the ammunition in order to meet the product specifications." *Id.* at 6.

Olin claimed that converting its process "to Capper machines that apply the sealant through a nozzle to meet the "Flow Coating" definition would cost several hundred thousand dollars, but would provide no net environmental benefit." PC 2 at 5. Olin acknowledged that, under proposed Section 218/219.219(b)(6)(H), it might employ "[a]nother coating application method capable of achieving a transfer efficiency equal to or better than that achieved by HVLP spraying, if such method is approved in writing by the Agency." Prop. 218 at 81, Prop, 219 at 80. Olin argued, however, that "[t]here would not be sufficient time, nor would it be economically reasonable, to convert all machines to meet the flow coating definition should the Agency not be able [to] approve the wicking application as an alternate application method" under subsection (b)(6)(H). PC 2 at 5. Olin further argued that comparing "Olin's wicking method to the transfer efficiency achieved by the HVLP spraying . . . would be difficult since the ammunition sealant is applied to only a small specific area on the ammunition, which is very different from transferring the coating to a large surface area as in HVLP spraying." *Id.* at 5-6.

Olin stated that it discussed these issues with the Agency and that Olin and the Agency agreed to propose a fifth exception to the four originally proposed in Section 218/219.219(c). PC 2 at 6; *see* Prop. 218 at 82, Prop. 219 at 80. Specifically, Olin and the Agency proposed to add a subsection (c)(5) establishing an exception "For Ammunition Sealant Operations: application of cap sealants and mouth waterproofing sealants." PC 2 at 6. Olin stated that incorporation of this proposed exception "would assure Olin that it could continue to apply cap sealants and mouth waterproofing sealants under the same conditions that are currently regulated by it Title V permit." *Id*.

In its post-hearing comments filed June 4, 2010, the Agency notes that Olin "provided information regarding the difficulty of complying with the application method requirements set forth in Section 218/219.219(b)(6) for mouth waterproofing sealants and cap sealants." PC 3 at 5. On the basis of this information, the Agency states that it "recommends exempting these sealants from such application method limitations." *Id.* at 5, 6. The Board found that the record supports the limited exemption proposed by Olin and the Agency, and the limited exemption if included in the adopted regulations in the order below.

Subpart II: Fiberglass Boat Manufacturing Materials.

In its original rulemaking proposal, the Agency sought to add Subpart II to Parts 218 and 219 in order to address VOM emissions from fiberglass boat manufacturing operations. *See* SR at 31; *see* Prop. 218 at 82-101 Prop. 219 at 80-99. On a section-by-section basis below, the Board summarizes Subpart H as adopted.

Section 218/219.890 Applicability.

<u>Subsection (a).</u> The Agency originally proposed in this subsection that, "on and after May 1, 2011, the requirements of Subpart II shall apply to owners and operators of sources that

manufacture hulls or decks of boats from fiberglass, or that build molds to make hulls or decks of boats from fiberglass, and that emit 15 lbs/day or more of VOM from specified operations." SR at 31, see Prop. 218 at 82, Prop. 219 at 80-81. The proposed subsection also provided that, "[i]f a source meets such criteria, the limitations in Subpart II apply to the manufacture of all fiberglass boat parts at the source." SR at 31; see Prop. 218 at 82, Prop. 219 at 81. In post-hearing comments filed on June 4, 2010, the Agency noted a request at the second hearing "that the Agency provide additional time for sources to comply with the proposal." PC 3 at 2. The Agency recommended "extending the compliance deadline one year from May 1, 2011, to May 1, 2012." Id. Having reviewed the record in this proceeding, the Board concurred with the Agency's recommendation to extend the compliance deadline, and the extension is reflected in the adopted regulations in the order below.

During the first hearing, the Board noted Mr. Davis' pre-filed testimony on behalf of the Agency that "there are no fiberglass boat manufacturing facilities in Illinois non-attainment areas." Tr.1 at 34-35, citing Davis Test. at 4. The Board also noted recent testimony in a different proceeding that "additional state VOM requirements, like the 8-pound-per-hour rule, act as a deterrent for new facilities to be sited in Illinois." *Id.* at 35, citing Petition of Royal Fiberglass Pools, Inc. for an Adjusted Standard from 35 Ill. Adm. Code 215.301, AS 09-4 (transcript of Oct. 28, 2009 hearing). The Board asked the Agency to "clarify whether fiberglass boat manufacturing facilities subject to the proposed rules would also be subject to additional state requirements like the 8-pound-per-hour rule?" Tr.1 at 35. In its post-hearing comments filed May 17, 2010, the Agency responded that "[s]ources subject to Illinois EPA's proposal regarding fiberglass boat manufacturing materials are also subject to all other applicable state VOM requirements, including the 8 lb/hour rule." PC 1 at 2 (¶6).

During the first hearing, the Board also asked the Agency to comment on "the merits of exempting fiberglass boat manufacturing facilities complying with the proposed regulations from additional state VOM control requirements like the 8-pound-per-hour rule." Tr.1 at 36. The Agency responded that it did not recommend an exemption of that nature. PC 1 at 2 (¶7). The Agency elaborated that "[f]iberglass boat manufacturing facilities located inside and outside Illinois MAAs are already regulated by a National Emissions Standard for Hazardous Air Pollutants ("NESHAP") for the category." *Id.* The Agency argued that the CTG for this category largely reflects the NESHAP, which in turn reflects the state of the industry. *Id.* The Agency further argued that, "while the 8 lb/hr rule may deter new sources from operating in Illinois in general, exempting sources in the NAAs alone from the 8 lb/hour rule would incentivize sources to operate within the NAAs, and put attainment area sources (which would still be required to comply with both the NESHAP and the 8 lb/hour rule) at a disadvantage." *Id.*

The Agency referred to "two fiberglass molding operations located in Illinois attainment areas that currently operate with adjusted standards." PC 1 at 2 (¶7); see 415 ILCS 5/28.1 (2008). The Agency argued that "[o]btaining an adjusted standard would also be an option for a new source located in an Illinois NAA, and would be considered by the Agency and the Board on a case by case basis. In the meantime, the Agency does not recommend exempting a source operating in a NAA from the 8 lb/hr rule based solely on theoretical difficulties the source may or may not face in complying with such rule." PC 1 at 2 (¶7).

<u>Subsection (b).</u> The Board in this subsection establishes "exemptions for various coatings and operations." SR at 31; see Prop. 218 at 82, Prop. 219 at 82.

<u>Subsection (c).</u> The Board provides in this subsection that, "[i]f a source is or becomes subject to one or more of the limitations in this Subpart, the source is always subject to the applicable provisions of this Subpart." Prop. 218 at 83, Prop. 219 at 82; *see* SR at 31.

<u>Subsection (d).</u> The Board provides in this subsection that "[t]he owner or operator of a source exempt from the limitations of this Subpart because of the criteria in this Section is subject to the recordkeeping and reporting requirements specified in Section 218.894(a) of this Subpart." Prop. 218 at 83, Prop. 219 at 81; *see* SR at 31.

Section 218/219.891 Emission Limitation and Control Requirements.

<u>Subsection (a).</u> The Board adds a new subsection providing "that resins and gel coats at subject sources shall comply with the limitations set forth in subsection (b)(1) or (b)(2), (c), or (d) of this Section, as well as with subsections (e), (g), and (h) of this Section." SR at 31; see Prop. 218 at 83, Prop. 219 at 81. Subsection (a) also provides that, "if a source complies pursuant to subsection (b) or (c), and the non-monomer VOM content of a resin or gel coat exceeds five percent, by weight, the excess non-monomer VOM shall be added to the monomer VOM content of such resin or gel coat in accordance with a specified equation." SR at 32; see Prop. 218 at 83-84, Prop. 219 at 81-82.

<u>Subsection (b).</u> The Board adds a new subsection establishing "VOM content limitations for subject resins and gel coats." SR at 32; *see* Prop. 218 at 84, Prop. 219 at 82-83. The subsection also establishes "a 12-month rolling weighted averaging alternative to such limitations." SR at 32; *see* Prop. 218 at 84-85 (Equation 1), Prop. 219 at 83 (Equation 1).

<u>Subsection (c).</u> The Board adds a new subsection establishing "an emission averaging alternative in which resin and gel coat operations utilizing the alternative comply with a source-specific monomer VOM mass emission limit on a 12-month rolling average basis." SR at 32; see Prop. 218 at 85, Prop. 219 at 83. During the first hearing, Mr. Davis on behalf of the Agency characterized compliance with the averaging option as "a multistep process." Tr.1 at 331.

Subsection (c) lists equations for use in complying through this alternative. Equation 1 determines the weighted average monomer VOM content for resin and gel coat materials. Prop. 218 at 84-85, Prop. 219 at 83, CTG Fiberglass Boat at 27; see Tr.1 at 32. Equation 2 determines "the source-specific monomer VOM mass emission limit for resin and gel coats included in the emissions average." Prop. 218 at 85, Prop. 219 at 83-84; see SR at 32. Mr. Davis indicated that this equation accounts for "the different weights of the different kinds of products that go into the boat manufacturing materials." Tr.1 at 32. He further indicated that the equation assigns specific weights to various materials based on the allowable VOM content. *Id.*; see CTG Fiberglass Boat at 28.

Equation 3 calculates "the monomer VOM emissions from the resin and gel coat operations included in the emissions average to determine whether such emissions exceed the limitation calculated using Equation 2." Prop. 218 at 86-87, Prop. 219 at 84-86; see SR at 32. Mr. Davis indicated that emissions as determined by Equation 3 must comply with the emission limit determined by Equation 2. Tr.1 at 34. Equation 4 calculates, for purposes of Equation 3, "the weighted-average monomer VOM emission rate for the previous 12 months for each resin and gel coat operation included in the emissions average. . . ." Prop. 218 at 87-88, Prop. 219 at 86-87; see SR at 32, CTG Fiberglass Boat at 29-30. The subsection also includes "monomer VOM emission rate formulas for use in Equation 4 and subsection (e)(3) of this Section." SR at 32; see Prop. 218 at 88-89, Prop. 219 at 87.

<u>Subsection (d).</u> The Board adds a new subsection establishing "an emissions control alternative for subject resin and gel coat operations." SR at 32. Specifically, the subsection provides that "an afterburner, carbon adsorber, or other approved control device shall be installed and operated such that the COM emissions at the outlet of the control device meet an emission limitation determined using a slightly altered version of Equation 2. . ." *Id.*; *see* Prop. 218 at 89, Prop. 219 at 87-88.

<u>Subsection (e).</u> The Board adds a new subsection including Equation 5. SR at 32; see Prop. 218 at 89-90, Prop. 219 at 88. The proposed subsection provides that, "for all filled production and tooling resins, the owner or operator of a subject source shall use such equation to adjust the monomer VOM emission rates determined pursuant to subsection (b)." SR at 32-33; see Prop. 218 at 89-90, Prop. 219 at 88.

<u>Subsection (f).</u> The Board adds a new subsection providing "that certain types of materials are exempt from the limitations set forth in subsections (a) through (e)." SR at 33; see Prop. 218 at 90-91, Prop. 219 at 88-89. Subsection (f) also provides that "[s]uch materials shall instead comply with the requirements set forth in subsection (f)." SR at 33; see Prop. 218 at 90-91, Prop. 219 at 88-89.

<u>Subsection (g).</u> The Board adds a new subsection (g) providing that "no owner or operator subject to this Subpart shall use VOM-containing cleaning solutions to remove cured resin and gel coats from fiberglass boat manufacturing application equipment." SR at 33; *see* Prop. 218 at 91, Prop. 219 at 89. The subsection also provides that "no owner or operator shall use VOM-containing cleaning solutions for routine cleaning of application equipment unless specified VOM content or composite vapor pressure requirements are met." SR at 33; *see* Prop. 218 at 91, Prop. 219 at 89.

Subsection (h). The Board adds a new subsection (h) providing that

no owner or operator of a source subject to this Subpart shall use resin or gel coat mixing containers with a capacity equal to or greater than 55 gallons unless such containers have covers with no visible gaps in place at all times, except when material is being manually added to or removed from a container of when mixing

or pumping equipment is being placed in or removed from a container. SR at 33; see Prop. 218 at 91, Prop. 219 at 89.

Section 218/219.892 Testing and Monitoring Requirements.

<u>Subsection (a).</u> The Board adds a new subsection (a) providing that "testing to demonstrate compliance with Section 218/219.891 shall be conducted within 90 days after a request by Illinois EPA, or as otherwise specified in Subpart II." SR at 33; *see* Prop. 218 at 91, Prop. 219 at 90. The subsection also provides that testing shall be performed at the expense of the owner or operator and that the Agency shall be notified in writing 30 days in advance of such testing. SR at 33; *see* Prop. 218 at 91, Prop. 219 at 90.

<u>Subsection (b).</u> The Board adds a new subsection (b) providing that "testing to determine compliance with monomer VOM content requirements set forth in Section 218/219.891(b) shall be conducted in accordance with a specified test method." SR at 34; *see* Prop. 218 at 91, Prop. 219 at 90.

<u>Subsection (c).</u> The Board adds a new subsection (c). In subsection (c)(1), the Board requires that "the owner or operator of a source complying pursuant to the emissions control device requirements in Section 218/219.891(d) shall conduct an initial performance test of the control device that demonstrates compliance with the emission limitation determined pursuant to such Section." SR at 34; *see* Prop. 218 at 91-92, Prop, 219 at 90.

Originally, the Agency proposed that the owner or operator of a subject coating line must comply with this requirement "[b]y May 1, 2011, or upon initial start-up, whichever is later. . . ." Prop. 218 at 91, Prop. 219 at 90. In post-hearing comments filed on June 4, 2010, the Agency noted a request at the second hearing "that the Agency provide additional time for sources to comply with the proposal." PC 3 at 2. The Agency recommended "extending the compliance deadline one year from May 1, 2011, to May 1, 2012." *Id.* Having reviewed the record in this proceeding, the Board concurred with the Agency's recommendation to extend the compliance deadline, and the extension is reflected in the adopted regulations in the order below.

In subsection (c)(2), the Board requires "[t]hat the owner or operator shall then conduct at least one performance test per calendar year." SR at 34; *see* Prop. 218 at 92, Prop. 219 at 90. Subsection (c)(2) also provides that these performance tests must be conducted at least six months apart from one another unless conducted under subsection (c)(3) or in response to an Agency request. SR at 34; *see* Prop. 218 at 92, Prop. 219 at 90.

In subsection (c)(3), the Board requires that "[t]he owner or operator shall monitor and record relevant operating parameters during each performance test used to demonstrate compliance and shall continue to operate the fiberglass boat manufacturing process within such parameters until another performance test is conducted that demonstrates compliance." SR at 34; see Prop. 218 at 92, Prop. 219 at 90. The subsection also provides that, "[i]f the fiberglass boat manufacturing process exceeds any parameter by more than ten percent, the owner or operator shall conduct an additional performance test." SR at 34; see Prop. 218 at 92, Prop, 219 at 90.

Subsections (c)(4), (c)(5), and (c)(6) establish "the methods and procedures the owner or operator shall follow when testing, as well as monitoring requirements for emissions control systems." SR at 34; see Prop. 218 at 92-94, Prop. 219 at 91-92.

<u>Subsection (d).</u> The Board adds a new subsection (d) providing that "testing to demonstrate compliance with the VOM content limitations for cleanings solutions set forth in Section 218/219.891(g), and with the non-monomer VOM content limitations set forth in Section 218/219.891(a), shall be conducted in accordance with specified test methods and procedures." SR at 34; *see* Prop. 218 at 94, Prop. 219 at 92. The subsection also provides that, "[f]or cleaning solvents, testing may be conducted in accordance with the manufacturer's specifications if certain conditions are met." SR at 34-35; *see* Prop. 218 at 94, Prop. 219 at 92.

<u>Subsection (e).</u> The Board adds a new subsection (e) establishing "monitoring requirements for owners or operators relying on the VOM content of cleaning solutions to comply with Section 218/219.891(g)(1)." SR at 35; *see* Prop. 218 at 94, Prop. 219 at 93.

<u>Subsection (f)</u>. The Board adds a new subsection (f) providing "that testing to demonstrate compliance with the VOM composite partial vapor pressure limitation for cleaning solvents shall be conducted on accordance with the methods and procedures set forth in Section 218/219.110." SR at 35; *see* Prop. 218 at 95, Prop. 219 at 93.

Section 218/219.894 Recordkeeping and Reporting Requirements.

<u>Subsection (a).</u> The Board adds a new subsection (a)(1) providing that "the owners and operators of sources exempt from the limitations of Subpart II because of the criteria in Section 218/219.890(a) shall submit a certification to the Illinois EPA that includes a declaration that the source is exempt and calculations that demonstrate that the source is exempt." SR at 35; see Prop. 218 at 95, Prop. 219 at 93-94. Originally, the Agency proposed that the owner or operator of a subject coating line must submit a certification to the Agency "[b]y May 1, 2011, or upon initial start-up, whichever is later. . . ." Prop. 218 at 95, Prop. 219 at 903. In post-hearing comments filed on June 4, 2010, the Agency noted a request at the second hearing "that the Agency provide additional time for sources to comply with the proposal." PC 3 at 2. The Agency recommended "extending the compliance deadline one year from May 1, 2011, to May 1, 2012." *Id.* Having reviewed the record in this proceeding, the Board concurred with the Agency's recommendation to extend the compliance deadline, and the extension is reflected in the adopted regulations in the order below.

Subsection (a)(2) provides that the owner or operator "shall notify the Illinois EPA if the combined emissions of VOM from subject fiberglass boat manufacturing operations at the source ever equal or exceed 15 lbs/day, within 30 days after the event occurs." SR at 35; *see* Prop. 218 at 95, Prop. 219 at 94.

<u>Subsection (b).</u> The Board adds a new subsection (b) establishing recordkeeping and reporting requirements for sources subject to the requirements of Subpart II. SR at 35; *see* Prop. 218 at 95-96, Prop. 219 at 94-95. Subsection (b)(1) requires sources to "submit a certification to

the Illinois EPA that includes specified information." SR at 35; *see* Prop. 218 at 95-96 (subsections A-H), Prop. 219 at 94-95 (subsections A-H). Originally, the Agency proposed that sources must submit this certification "[b]y May 1, 2011, or upon initial start-up, whichever is later. . . ." Prop. 218 at 95, Prop. 219 at 94. In post-hearing comments filed on June 4, 2010, the Agency noted a request at the second hearing "that the Agency provide additional time for sources to comply with the proposal." PC 3 at 2. The Agency recommended "extending the compliance deadline one year from May 1, 2011, to May 1, 2012." *Id.* Having reviewed the record in this proceeding, the Board concurred with the Agency's recommendation to extend the compliance deadline, and the extension is reflected in the adopted regulations in the order below.

Subsection (b)(2) requires that sources "notify the Illinois EPA at least 30 calendar days before changing the method of compliance between Section 218/219.891(b), (c), and (d)." SR at 35; see Prop. 218 at 96, Prop, 219 at 95. Subsection (b)(3) requires that sources "notify the Illinois EPA of any violation of the requirements of Subpart II within 30 days following the violation" and provide records documenting the violation. SR at 35; see Prop. 218 at 96, Prop. 219 at 95. Subsection (b)(4) requires that sources "retain all records required by this Section for at least three years, and make such records available to the Illinois EPA upon request." SR at 35; see Prop. 218 at 96; Prop. 219 at 95.

Subsection (c). The Board adds a new subsection (c). Prop. 218 at 96-97, Prop. 219 at 95. Subsection (c)(1) provides that "the owner or operator of a subject fiberglass boat manufacturing operation that is complying by means of Section 218/219.891(b) shall submit a certification to the Illinois EPA that includes the name, identification number, and VOM content of each subject resin and gel coat as applied each day." SR at 36; see Prop. 218 at 97, Prop, 219 at 95. Originally, the Agency proposed that the owner or operator of a subject operation must comply with this requirement "[b]y May 1, 2011, or upon initial start-up, whichever is later. . . ." Prop. 218 at 97, Prop. 219 at 95. In post-hearing comments filed on June 4, 2010, the Agency noted a request at the second hearing "that the Agency provide additional time for sources to comply with the proposal." PC 3 at 2. The Agency recommended "extending the compliance deadline one year from May 1, 2011, to May 1, 2012." *Id*. Having reviewed the record in this proceeding, the Board concurred with the Agency's recommendation to extend the compliance deadline, and the extension is reflected in the adopted regulations in the order below.

Subsection (c)(2) provides that "[t]he owner or operator shall collect and record such information, as well as the daily weighted average VOM content of all subject resins and gel coats complying pursuant to Section 218.219.891(b)(2).

<u>Subsection (d).</u> The Board adds a new subsection (d). Prop. 218 at 97, Prop. 219 at 95-96. Subsection (d)(1) provides that "the owner or operator of a subject fiberglass boat manufacturing operation that is complying by means of Section 218/219.891(c) shall collect and record each month the amount and VOM content of each subject resin and gel coat used in each subject manufacturing operation." SR at 36; *see* Prop. 218 at 97, Prop. 219 at 95-96. Originally, the Agency proposed that the owner or operator of a subject coating line must comply with this requirement on and after May 1, 2011. Prop. 218 at 71, Prop. 219 at 95. In post-hearing comments filed on June 4, 2010, the Agency noted a request at the second hearing "that the

Agency provide additional time for sources to comply with the proposal." PC 3 at 2. The Agency recommended "extending the compliance deadline one year from May 1, 2011, to May 1, 2012." *Id.* Having reviewed the record in this proceeding, the Board concurred with the Agency's recommendation to extend the compliance deadline, and the extension is reflected in the adopted regulations in the order below.

Subsection (d)(2) provides that, "[a]t the end of the 12-month averaging period, and at the end of each subsequent month, the owner or operator shall also collect and record the monomer VOM mass emission limit for the subject manufacturing operations for the applicable 12-month averaging period, and the total actual emission of VOM from such operations." SR at 36; *see* Prop. 218 at 97, Prop. 219 at 96.

Subsection (e). The Board adds a new subsection (e). Prop. 218 at 98-99, Prop. 219 at 96-97. Subsection (e)(1) provides that

the owner or operator of a subject fiberglass board manufacturing operation that is complying by means of Section 218/219.891(d) shall submit a certification to the Illinois EPA that includes information regarding the type of control device used to demonstrate compliance, the results of all tests and calculations necessary to demonstrate compliance, and a declaration that the owner or operator is in compliance with monitoring requirements. SR at 36; *see* Prop 218 at 98, Prop. 219 at 96.

Originally, the Agency proposed that the owner or operator of a subject operation must comply with this requirement "[b]y May 1, 2011, or upon initial start-up, whichever is later. . . ." Prop. 218 at 98, Prop. 219 at 96. In post-hearing comments filed on June 4, 2010, the Agency noted a request at the second hearing "that the Agency provide additional time for sources to comply with the proposal." PC 3 at 2. The Agency recommended "extending the compliance deadline one year from May 1, 2011, to May 1, 2012." *Id.* Having reviewed the record in this proceeding, the Board concurred with the Agency's recommendation to extend the compliance deadline, and the extension is reflected in the adopted regulations in the order below.

Subsection (e)(2) provides that "the owner or operator shall also submit to the Illinois EPA a copy of all test results within 90 days after conducting testing, and a certification providing specified details regarding such testing." SR at 36; *see* Prop. 218 at 98, Prop. 219 at 96-97. Subsection (e)(3) provides that

the owner or operator shall collect and record daily control device monitoring data, a log of operating time for the control device and monitoring equipment, a maintenance log for the control device and monitoring equipment, and information substantiating that the fiberglass boat manufacturing operation is operating in compliance with the parameters determined pursuant to Section 218/219.892. SR at 36-37; *see* Prop. 218 at 98-99, Prop. 219 at 97.

<u>Subsection (f)</u>. The Board adds a new subsection (f) providing that "the owner or operator of a source subject to Section 218/219.891(f) shall collect and record specified information regarding materials exempt pursuant to such Section." SR at 37; *see* Prop. 218 at 99, Prop. 219 at 97.

<u>Subsection (g).</u> The Board adds a new subsection (g) providing that "the owner or operator of a subject source shall collect and record specified information for each cleaning solution used in each fiberglass boat manufacturing operation." SR at 37; *see* Prop. 218 at 99-101, Prop. 219 at 98-99.

Subpart JJ: Miscellaneous Industrial Adhesives

In its original rulemaking proposal, the Agency proposed to add Subpart JJ to Parts 218 and 219 in order to address VOM emissions from miscellaneous industrial adhesives. *See* SR at 37-41; *see* Prop. 218 at 101-13 Prop. 219 at 99-112. On a section-by-section basis below, the Board summarizes Subpart JJ as adopted in the order below.

Section 218/219.900 Applicability.

<u>Subsection (a).</u> The Board adds a new subsection (a) providing that, "on and after May 1, 2011, the requirements of Subpart JJ apply to miscellaneous industrial adhesive application operations at source where the total actual VOM emissions from such operations, including related cleaning activities, equal or exceed 15 lbs/day, in the absence of air pollution control equipment." SR at 37; see Prop. 218 at 101, Prop. 219 at 99; see also TSD at 36 (Table 4.2 Potentially Affected Sources in Illinois). In post-hearing comments filed on June 4, 2010, the Agency noted a request at the second hearing "that the Agency provide additional time for sources to comply with the proposal." PC 3 at 2. The Agency recommended "extending the compliance deadline one year from May 1, 2011, to May 1, 2012." *Id.* Having reviewed the record in this proceeding, the Board concurred with the Agency's recommendation to extend the compliance deadline, and the extension is reflected in the adopted regulations in the order below.

During the first hearing, Mr. Alec Davis on behalf of IERG noted this 15 lbs/day threshold and asked which sources the Agency expected to determine that they meet or exceed this threshold. Tr.1 at 10. On behalf of the Agency, Mr. Rory Davis cited the TSD, which lists 12 potentially affected sources. *Id.* at 10-11, citing TSD at 36 (Table 4.2). He acknowledged that sources other than these 12 may determine that they meet or exceed this applicability threshold. Tr.1 at 11.

Mr. Alec Davis then addressed sources demonstrating that they do not equal or exceed the 15-pound per day threshold. He asked "what if any types of activities could cause that source to be required to submit an additional demonstration that they're not subject to the rule. . . ." Tr.1 at 11. Also, the Board asked whether any change in a source's processes might require a source to submit another demonstration of inapplicability. Tr.1 at 12, 14. Mr. Rory Davis indicated that the Agency would require only a single initial demonstration of inapplicability. *Id.* at 11, 12. He further indicated that sources would be required to notify the Agency "if they ever

exceed the 15-pound-per-day criteria." *Id.* at 12; *see* Prop. 218 at 110, Prop. 219 at 109 (proposed subsection 218/219.904(a)(2)). In order to provide this notification, he suggested that sources "would necessarily have to keep track of their emissions." Tr.1 at 12-14. He characterized this as an implied requirement. *See* Tr.1 at 13, Tr.2 at 75. In response to a question from the Board, Mr. Rory Davis agreed to consider proposing a provision requiring some demonstration of continued compliance or some periodic measurement of emissions. *Id.* at 14. In its motion to amend, the Agency responded by proposing to amend Section 218/219.904(a) by adding a recordkeeping requirement. Mot. Amend at 2-4 (¶3); *see infra* at 95-99 (summarizing proposed Section 218.219.904). Having granted the motion above under "Preliminary Matter," the Board incorporates this amendment in the adopted regulations in its order below.

Also during the first hearing, Mr. Alec Davis noted that proposed Section 218/219.900(a) bases applicability on VOM emissions from both industrial adhesive application operations and related cleaning operations. Tr.1 at 15; *see* Prop. 218 at 101, Prop. 219 at 99. He asked which related cleaning activities might be encompassed in determining applicability. Tr.1 at 15. Mr. Rory Davis responded that the CTG described those activities. *Id.*, citing CTG Adhesives at 20.

<u>Subsection (b).</u> The Board adds a new subsection (b) establishing "exemptions for certain coatings, adhesives, and operations." SR at 37; *see* Prop. 218 at 101-02, Prop. 219 at 99-100.

<u>Subsection (c)</u>. The Board adds a new subsection (c) providing in its entirety that, "[i]f a miscellaneous industrial adhesive application operation at a source is or becomes subject to one or more of the limitations in this Subpart, the miscellaneous industrial adhesive application operation is always subject to the applicable provisions of this Subpart." Prop. 218 at 102, Prop. 219 at 100-01; *see* SR at 37.

<u>Subsection (d).</u> The Board adds a new subsection (d) providing "that sources exempt pursuant to this Section are still subject to recordkeeping and reporting requirements" specified in Section 218/219.904(a). SR at 37; *see* Prop. 218 at 102, Prop. 219 at 101.

Section 218/219.901 Emission Limitations and Control Requirements.

<u>Subsection (a).</u> The Board adds a new subsection (a) providing that "the owner or operator of a source subject to the requirements of Subpart JJ shall comply with subsection (b), (c), or (d) of this Section, as well as with the limitations in subsections (e) and (f) of this Section." SR at 38; *see* Prop. 218 at 102, Prop. 219 at 101. The subsection also provides that sources subject only to Section 218/219.900(b)(2) "shall only comply with the limitations in subsection (f)." SR at 38; *see* Prop. 218 at 102, Prop. 219 at 101.

<u>Subsection (b).</u> The Board adds a new subsection (b), which "establishes VOM content limitations for subject adhesives." SR at 38; *see* TSD at 32; *see also* Prop. 218 at 102-04, Prop. 219 at 101-03.

<u>Subsection (c).</u> The Board adds a new subsection (c), which "establishes a daily-weighted averaging alternative to the VOM content limitations in subsection (b)." SR at 38; *see* Prop. 218 at 104-06, Prop. 219 at 103-04.

<u>Subsection (d).</u> The Board adds a new subsection (d) providing "an emissions control alternative for subject adhesives." SR at 38; *see* Prop. 218 at 106, Prop. 219 at 104-05. The subsection "provides that an afterburner, carbon adsorber, or other approved control device shall be utilized that provides at least 85% reduction in the overall emissions of VOM from the adhesive application operation." SR at 38; *see* Prop. 218 at 106, Prop. 219 at 104-05, Davis Test. at 3. As an alternative, subsection (d) provides that "the owner or operator may comply with the applicable limitation set forth in Section 218.901(b) by utilizing a combination of low-VOM adhesives and an afterburner, carbon adsorber, or other approved control device." SR at 38; *see* Prop. 218 at 106, Prop. 219 at 104-05, Davis Test. at 3.

During the first hearing, the Board noted that "add-on controls for miscellaneous industry adhesives must achieve a capture and control efficiency of 85 percent." Tr.1 at 30, citing Davis Test. at 3. The Board asked the Agency to "explain the rationale for requiring a lower efficiency for adhesives as compared to 90 percent for miscellaneous metal and plastic parts." Tr.1 at 30. The Agency responded that USEPA determined the different efficiencies and that the Agency took them directly from the CTG. *Id.* at 31. In its post-hearing comments filed on May 17, 2010, the Agency elaborated that it "is unaware of the analyses employed by USEPA in arriving at these particular efficiency requirements." PC 1 at 2 (¶5). The Agency stated that it had "requested the information from USEPA, and will supplement its post-hearing comments when such information is available." *Id.*

<u>Subsection (e).</u> The Board adds a new subsection (e) providing "that the owner or operator of a subject source shall comply with eight specified application method requirements." SR at 38; *see* Prop. 218 at 106-07, Prop. 219 at 105.

<u>Subsection (f).</u> The Board adds a new subsection (f) providing that "the owner or operator of a subject source shall comply with specified work practices for each subject adhesive application operation." SR at 38; *see* Prop. 218 at 107-08, Prop. 219 at 105-06.

Section 218/219.902 Testing Requirements.

<u>Subsection (a).</u> The Board adds a new subsection (a) providing "that testing to demonstrate compliance with Subpart JJ shall be conducted within 90 days after a request by the Illinois EPA, or as otherwise specified." SR at 38-39; *see* Prop. 218 at 108, Prop. 219 at 106. The subsection also provides that "[t]he Illinois EPA shall be notified 30 days in advance of such testing" in order to allow the Agency to be present. SR at 39; *see* Prop. 218 at 108, Prop. 219 at 106.

<u>Subsection (b).</u> The Board adds a new subsection (b) providing that "testing to demonstrate compliance with the VOM content limitations set forth in Section 218/219.901(b) shall be conducted in accordance with specified test methods, or, under certain circumstances, in

accordance with the manufacturer's specifications." SR at 39; see Prop. 218 at 108, Prop. 219 at 106-07.

During the first hearing, Mr. Alec Davis on behalf of IERG noted that Section 218/219.105 provide "an option for the use of formulation data in determining VOM content" of coatings, inks, and fountain solutions. Tr. 1 at 16-17. He asked whether the Agency would consider the use of formulation data in the case of adhesives. *Id.* at 16. Mr. Rory Davis responded that, although the CTG for the category had not included that option, the Agency "would consider it an option for calculating VOM content from a formula similar to the metal parts or metal and plastic parts coatings." *Id.* at 17.

In its motion to amend, the Agency proposed to amend subsection (b) to allow the use of formulation data under specified circumstances. Mot. Amend at 1-2 (¶2). In its post-hearing comments filed on June 4, 2010, IERG noted that the Agency's proposed language "appears to be substantially identical to the existing provisions contained in Section 218.105(a)(2), that allow the use of formulation data to determine the composition of coatings, inks, or fountain solutions." PC 5 at 2. IERG supported the Agency's proposed amendment, claiming that "[t]he option for the use of formulation data will provide subject sources with additional flexibility to demonstrate compliance, without compromising the integrity of the regulations." *Id.* As the Board has granted the Agency's motion above under "Preliminary Matter," the proposed language is reflected in the adopted regulations in the order below.

<u>Subsection (c)</u>. The Board adds a new subsection (c) providing that "the owner or operator of a source complying with Section 218/219.901(d) by utilizing an afterburner or carbon adsorber shall perform testing pursuant to specified test methods and procedures." SR at 39; *see* Prop. 218 at 108-09, Prop. 219 at 107-08.

<u>Subsection (d).</u> The Board adds a new subsection (d) providing that "the owner or operator of a source complying with Section 218/219.901(d) by utilizing an emissions control system other than afterburner or carbon adsorber shall conduct testing as set forth in the owner or operator's plan approved by the Illinois EPA and USEPA." SR at 39; *see* Prop. 218 at 109, Prop. 219 at 108.

Section 218/219.903 Monitoring Requirements.

<u>Subsection (a).</u> The Board adds a subsection (a) providing establishing "monitoring requirements for owners or operators utilizing an afterburner or carbon adsorber to demonstrate compliance with Section 218/219.901(d)." SR at 39; *see* Prop. 218 at 109-10, Prop. 219 at 108.

<u>Subsection (b).</u> The Board adds a subsection (b) establishing "monitoring requirements for owners or operators utilizing an emissions control system other than an afterburner or carbon adsorber to demonstrate compliance with Section 218/219.901(d)." SR at 39; *see* Prop. 218 at 110, Prop. 219 at 108.

Section 218/219.904 Recordkeeping and Reporting Requirements.

<u>Subsection (a).</u> The Board adds a new subsection (a)(1) providing that "the owners and operators of sources exempt from the limitations of Subpart JJ because of the criteria in Section 218/219.900(a) shall submit a certification to the Illinois EPA that includes a declaration that the source is exempt and calculations that demonstrate that the source is exempt." SR at 39-40; *see* Prop. 218 at 110, Prop. 219 at 108-09.

Originally, the Agency proposed that the owner or operator of an exempt source must comply with this requirement "[b]y May 1, 2011, or upon initial start-up, whichever is later. . . ." Prop. 218 at 110, Prop. 219 at 108. In post-hearing comments filed on June 4, 2010, the Agency noted a request at the second hearing "that the Agency provide additional time for sources to comply with the proposal." PC 3 at 2. The Agency recommended "extending the compliance deadline one year from May 1, 2011, to May 1, 2012." *Id.* Having reviewed the record in this proceeding, the Board concurred with the Agency's recommendation to extend the compliance deadline, and the extension is reflected in the adopted regulations in the order below.

Subsection (a)(2) provides that the owner or operator must also "notify the Illinois EPA if the combined emissions of VOM from subject miscellaneous industrial adhesive application operations at the source ever equal or exceed 15 lbs/day, within 30 days after the event occurs." SR at 40; *see* Prop. 218 at 110, Prop. 219 at 108-09.

During the first hearing, Mr. Rory Davis indicated that the Agency would require only a single initial demonstration of exemption. *Id.* at 11, 12. He further indicated that, under proposed Section 218/219.904(a)(2), sources would be required to notify the Agency "if they ever exceed the 15-pound-per-day criteria." *Id.* at 12; *see* Prop. 218 at 110, Prop. 219 at 109. In order to provide this notification, he suggested that sources "would necessarily have to keep track of their emissions." Tr.1 at 12-14. He characterized this as an implied requirement. *See* Tr.1 at 13, Tr.2 at 75. In response to a question from the Board, Mr. Rory Davis agreed to consider proposing a provision requiring exempt sources to provide some demonstration of continued compliance or some periodic measurement of emissions. *Id.* at 14.

In its motion to amend, the Agency proposed to add recordkeeping requirements to subsection (a). Mot. Amend at 2-4 (\P 3). Specifically, the Agency proposed that, among other requirements, exempt sources shall

- 2) Collect and record the following information each day for each miscellaneous industrial adhesive application operation, maintain the information at the source for a period of three years, and provide the information to the Agency upon request:
 - A) The name and identification number of each adhesive as applied by each miscellaneous industrial adhesive application operation; and
 - B) The weight of VOM per volume and the volume of each adhesive (minus water and any compounds which are specifically exempted

from the definition of VOM) as applied each day by each miscellaneous industrial adhesive application operation. Mot. Amend at 2-4

During the second hearing, Ms. Kathryn Hodge on behalf of IERG asked whether the Agency intended "that sources claiming this exemption would have to collect and record and otherwise keep those records on a daily basis?" Tr.2 at 74. On behalf of the Agency, Mr. Rory Davis responded that the language of the proposed amendment did require this daily collection and recording. *Id.* Mr. Davis also agreed with Ms. Hodge that Section 218/219.904(a)(1)(B), referring to demonstrations that combined VOM emissions are less than 15 pounds per day, calculates daily emissions by dividing monthly emissions by the number of calendar days during the month that the operation was active. *Id.* Ms. Hodge than asked how to reconcile these two requirements: "[a]re we supposed to do the calculation on a daily basis or do we just keep that record on a daily basis? How do you anticipate that working?" *Id.* at 74-75.

Mr. Rory Davis responded that the Agency would be willing to amend its proposed subsection (a)(2) "to look more like (a)(1)(B) so that sources wouldn't need to measure, record and calculate their emissions on a daily basis. . . ." Tr.2 at 75. He suggested that sources could then calculate emissions on a monthly basis in order to determine whether they were exceeding 15 pounds per day. *Id.* Mr. Davis acknowledged that, although the 15-pound limit is a daily limit, compliance with that limit is determined on a monthly basis. *Id.* at 76.

In its post-hearing comments filed on June 4, 2010, the Agency proposed to further amend Section 218/219.904(a)(2) by changing "the recordkeeping requirements from daily to monthly." PC 3 at 2.

In its post-hearing comments filed on June 4, 2010, IERG noted that it had sought "to clarify whether, or to what extent, the proposal imposed recordkeeping or reporting requirements on sources exempted from Subpart JJ on the basis of their combined VOM emissions from miscellaneous industrial adhesive application operations never equaling or exceeding 6.8 kg/day (15 lbs/day)." PC 5 at 2, citing Tr.1 at 11-15. IERG noted that the Agency's motion to amend had sought to clarify this issue "by explicitly specifying the records required to be kept by such exempted sources." PC 5 at 2-3, citing Mot. Amend at 2-4. Although IERG expressed general support for the Agency's proposed amendment, it argued that the language imposed a daily recordkeeping obligation for demonstrating compliance with a limit determined on a monthly basis. PC 5 at 3. IERG requested that the Board consider amending this subsection to require monthly recordkeeping. *Id*.

The Board notes that IERG's proposed amendment matches the Agency's. PC 3 at 2; PC 5 at 3. Having reviewed the record in this proceeding, the Board concurred with the recommendation by the Agency and IERG to require recordkeeping on a monthly instead of a daily basis, and that requirement is reflected in the adopted regulations in the order below.

<u>Subsection (b).</u> The Board adds a subsection (b) establishing "recordkeeping and reporting requirements for all sources subject to the requirements of Subpart JJ." SR at 40; *see* Prop. 218 at 110-11, Prop. 219 at 109-10. The subsection provides that

[s]uch sources shall submit a certification to the Illinois EPA that includes specified information, notify the Illinois EPA at least 30 calendar days before changing the method of compliance between Sections 218/219.901(b), (c), and (d), notify the Illinois EPA of any violation of the requirements of Subpart JJ within 30 following the violation, retain all records required by this Section for at least three years, and make such records available to the Illinois EPA upon request. SR at 40; *see* Prop. 218 at 110-11, Prop. 219 at 109-10.

Originally, the Agency proposed that subject sources must comply with this requirement "[b]y May 1, 2011, or upon initial start-up, whichever is later. . . ." Prop. 218 at 111, Prop. 219 at 109. In post-hearing comments filed on June 4, 2010, the Agency noted a request at the second hearing "that the Agency provide additional time for sources to comply with the proposal." PC 3 at 2. The Agency recommended "extending the compliance deadline one year from May 1, 2011, to May 1, 2012." *Id.* Having reviewed the record in this proceeding, the Board concurred with the Agency's recommendation to extend the compliance deadline, and the extension is reflected in the adopted regulations in the order below.

<u>Subsection (c).</u> The Board adds a subsection (c) providing that "the owner or operator of a subject adhesive application operation that is complying by means of Section 218/219.901(b) shall submit a certification to the Illinois EPA that includes the name, identification number, and VOM content of each subject adhesive as applied each day." SR at 40; see Prop. 218 at 112, Prop. 219 at 110. Originally, the Agency proposed that the owner or operator of a subject operation comply with this requirement "[b]y May 1, 2011, or upon initial start-up, whichever is later. . . ." Prop. 218 at 112, Prop. 219 at 110. In post-hearing comments filed on June 4, 2010, the Agency noted a request at the second hearing "that the Agency provide additional time for sources to comply with the proposal." PC 3 at 2. The Agency recommended "extending the compliance deadline one year from May 1, 2011, to May 1, 2012." *Id*. Having reviewed the record in this proceeding, the Board concurred with the Agency's recommendation to extend the compliance deadline, and the extension is reflected in the adopted regulations in the order below.

The subsection also provides that "[t]he owner or operator shall also collect and record such information." SR at 40; *see* Prop. 218 at 112, Prop. 219 at 110.

<u>Subsection (d).</u> The Board adds a subsection (d) providing that "the owner or operator of a subject adhesive application operation that is complying by means of Section 218/219.901(c) shall submit a certification to the Illinois EPA that include the name, identification number, and VOM content of each subject adhesive as applied each day." SR at 40; *see* Prop. 218 at 112, Prop. 219 at 110-11. Originally, the Agency proposed that the owner or operator of a subject operation must comply with this requirement "[b]y May 1, 2011, or upon initial start-up, whichever is later. . . ." Prop. 218 at 112, Prop. 219 at 110. In post-hearing comments filed on June 4, 2010, the Agency noted a request at the second hearing "that the Agency provide

additional time for sources to comply with the proposal." PC 3 at 2. The Agency recommended "extending the compliance deadline one year from May 1, 2011, to May 1, 2012." *Id.* Having reviewed the record in this proceeding, the Board concurred with the Agency's recommendation to extend the compliance deadline, and the extension is reflected in the adopted regulations in the order below.

The subsection also provides that "[t]he owner or operator shall also collect and record such information, along with the daily weighted average VOM content of all subject adhesives as applied." SR at 40-41; *see* Prop. 218 at 112, Prop. 219 at 110-11.

Subsection (e). The Board adds a subsection (e) providing that

the owner or operator of a subject adhesive application operation that is complying by means of Section 218/219(d) shall submit a certification to the Illinois EPA that includes information regarding the type of control device used to demonstrate compliance, the results of all tests and calculations necessary to demonstrate compliance, and a declaration that the owner or operator is in compliance with monitoring requirements. SR at 41; *see* Prop. 218 at 112-13, Prop. 219 at 111-12.

Originally, the Agency proposed that the owner or operator of a subject operation must comply with this requirement "[b]y May 1, 2011, or upon initial start-up, whichever is later. . . ." Prop. 218 at 112, Prop. 219 at 111. In post-hearing comments filed on June 4, 2010, the Agency noted a request at the second hearing "that the Agency provide additional time for sources to comply with the proposal." PC 3 at 2. The Agency recommended "extending the compliance deadline one year from May 1, 2011, to May 1, 2012." *Id.* Having reviewed the record in this proceeding, the Board concurred with the Agency's recommendation to extend the compliance deadline, and the extension is reflected in the adopted regulations in the order below.

Subsection (e)(2) provides that "[t]he owner or operator shall also submit to the Illinois EPA a copy of all test results within 90 days after conducting testing, and a certification providing specified details regarding such testing." SR at 41; see Prop, 218 at 113, Prop. 219 at 111. Subsection (e)(3) requires the owner or operator to "collect and record daily control device monitoring data, a log of operating time for the control device, monitoring equipment, and the associated adhesive applications unit, and a maintenance log for the control device and monitoring equipment." SR at 41; see Prop. 218 at 113, Prop, 219 at 111-12.

CONCLUSION

The Board adopts regulations governing VOM emissions in Parts 211, 218, and 219 of its air pollution regulations (35 Ill. Adm. Code 211, 218, 219). Substantively, the Board adopts its second-notice proposal with non-substantive changes suggested by JCAR.

ORDER

The Board directs the Clerk to file the following adopted rule with the Secretary of State for publication in the *Illinois Register*. Proposed additions are underlined, and proposed deletions appear stricken.

TITLE 35: ENVIRONMENTAL PROTECTION SUBTITLE B: AIR POLLUTION CHAPTER I: POLLUTION CONTROL BOARD SUBCHAPTER c: EMISSION STANDARDS AND LIMITATIONS FOR STATIONARY SOURCES

PART 211 DEFINITIONS AND GENERAL PROVISIONS

SUBPART A: GENERAL PROVISIONS

	SUBPART A: GENERAL PROVISIONS
Section	
211.101	<u>Incorporated and Referenced Materials</u> <u>Incorporations by Reference</u>
211.102	Abbreviations and Conversion Factors
	SUBPART B: DEFINITIONS
Section	
211.121	Other Definitions
211.122	Definitions (Repealed)
211.130	Accelacota
211.150	Accumulator
211.170	Acid Gases
<u>211.200</u>	Acrylonitrile Butadiene Styrene (ABS) Welding
211.210	Actual Heat Input
211.230	Adhesive
<u>211.233</u>	Adhesion Primer
<u>211.235</u>	Adhesive Primer
211.240	Adhesion Promoter
211.250	Aeration
<u>211.260</u>	Aerosol Adhesive and Adhesive Primer
211.270	Aerosol Can Filling Line
211.290	Afterburner
211.310	Air Contaminant
211.330	Air Dried Coatings
211.350	Air Oxidation Process
211.370	Air Pollutant
211.390	Air Pollution
211.410	Air Pollution Control Equipment
211.430	Air Suspension Coater/Dryer
211.450	Airless Spray
211.470	Air Assisted Airless Spray

211.474	Alcohol
211.474	Allowance
211.479 211.481	Ammunition Sealant
211.481 211.484	Animal Animal
211.485	Animal Pathological Waste
211.490	Annual Grain Through-Put
211.490 211.492	Antifoulant Coating
211.492 211.495	Anti-Glare/Safety Coating
211.493	Application Area
211.530	Architectural Coating
211.540	Architectural Coating Architectural Structure
211.550	As Applied
211.560	As-Applied Fountain Solution
211.570	Asphalt
211.570	Asphalt Prime Coat
211.590	Automobile
211.630	Automobile or Light-Duty Truck Assembly Source or Automobile or Light-Duty
211.030	Truck Manufacturing Plant
211.650	Automobile or Light-Duty Truck Refinishing
211.660	Automobile of Light-Duty Truck Remissing Automotive/Transportation Plastic Parts
211.665	Auxiliary Boiler
211.670	Baked Coatings
211.680	Bakery Oven
211.685	Basecoat/Clearcoat System
211.690	Batch Loading
211.695	Batch Operation
211.696	Batch Process Train
211.710	Bead-Dipping
<u>211.715</u>	Bedliner Bedliner
211.730	Binders
211.735	Black Coating
211.740	Brakehorsepower (rated-bhp)
211.750	British Thermal Unit
211.770	Brush or Wipe Coating
211.790	Bulk Gasoline Plant
211.810	Bulk Gasoline Terminal
211.820	Business Machine Plastic Parts
<u>211.825</u>	Camouflage Coating
211.830	Can
211.850	Can Coating
211.870	Can Coating Line
211.880	Cap Sealant
211.890	Capture
211.910	Capture Device
211.930	Capture Efficiency
	-

211.050	Continue System
211.950	Capture System
211.953	Carbon Adsorber
<u>211.954</u>	Cavity Wax
211.955	Cement Vila
211.960	Cement Kiln
<u>211.965</u>	Ceramic Tile Installation Adhesive
211.970	Certified Investigation
211.980	Chemical Manufacturing Process Unit
211.990	Choke Loading
211.995	Circulating Fluidized Bed Combustor
211.1000	Class II Finish
211.1010	Clean Air Act
211.1050	Cleaning and Separating Operation
211.1070	Cleaning Materials
211.1090	Clear Coating
211.1110	Clear Topcoat
211.1120	Clinker
<u>211.1128</u>	Closed Molding
211.1130	Closed Purge System
211.1150	Closed Vent System
211.1170	Coal Refuse
211.1190	Coating
211.1210	Coating Applicator
211.1230	Coating Line
211.1250	Coating Plant
211.1270	Coil Coating
211.1290	Coil Coating Line
211.1310	Cold Cleaning
211.1312	Combined Cycle System
211.1315	Combustion Tuning
211.1316	Combustion Turbine
211.1320	Commence Commercial Operation
211.1324	Commence Operation
211.1328	Common Stack
211.1330	Complete Combustion
211.1350	Component
211.1370	Concrete Curing Compounds
211.1390	Concentrated Nitric Acid Manufacturing Process
211.1410	Condensate
211.1430	Condensible PM-10
211.1435	Container Glass
<u>211.1455</u>	Contact Adhesive
211.1465	Continuous Automatic Stoking
211.1467	Continuous Coater
211.1470	Continuous Process

211.1490	Control Device
211.1510	Control Device Efficiency
211.1515	Control Period
211.1520	Conventional Air Spray
211.1530	Conventional Soybean Crushing Source
211.1550	Conveyorized Degreasing
<u>211.1560</u>	Cove Base
<u>211.1565</u>	Cove Base Installation Adhesive
211.1570	Crude Oil
211.1590	Crude Oil Gathering
211.1610	Crushing
211.1630	Custody Transfer
211.1650	Cutback Asphalt
<u>211.1655</u>	Cyanoacrylate Adhesive
211.1670	Daily-Weighted Average VOM Content
211.1690	Day
<u>211.1700</u>	<u>Deadener</u>
211.1710	Degreaser
211.1730	Delivery Vessel
211.1740	Diesel Engine
211.1745	Digital Printing
211.1750	Dip Coating
211.1770	Distillate Fuel Oil
211.1780	Distillation Unit
211.1790	Drum
211.1810	Dry Cleaning Operation or Dry Cleaning Facility
211.1830	Dump-Pit Area
211.1850	Effective Grate Area
211.1870	Effluent Water Separator
<u>211.1872</u>	Ejection Cartridge Sealant
211.1875	Elastomeric Materials
211.1876	Electric Dissipating Coating
211.1877	Electric-Insulating Varnish
211.1878	Electrical Apparatus Component
211.1880	Electrical Switchgear Compartment Coating
211.1882	Electrodeposition Primer (EDP)
<u>211.1883</u> 211.	
•11.100=	Shielding Coatings
211.1885	Electronic Component
211.1890	Electrostatic Bell or Disc Spray
211.1900	Electrostatic Prep Coat
211.1910	Electrostatic Spray
211.1920	Emergency or Standby Unit
211.1930	Emission Rate
211.1950	Emission Unit

211 1050	
211.1970	Enamel
211.1990	Enclose
211.2010	End Sealing Compound Coat
211.2030	Enhanced Under-the-Cup Fill
211.2040	Etching Filler
211.2050	Ethanol Blend Gasoline
<u>211.2055</u>	Ethylene Propylenediene Monomer (EPDM) Roof Membrane
211.2070	Excess Air
211.2080	Excess Emissions
211.2090	Excessive Release
211.2110	Existing Grain-Drying Operation (Repealed)
211.2130	Existing Grain-Handling Operation (Repealed)
211.2150	Exterior Base Coat
211.2170	Exterior End Coat
211.2190	External Floating Roof
<u>211.2200</u>	Extreme High-Gloss Coating
211.2210	Extreme Performance Coating
211.2230	Fabric Coating
211.2250	Fabric Coating Line
211.2270	Federally Enforceable Limitations and Conditions
211.2285	Feed Mill
211.2290	Fermentation Time
211.2300	Fill
211.2310	Final Repair Coat
<u>211.2320</u>	Finish Primer/Surfacer
211.2330	Firebox
211.2350	Fixed-Roof Tank
211.2355	Flare
211.2357	Flat Glass
211.2358	Flat Wood Paneling
211.2359	Flat Wood Paneling Coating Line
211.2360	Flexible Coating
211.2365	Flexible Operation Unit
<u>211.2369</u>	Flexible Vinyl
211.2370	Flexographic Printing
211.2390	Flexographic Printing Line
211.2410	Floating Roof
<u>211.2415</u>	Fog Coat Fossil Fuel
211.2420 211.2425	Fossil Fuel-Fired
211.2423	Fountain Solution
211.2450	
211.2450 211.2470	Freeboard Height Fuel Combustion Emission Unit or Fuel Combustion Emission Source
211.2470	Fugitive Particulate Matter
211.2490	Full Operating Flowrate
211.2310	Tun Operating Piowrate

211.2525	Gasket/Gasket Sealing Material
211.2530	Gas Service
211.2550	Gas/Gas Method
211.2570	Gasoline
211.2590	Gasoline Dispensing Operation or Gasoline Dispensing Facility
211.2610	Gel Coat
211.2615	General Work Surface
211.2620	Generator
211.2622	Glass Bonding Primer
211.2625	Glass Melting Furnace
211.2630	Gloss Reducers
211.2650	Grain
211.2670	Grain-Drying Operation
211.2690	Grain-Handling and Conditioning Operation
211.2710	Grain-Handling Operation
211.2730	Green-Tire Spraying
211.2750	Green Tires
211.2770	Gross Heating Value
211.2790	Gross Vehicle Weight Rating
211.2810	Heated Airless Spray
211.2815	Heat Input
211.2820	Heat Input Rate
<u>211.2825</u>	<u>Heat-Resistant Coating</u>
211.2830	Heatset
211.2840	Heatset Web Letterpress Printing Line
211.2850	Heatset Web Offset Lithographic Printing Line
211.2870	Heavy Liquid
211.2890	Heavy Metals
211.2910	Heavy Off-Highway Vehicle Products
211.2930	Heavy Off-Highway Vehicle Products Coating
211.2950	Heavy Off-Highway Vehicle Products Coating Line
<u>211.2955</u>	High Bake Coating
<u>211.2956</u>	High Build Primer/Surfacer
<u>211.2958</u>	High Gloss Coating
<u>211.2960</u>	High-Performance Architectural Coating
211.2965	High Precision Optic
211.2970	High Temperature Aluminum Coating
<u>211.2980</u>	High Temperature Coating
211.2990	High Volume Low Pressure (HVLP) Spray
211.3010	Hood
211.3030	Hot Well
211.3050	Housekeeping Practices
211.3070	Incinerator
211.3090	Indirect Heat Transfer
<u>211.3095</u>	Indoor Floor Covering Installation Adhesive

211.3100	Industrial Boiler
211.3110	Ink
211.3120	In-Line Repair
211.3130	In-Process Tank
211.3150	In-Situ Sampling Systems
211.3170	Interior Body Spray Coat
211.3190	Internal-Floating Roof
211.3210	Internal Transferring Area
211.3215	Janitorial Cleaning
211.3230	Lacquers
211.3240	Laminate
211.3250	Large Appliance
211.3270	Large Appliance Coating
211.3270	Large Appliance Coating Line
211.3200	Lean-Burn Engine
211.3305	Letterpress Printing Line
211.3303	Light Liquid
211.3330	Light-Duty Truck
211.3350	Light Oil
211.3355	Lime Kiln
211.3370	Liquid/Gas Method
211.3370	Liquid-Mounted Seal
211.3410	Liquid Service
211.3430	Liquids Dripping
211.3450	Lithographic Printing Line
211.3470	Load-Out Area
211.3475	Load-Shaving Unit
211.3480	Loading Event
211.3483	Long Dry Kiln
211.3485	Long Wet Kiln
211.3487	Low-NO _x Burner
211.3490	Low Solvent Coating
211.3500	Lubricating Oil
211.3505	Lubricating Wax/Compound
211.3510	Magnet Wire
211.3530	Magnet Wire Coating
211.3550	Magnet Wire Coating Line
211.3555	Maintenance Cleaning
211.3570	Major Dump Pit
211.3590	Major Metropolitan Area (MMA)
211.3610	Major Population Area (MPA)
211.3620	Manually Operated Equipment
211.3630	Manufacturing Process
211.3640	Marine Coating
211.3650	Marine Terminal

211.3660	Marine Vessel
211.3665	Mask Coating
211.3670	Material Recovery Section
211.3690	Maximum Theoretical Emissions
211.3695	Maximum True Vapor Pressure
211.3705	Medical Device
211.3707	Medical Device and Pharmaceutical Manufacturing
211.3710	Metal Furniture
211.3730	Metal Furniture Coating
211.3750	Metal Furniture Coating Line
211.3760	Metallic Coating
211.3770	Metallic Shoe-Type Seal
211.3775	Metal to Urethane/Rubber Molding or Casting Adhesive
211.3780	Mid-Kiln Firing
<u>211.3785</u>	Military Specification Coating
211.3790	Miscellaneous Fabricated Product Manufacturing Process
211.3810	Miscellaneous Formulation Manufacturing Process
<u>211.3820</u>	Miscellaneous Industrial Adhesive Application Operation
211.3830	Miscellaneous Metal Parts and Products
211.3850	Miscellaneous Metal Parts and Products Coating
211.3870	Miscellaneous Metal Parts or Products Coating Line
211.3890	Miscellaneous Organic Chemical Manufacturing Process
211.3910	Mixing Operation
211.3915	Mobile Equipment
<u>211.3925</u>	Mold Seal Coating
211.3930	Monitor
211.3950	Monomer
211.3960	Motor Vehicles
<u>211.3961</u>	Motor Vehicle Adhesive
211.3965	Motor Vehicle Refinishing
<u>211.3966</u>	Motor Vehicle Weatherstrip Adhesive
<u>211.3967</u>	Mouth Waterproofing Sealant
211.3968	Multi-Colored Coating
211.3969	Multi-Component Coating
211.3970	Multiple Package Coating
211.3975	Multipurpose Construction Adhesive
211.3980	Nameplate Capacity
211.3990	New Grain-Drying Operation (Repealed)
211.4010	New Grain-Handling Operation (Repealed)
211.4030	No Detectable Volatile Organic Material Emissions
211.4050	Non-Contact Process Water Cooling Tower
<u>211.4052</u>	Non-Convertible Coating
211.4055	Non-Flexible Coating
211.4065	Non-Heatset
211.4067	NO _x Trading Program

211.4070	Offset
211.4080	One-Component Coating
211.4090	One Hundred Percent Acid
211.4110	One-Turn Storage Space
211.4130	Opacity
211.4150	Opaque Stains
211.4170	Open Top Vapor Degreasing
211.4190	Open-Ended Valve
211.4210	Operator of a Gasoline Dispensing Operation or Operator of a Gasoline
	Dispensing Facility
211.4220	Optical Coating
211.4230	Organic Compound
211.4250	Organic Material and Organic Materials
211.4260	Organic Solvent
211.4270	Organic Vapor
211.4280	Other Glass
211.4280	Outdoor Floor Covering Installation Adhesive
211.4290	Oven
211.4310	Overall Control
211.4330	Overvarnish
211.4350	Owner of a Gasoline Dispensing Operation or Owner of a Gasoline Dispensing
	Facility
211.4370	Owner or Operator
211.4390	Packaging Rotogravure Printing
211.4410	Packaging Rotogravure Printing Line
211.4430	Pail
211.4450	Paint Manufacturing Source or Paint Manufacturing Plant
<u>211.4455</u>	Pan Backing Coating
211.4470	Paper Coating
211.4490	Paper Coating Line
211.4510	Particulate Matter
211.4530	Parts Per Million (Volume) or PPM (Vol)
<u>211.4540</u>	Perimeter Bonded Sheet Flooring
211.4550	Person
211.4590	Petroleum
211.4610	Petroleum Liquid
211.4630	Petroleum Refinery
211.4650	Pharmaceutical
211.4670	Pharmaceutical Coating Operation
211.4690	Photochemically Reactive Material
211.4710	Pigmented Coatings
211.4730	Plant
<u>211.4735</u>	Plastic Plastic
211.4740	Plastic Part
211.4750	Plasticizers

211.4760	Plastic Solvent Welding Adhesive
211.4765	Plastic Solvent Welding Adhesive Primer
211.4768	Pleasure Craft
211.4769	Pleasure Craft Surface Coating
211.4770	PM-10
211.4790	Pneumatic Rubber Tire Manufacture
211.4810	Polybasic Organic Acid Partial Oxidation Manufacturing Process
211.4830	Polyester Resin Material(s)
211.4850	Polyester Resin Products Manufacturing Process
211.4870	Polystyrene Plant
211.4890	Polystyrene Resin
<u>211.4895</u>	Polyvinyl Chloride Plastic (PVC Plastic)
<u>211.4900</u>	Porous Material
211.4910	Portable Grain-Handling Equipment
211.4930	Portland Cement Manufacturing Process Emission Source
211.4950	Portland Cement Process or Portland Cement Manufacturing Plant
211.4960	Potential Electrical Output Capacity
211.4970	Potential to Emit
211.4990	Power Driven Fastener Coating
211.5010	Precoat
211.5012	Prefabricated Architectural Coating
211.5015	Preheater Kiln
211.5020	Preheater/Precalciner Kiln
211.5030	Pressure Release
211.5050	Pressure Tank
211.5060	Pressure/Vacuum Relief Valve
211.5061	Pretreatment Coating
211.5062211.5	5061 Pretreatment Wash Primer
211.5065	Primary Product
211.5070	Prime Coat
<u>211.5075</u>	Primer Sealant
211.5080	Primer Sealer
211.5090	Primer Surfacer Coat
211.5110	Primer Surfacer Operation
211.5130	Primers
211.5150	Printing
211.5170	Printing Line
211.5185	Process Emission Source
211.5190	Process Emission Unit
211.5195	Process Heater
211.5210	Process Unit
211.5230	Process Unit Shutdown
211.5245	Process Vent
211.5250	Process Weight Rate
211.5270	Production Equipment Exhaust System

211.5310	Publication Rotogravure Printing Line
211.5330	Purged Process Fluid
211.5335	Radiation Effect Coating
211.5340	Rated Heat Input Capacity
211.5350	Reactor
211.5370	Reasonably Available Control Technology (RACT)
211.5390	Reclamation System
211.5400	Red Coating
211.5410	Refiner
211.5430	Refinery Fuel Gas
211.5450	Refinery Fuel Gas System
211.5470	Refinery Unit or Refinery Process Unit
211.5480	Reflective Argent Coating
211.5490	Refrigerated Condenser
211.5500	Regulated Air Pollutant
211.5510	Reid Vapor Pressure
211.5520	Reinforced Plastic Composite
211.5530	Repair
211.5535	Repair Cleaning
211.5550	Repair Coat
211.5570	Repaired
211.5580	Repowering
211.5585	Research and Development Operation
211.5590	Residual Fuel Oil
211.5600	Resist Coat
211.5610	Restricted Area
211.5630	Retail Outlet
211.5640	Rich-Burn Engine
211.5650	Ringelmann Chart
211.5670	Roadway
211.5690	Roll Coater
211.5710	Roll Coating
211.5730	Roll Printer
211.5750	Roll Printing
211.5770	Rotogravure Printing
211.5790	Rotogravure Printing Line
<u>211.5800</u>	Rubber
211.5810	Safety Relief Valve
211.5830	Sandblasting
211.5850	Sanding Sealers
211.5860	Scientific Instrument
211.5870	Screening
211.5880	Screen Printing on Paper
211.5885	Screen Reclamation
211.5890	Sealer

211.5910	Semi-Transparent Stains
211.5930	Sensor
211.5950	Set of Safety Relief Valves
211.5970	Sheet Basecoat
211.5980	Sheet-Fed
<u>211.5985</u>	Sheet Rubber Lining Installation
<u>211.5987</u>	Shock-Free Coating
211.5990	Shotblasting
211.6010	Side-Seam Spray Coat
<u>211.6012</u>	Silicone-Release Coating
<u>211.6015</u>	Single-Ply Roof Membrane
211.6017	Single-Ply Roof Membrane Adhesive Primer
<u>211.6020</u>	Single-Ply Roof Membrane Installation and Repair Adhesive
211.6025	Single Unit Operation
211.6030	Smoke
211.6050	Smokeless Flare
211.6060	Soft Coat
211.6063	Solar-Absorbent Coating
211.6065	Solids Turnover Ratio (R _T)
211.6070	Solvent
211.6090	Solvent Cleaning
211.6110	Solvent Recovery System
211.6130	Source
211.6140	Specialty Coatings
211.6145	Specialty Coatings for Motor Vehicles
211.6150	Specialty High Gloss Catalyzed Coating
211.6170	Specialty Leather
211.6190	Specialty Soybean Crushing Source
211.6210	Splash Loading
211.6230	Stack
211.6250	Stain Coating
211.6270	Standard Conditions
211.6290	Standard Cubic Foot (scf)
211.6310	Start-Up
211.6330	Stationary Emission Source
211.6350	Stationary Emission Unit
211.6355	Stationary Gas Turbine
211.6360	Stationary Reciprocating Internal Combustion Engine
211.6370	Stationary Source
211.6390	Stationary Storage Tank
211.6400	Stencil Coat
211.6405	Sterilization Indicating Ink
211.6410	Storage Tank or Storage Vessel
211.6420	Strippable Spray Booth Coating
211.6425	Stripping
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211 6427	0, , 101 ;
<u>211.6427</u>	Structural Glazing
211.6430	Styrene Devolatilizer Unit
211.6450	Styrene Recovery Unit
<u>211.6460</u>	Subfloor
211.6470	Submerged Loading Pipe
211.6490	Substrate
211.6510	Sulfuric Acid Mist
211.6530	Surface Condenser
211.6535	Surface Preparation
211.6540	Surface Preparation Materials
211.6550	Synthetic Organic Chemical or Polymer Manufacturing Plant
211.6570	Tablet Coating Operation
211.6580	Texture Coat
<u>211.6585</u>	Thin Metal Laminating Adhesive
211.6590	Thirty-Day Rolling Average
211.6610	Three-Piece Can
211.6620	Three or Four Stage Coating System
211.6630	Through-the-Valve Fill
<u>211.6640</u>	<u>Tire Repair</u>
211.6650	Tooling Resin
211.6670	Topcoat
211.6690	Topcoat Operation
211.6695	Topcoat System
211.6710	Touch-Up
211.6720	Touch-Up Coating
211.6730	Transfer Efficiency
<u>211.6740</u>	<u>Translucent Coating</u>
211.6750	Tread End Cementing
211.6770	True Vapor Pressure
<u>211.6780</u>	Trunk Interior Coating
211.6790	Turnaround
211.6810	Two-Piece Can
<u>211.6825</u>	<u>Underbody Coating</u>
211.6830	Under-the-Cup Fill
211.6850	Undertread Cementing
211.6860	Uniform Finish Blender
211.6870	Unregulated Safety Relief Valve
211.6880	Vacuum Metallizing
<u>211.6885</u>	Vacuum Metalizing Coating
211.6890	Vacuum Producing System
211.6910	Vacuum Service
211.6930	Valves Not Externally Regulated
211.6950	Vapor Balance System
211.6970	Vapor Collection System
211.6990	Vapor Control System

211.7010	Vapor-Mounted Primary Seal
211.7030	Vapor Recovery System
211.7050	Vapor-Suppressed Polyester Resin
211.7070	Vinyl Coating
211.7090	Vinyl Coating Line
211.7110	Volatile Organic Liquid (VOL)
211.7130	Volatile Organic Material Content (VOMC)
211.7150	Volatile Organic Material (VOM) or Volatile Organic Compound (VOC)
211.7170	Volatile Petroleum Liquid
211.7190	Wash Coat
211.7200	Washoff Operations
211.7210	Wastewater (Oil/Water) Separator
211.7220	Waterproof Resorcinol Glue
211.7230	Weak Nitric Acid Manufacturing Process
211.7240	Weatherstrip Adhesive
211.7250	Web
211.7270	Wholesale Purchase - Consumer
211.7290	Wood Furniture
211.7310	Wood Furniture Coating
211.7330	Wood Furniture Coating Line
211.7350	Woodworking
211.7400	Yeast Percentage

AUTHORITY: Implementing Sections 9, 9.1, 9.9 and 10 and authorized by Sections 27 and 28.5 of the Environmental Protection Act [415 ILCS 5/9, 9.1, 9.9, 10, 27 and 28.5].

Appendix A

Appendix B

Rule into Section Table

Section into Rule Table

SOURCE: Adopted as Chapter 2: Air Pollution, Rule 201: Definitions, R71-23, 4 PCB 191, filed and effective April 14, 1972; amended in R74-2 and R75-5, 32 PCB 295, at 3 Ill. Reg. 5, p. 777, effective February 3, 1979; amended in R78-3 and 4, 35 PCB 75 and 243, at 3 Ill. Reg. 30, p. 124, effective July 28, 1979; amended in R80-5, at 7 Ill. Reg. 1244, effective January 21, 1983; codified at 7 III. Reg. 13590; amended in R82-1 (Docket A) at 10 III. Reg. 12624, effective July 7, 1986; amended in R85-21(A) at 11 Ill. Reg. 11747, effective June 29, 1987; amended in R86-34 at 11 Ill. Reg. 12267, effective July 10, 1987; amended in R86-39 at 11 Ill. Reg. 20804, effective December 14, 1987; amended in R82-14 and R86-37 at 12 III. Reg. 787, effective December 24, 1987; amended in R86-18 at 12 Ill. Reg. 7284, effective April 8, 1988; amended in R86-10 at 12 Ill. Reg. 7621, effective April 11, 1988; amended in R88-23 at 13 Ill. Reg. 10862, effective June 27, 1989; amended in R89-8 at 13 Ill. Reg. 17457, effective January 1, 1990; amended in R89-16(A) at 14 Ill. Reg. 9141, effective May 23, 1990; amended in R88-30(B) at 15 Ill. Reg. 5223, effective March 28, 1991; amended in R88-14 at 15 Ill. Reg. 7901, effective May 14, 1991; amended in R91-10 at 15 Ill. Reg. 15564, effective October 11, 1991; amended in R91-6 at 15 Ill. Reg. 15673, effective October 14, 1991; amended in R91-22 at 16 Ill. Reg. 7656, effective May 1, 1992; amended in R91-24 at 16 Ill. Reg. 13526, effective August 24, 1992; amended in R93-9 at 17 III. Reg. 16504, effective September 27, 1993; amended in R93-11 at 17 Ill. Reg. 21471, effective December 7, 1993; amended in R93-14 at 18 Ill. Reg. 1253, effective January 18, 1994; amended in R94-12 at 18 III. Reg. 14962, effective September 21, 1994; amended in R94-14 at 18 III. Reg. 15744, effective October 17, 1994; amended in R94-15 at 18 Ill. Reg. 16379, effective October 25, 1994; amended in R94-16 at 18 Ill. Reg. 16929, effective November 15, 1994; amended in R94-21, R94-31 and R94-32 at 19 Ill. Reg. 6823, effective May 9, 1995; amended in R94-33 at 19 Ill. Reg. 7344, effective May 22, 1995; amended in R95-2 at 19 Ill. Reg. 11066, effective July 12, 1995; amended in R95-16 at 19 Ill. Reg. 15176, effective October 19, 1995; amended in R96-5 at 20 Ill. Reg. 7590, effective May 22, 1996; amended in R96-16 at 21 Ill. Reg. 2641, effective February 7, 1997; amended in R97-17 at 21 Ill. Reg. 6489, effective May 16, 1997; amended in R97-24 at 21 Ill. Reg. 7695, effective June 9, 1997; amended in R96-17 at 21 Ill. Reg. 7856, effective June 17, 1997; amended in R97-31 at 22 III. Reg. 3497, effective February 2, 1998; amended in R98-17 at 22 III. Reg.11405, effective June 22, 1998; amended in R01-9 at 25 Ill. Reg. 108, effective December 26, 2000; amended in R01-11 at 25 Ill. Reg. 4582, effective March 15, 2001; amended in R01-17 at 25 Ill. Reg. 5900, effective April 17, 2001; amended in R05-16 at 29 Ill. Reg. 8181, effective May 23, 2005; amended in R05-11 at 29 III. Reg. 8892, effective June 13, 2005; amended in R04-12/20 at 30 III. Reg. 9654, effective May 15, 2006; amended in R07-18 at 31 III. Reg. 14254, effective September 25, 2007; amended in R08-6 at 32 Ill. Reg. 1337, effective January 16, 2008; amended in R07-19 at 33 III. Reg. 11982, effective August 6, 2009; amended in R08-19 at 33 Ill. Reg. 13326, effective August 31, 2009; amended in R10-7 at 34 Ill. Reg. 1391, effective January 11, 2010; amended in R10-08 at 34 Ill. Reg. 9069, effective June 25, 2010; amended in R10-20 at 34 Ill. Reg. , effective .

SUBPART A: GENERAL PROVISIONS

Section 211.101 <u>Incorporated and Referenced Materials</u>Incorporations by Reference

The following materials are incorporated by reference. These incorporations do not include any later amendments or editions.

a) <u>Incorporations by Reference</u>

- 1) "Evaporation Loss from Floating Roof Tanks," American Petroleum Institute Bulletin 2517, (1962)
- 2b) Standard Industrial Classification Manual, Superintendent of Documents, Washington, D.C. 20402, (1972)
- <u>3e</u>) American Society for Testing and Materials, <u>1100 Barr Harbor Dr., West Conshohocken</u>, PA 19428-29591916 Race Street, Philadelphia, PA 19103

A-S-T-M- D 86 A-S-T-M- D 240-64 A-S-T-M- D 323 A-S-T-M-D 369-69 (1971) A-S-T-M-D 396-69 **ASTM** D 523-80 **ASTM** D 523-89 A-S-T-M-D 900-55 A.S.T.M. D 975-68 A-S-T-M-D 1826-64 A.S.T.M. D 2015-66 A-S-T-M-D 2880-71

- 4d) 40 CFR 51.100 (1987)
- 5) American Architectural Manufacturers Association, 1827 Walden Office Square, Suite 550, Schaumburg, IL 60173-4268, Specification 2604-05 (Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels) (2005)
- 6) American Architectural Manufacturers Association, 1827 Walden Office Square, Suite 550, Schaumburg, IL 60173-4268, Specification 2605-05 (Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels) (2005)
- b) Referenced Materials
 Federal Insecticide, Fungicide, and Rodenticide Act (7 USC 136)

(Source: Amended at 34 Ill. Reg. _____, effective_____)

Section 211.102 Abbreviations and Conversion Factors

a) Abbreviations used in this Part include the following:

ABS acrylonitrile butadiene styrene

ASTM American Society for Testing and Materials

bbl barrels (42 gallons)

btu British thermal units (60°F)

btu/hr btu per hour

°C degrees Celsius or centigrade CAAPP Clean Air Act Permit Program

cm centimeters cu in cubic inches

EDP electrodeposition primer

EMI/RFI electromagnetic interference/radio frequency interference

EPDM ethylene propylenediene monomer

EGU Electrical Generating Unit

°F degrees Fahrenheit

FIP Federal Implementation Plan

ft feet

ft² square feet ft³ cubic feet g grams

gpm gallons per minute g/mole grams per mole

gal gallons
hp horsepower
hr hours
in inch

°K degrees Kelvin kcal kilocalories kg kilograms

kg/hr kilograms per hour

kPa kilopascals; one thousand newtons per square meter

kW kilowatt l liters

l/sec liters per second

lbs pounds

lbs/day pounds per day lbs/hr pounds per hour lbs/gal pounds per gallon lbs/yr pounds per year LEL lower explosive limit

m meters

m² square meters m³ cubic meters mg milligrams

Mg Megagrams, metric tons or tonnes

ml milliliters min minutes MJ megajoules

mmbtu million British thermal units

mmbtu/hr million British thermal units per hour

mmHg millimeters of mercury

MTE maximum theoretical emissions

MWe megawatt of electricity
MW megawatt; one million watts

MW-hr megawatt per hour NDO natural draft opening No_x nitrogen oxides

peoc potential electrical output capacity

ppm (vol) parts per million

ppmv parts per million by volume ppmvd parts per million by volume dry

psi pounds per square inch

psia pounds per square inch absolute psig pounds per square inch gauge

PTE potential to emit

RACT reasonably available control technology

 ${R_T \over scf}$ ${solids turnover ratio \over standard cubic feet$ scm <math>standard cubic meters

sec seconds

SIP State Implementation Plan TTE temporary total enclosure

sq cm square centimeters sq in square inches

T short ton (2,000 lbs) ton short ton (2,000 lbs)

TPY tons per year

USEPA United States Environmental Protection Agency

VOC volatile organic compounds VOL volatile organic liquids VOM volatile organic materials

b) The following conversion factors have been used in this Part:

English Metric 1 gal 3.785 1

1,000 gal 3,785 1 or 3.785 m³ 1 psia 6.897 kPA (51.71 mmHg)

2.205 lbs 1 kg

 32° 0°C (273.15°K)

159.01 1 bbl 1 cu in 16.39 ml 119,800 mg/l 1 lb/gal 1 lb/mmbtu 1.548 kg/MW-hr 1 lb/T 0.500 kg/Mg0.907 Mg 1 ton 1 T $0.907 \, \mathrm{Mg}$ 0.293 MW mmbtu/hr

(Source: Amended at 34 Ill. Reg. _____, effective_____)

SUBPART B: DEFINITIONS

Section 211.200 Acrylonitrile Butadiene Styrene (ABS) Welding

"Acrylonitrile butadiene styrene welding" or "ABS Welding" means, for purposes of Subparts JJ
of 35 Ill. Adm. Code 218 and 219, any process to weld acrylonitrile butadiene styrene pipe.
(Source: Added at 34 Ill. Reg, effective)
Section 211.233 Adhesion Primer
"Adhesion primer" means, for purposes of 35 Ill. Adm. Code 218 and 219, a coating that is applied to a polyolefin part to promote the adhesion of a subsequent coating. An adhesion primer should be clearly identified as an adhesion primer or adhesion promoter on its accompanying material safety data sheet.
(Source: Added at 34 Ill. Reg, effective)
Section 211.235 Adhesive Primer
"Adhesive primer" means, for purposes of 35 Ill. Adm. Code 218 and 219, any product applied to a substrate, prior to the application of an adhesive, to provide a bonding surface.
((Source: Added at 34 Ill. Reg, effective)
Section 211.260 Aerosol Adhesive and Adhesive Primer
"Aerosol adhesive and adhesive primer" means, for purposes of 35 Ill. Adm. Code 218 and 219, an adhesive or adhesive primer packaged as an aerosol product in which the spray mechanism is permanently housed in a non-refillable can designed for handheld application without the need for ancillary hoses or spray equipment.
(Source: Added at 34 Ill. Reg, effective)
Section 211.481 Ammunition Sealant
"Ammunition Sealant" means, for purposes of 35 Ill. Adm. Code 218.204(q)(1) and 219.204(q)(1), a coating applied in the manufacture of ammunition, including cap sealants and mouth waterproofing sealants.
(Source: Added at 34 Ill. Reg. , effective)

Section 211.492 Antifoulant Coating

"Antifoulant coating" means, for purposes of 35 Ill. Adm. Code 218 and 219, any coating
applied to the underwater portion of a pleasure craft to prevent or reduce the attachment of
biological organisms, and registered with USEPA as a pesticide under the Federal Insecticide,
Fungicide, and Rodenticide Act (7 U.S.C. Section 136).
(Source: Added at 34 Ill. Reg, effective)
Section 211.540 Architectural Structure
"Architectural structure" means, for purposes of 35 Ill. Adm. Code 218 and 219, a free-standing, immobile outdoor construction, which may be permanent or temporary, including but not limited to buildings, bridges, dams, and electricity pylons.
(Source: Added at 34 Ill. Reg, effective)
Section 211.715 Bedliner
"Bedliner" means, for purposes of 35 Ill. Adm. Code 218 and 219, a multi-component coating applied to a cargo bed after the application of topcoat and outside of the topcoat operation to provide additional durability and chip resistance.
(Source: Added at 34 Ill. Reg, effective)
Section 211.735 Black Coating
"Black coating" means, for purposes of 35 Ill. Adm. Code 218 and 219, a coating that meets both of the following criteria, based on Cielab color space, 0/45 geometry:
Maximum lightness of 23 units. For spherical geometry, specular included, maximum lightness of 33 units; and

(Source: Added at 34 Ill. Reg. _____, effective____)

Saturation of less than 2.8, where saturation equals the square root of $A^2 + B^2$.

Section 211.820 Business Machine Plastic Parts

"Business machine plastic parts" means:

a) Prior to May 1, 20122011, the plastic housings and other exterior plastic components of electronic office equipment and of medical and musical equipment, including, but not limited to the following: computers, monitors, printers and keyboards, facsimile machines, copiers, microfiche readers, cellular and standard phones, and pencil sharpeners. This definition excludes internal electrical components of business machines:

b) On and after May 1, 2012 2011 , a device that uses electronic or mechanical
methods to process information, perform calculations, print or copy information,
or convert sound into electrical impulses for transmission, including devices listed
in standard industrial classification numbers 3572, 3573, 3574, 3579, and 3661,
and photocopy machines, a subcategory of standard industrial classification
number 3861.
number 30011
(Source: Amended at 34 Ill. Reg, effective)
Section 211.825 Camouflage Coating
"Camouflage coating" means, for purposes of 35 Ill. Adm. Code 218 and 219, a coating used, principally by the military, to conceal equipment from detection.
(Source: Added at 34 Ill. Reg, effective)
Section 211.880 Cap Sealant
"Cap sealant" means, for purposes of 35 Ill. Adm. Code 218.204(q)(1) and 219.204(q)(1), a
coating applied in the manufacture of ammunition to seal the annular crevice between a primer
cap and shellcase.
cap and shericase.
Source: Added at 34 Ill. Reg. , effective)
Section 211.954 Cavity Wax
"Cavity wax" means, for purposes of 35 Ill. Adm. Code 218 and 219, a coating applied into the
cavities of the vehicle primarily for the purpose of enhancing corrosion protection.
cavities of the venicle primarry for the purpose of chilaneing corrosion protection.
(Source: Added at 34 Ill. Reg, effective)
Section 211.965 Ceramic Tile Installation Adhesive
"Ceramic tile installation adhesive" means, for purposes of 35 Ill. Adm. Code 218 and 219, any
adhesive used in the installation of ceramic tiles.
addressive used in the instantation of certaine tries.
(Source: Added at 34 Ill. Reg, effective)
Section 211.1128 Closed Molding

"Closed molding" means, for purposes of 35 Ill. Adm. Code 218 and 219, any molding process in which pressure is used to distribute the resin through the reinforcing fabric placed between two mold surfaces to either saturate the fabric or fill the mold cavity. The pressure may be clamping pressure, fluid pressure, atmospheric pressure, or vacuum pressure used either alone or in combination. The mold surfaces may be rigid or flexible. Closed molding includes, but is not limited to, compression molding with sheet molding compound, infusion molding, resin injection molding, vacuum assisted resin transfer molding, resin transfer molding, and vacuum assisted compression molding. Processes in which a closed mold is used only to compact saturated fabric or remove air or excess resin from the fabric (such as in vacuum bagging), are not considered closed molding. Open molding steps, such as application of a gel coat or skin coat layer by conventional open molding prior to a closed molding process, are also not closed molding.

(Source:	Added at 34 Ill. Reg.	, effective
(DOGICE.	Traded at 5 1 mi. Ites.	, 0110011 10

Section 211.1455 Contact Adhesive

"Contact adhesive" means, for purposes of 35 Ill. Adm. Code 218 and 219, an adhesive that meets the criteria in this Section. "Contact adhesive" does not include rubber cements that are primarily intended for use on paper substrates or vulcanizing fluids that are designed and labeled for tire repair only. The qualifying criteria are:

The adhesive is designed for application to both surfaces to be bonded together;

The adhesive is allowed to dry before the two surfaces are placed in contact with each other;

The adhesive forms an immediate bond that is impossible, or difficult, to reposition after both adhesive-coated surfaces are placed in contact with each other; and

The adhesive does not need sustained pressure or clamping of surfaces after the adhesive-coated surfaces have been brought together using sufficient momentary pressure to establish full contact between both surfaces.

(Source: Added at 34 Ill. Reg., effective

Section 211.1560 Cove Base

"Cove base" means, for purposes of Subparts JJ of 35 Ill. Adm. Code 218 and 219, a flooring trim unit, generally made of vinyl or rubber, having a concave radius on one edge and a convex radius on the opposite edge that is used in forming a junction between the bottom wall course and the floor or to form an inside corner.

(Source:	Added at 34 Ill. Reg.	. effective	`

Section 211.1565 Cove Base Installation Adhesive

"Cove base installation adhesive" means, for purposes of 35 Ill. Adm. Code 218 and 219, any adhesive used for the installation of cove base or wall base on a wall or vertical surface at floor level.

(Source: Added at 34 Ill. Reg, effective)
Section 211.1655 Cyanoacrylate Adhesive
"Cyanoacrylate adhesive" means, for purposes of 35 Ill. Adm. Code 218 and 219, any adhesive with a cyanoacrylate content of at least 95 percent by weight.
(Source: Added at 34 Ill. Reg, effective)
Section 211.1700 Deadener
"Deadener" means, for purposes of 35 Ill. Adm. Code 218 and 219, a coating applied to selected vehicle surfaces primarily for the purpose of reducing the sound of road noise in the passenger compartment.
(Source: Added at 34 Ill. Reg, effective)
Section 211.1872 Ejection Cartridge Sealant
"Ejection cartridge sealant" means, for purposes of 35 Ill. Adm. Code 218.204(q) and 219.204(q), a sealant applied during the assembly of an ejection cartridge to provide a waterproof barrier between a shellcase and primer, and between a shellcase and the wad.
(Source: Added at 34 Ill. Reg., effective)
Section 211.1876 Electric Dissipating Coating
"Electric dissipating coating" means, for purposes of 35 Ill. Adm. Code 218 and 219, a coating that rapidly dissipates a high-voltage electric charge.
(Source: Added at 34 Ill. Reg, effective)
Section 211.1877 Electric-Insulating Varnish
"Electric-insulating varnish" means, for purposes of 35 Ill. Adm. Code 218 and 219, a non-convertible coating applied to electric motors, components of electric motors, or power transformers, to provide electrical, mechanical, and environmental protection or resistance.
(Source: Added at 34 Ill. Reg, effective)

$\underline{Section~211.1880}~\underline{Electrical~Switchgear~Compartment~Coatings}$

"Electrical switchgear compartment coatings" means coatings applied to metal-enclosed
compartments that house assemblies of medium/high voltage switchgear, of greater than 1,000
volts AC, for utility distribution in outdoor use.
(Source: Added at 34 Ill. Reg. , effective)
Section 211.1882 Electrodeposition Primer (EDP)
"Electrodeposition primer" or "EDP" means, for purposes of 35 Ill. Adm. Code Sections 218 and 219, a process of applying a protective, corrosion-resistant waterborne primer on exterior and interior surfaces that provides thorough coverage of recessed areas. It is a dip coating method that uses an electrical field to apply or deposit the conductive coating onto the part. The object being painted acts as an electrode that is oppositely charged from the particles of paint in the dip tank. Electrodeposition primer is also referred to as E-Coat, Uni-Prime, and ELPO Primer.
(Source: Added at 34 Ill. Reg, effective)
Section <u>211.1883</u> Electromagnetic Interference/Radio Frequency Interference (EMI/RFI) Shielding Coatings (Renumbered)
"Electromagnetic interference/radio frequency interference coatings" or "EMI/RFI coatings" means:
Prior to May 1, 2012 2011, coatings used on business machine plastic housings to attenuate electromagnetic and radio frequency interference signals that would otherwise pass through the plastic housing;
On and after May 1, 2012 2011 , coatings used on electrical or electronic equipment to provide shielding against electromagnetic interference, radio frequency interference, or static discharge.
(Source: Section 211.1880 renumbered to Section 211.1883 and amended at 34 Ill. Reg, effective)
Section 211.2040 Etching Filler
"Etching filler" means, for purposes of 35 Ill. Adm. Code 218 and 219, a coating that contains less than 23 percent solids by weight and at least 0.50 percent acid by weight, and is used instead of applying a protection of a position
of applying a pretreatment coating followed by a primer.
(Source: Added at 34 Ill. Reg, effective)

Section 211.2055 Ethylene Propylenediene Monomer (EPDM) Roof Membrane

"Ethylene propylenediene monomer roof membrane" or "EPDM roof membrane" means, for
purposes of 35 Ill. Adm. Code 218 and 219, a prefabricated single sheet of elastomeric material
composed of ethylene propylenediene monomer and that is field applied to a building roof using
one layer or membrane material.

(Source: Added at 34 Ill. Reg. _____, effective_____)

Section 211.2200 Extreme High-Gloss Coating

"Extreme high-gloss coating" means:

For purposes of 35 Ill. Adm. Code Section 218.204(q)(1) regarding metal parts and products coatings, a coating that, when tested by ASTM D-523-80, incorporated by reference in Section 211.101 of this Part, shows a reflectance of 75 percent or more on a 60° meter;

For purposes of 35 Ill. Adm. Code Section 218.204(q)(5) regarding pleasure craft coatings, any coating that achieves at least 95 percent reflectance on a 60° meter when tested using ASTM D 523-89, incorporated by reference in Section 211.101 of this Part.

(Source: Added at 34 Ill. Reg. _____, effective_____)

Section 211.2210 Extreme Performance Coating

"Extreme performance coating" means:

Except for purposes of 35 Ill. Adm. Code 218.204(q) or 219.204(q), any coating that during intended use is exposed to any or all of the following: ambient weather conditions, temperatures consistently above 95°C (203°F), detergents, abrasive and scouring agents, solvents, or corrosive atmospheres;

For purposes of 35 Ill. Adm. Code 218.204(q) and 219.204(q), a coating used on a metal or plastic surface where the coated surface meets, in its intended use, one or more of the criteria listed below. Extreme performance coatings include, but are not limited to, coatings applied to locomotives, railroad cars, farm machinery, and heavy duty trucks:

Chronic exposure to corrosive, caustic, or acidic agents, chemicals, chemical fumes, chemical mixtures, or solutions;

Repeated exposure to temperatures in excess of 121°C (250°F); or

Repeated heavy abrasion, including mechanical wear and repeated scrubbing with industrial grade solvents, cleansers, or scouring agents.

(Source: Amended at 34 Ill. Reg. _____, effective_____)

Section 211.2310 Final Repair Coat

"Final repair coat" means:

<u>Withwith</u> respect to automobile or light-duty truck assembly or manufacturing <u>described</u> in 35 Ill. Adm. Code 218.204(a)(1) and 218.219(a)(1), a coating <u>thatwhich</u> is used to repaint topcoat which is damaged during vehicle assembly;

With respect to automobile or light-duty truck assembly or manufacturing described in 35 Ill. Adm. Code 218.204(a)(2) and 218.219(a)(2), a coating applied to completely assembled motor vehicles or to parts that are not yet on a completely assembled vehicle to correct damage or imperfections in the coating. The curing of the coatings applied in these operations is accomplished at a lower temperature than that used for curing primersurfacer and topcoat.

(Source: Amended at 34 Ill. Reg. _____, effective_____)

Section 211.2320 Finish Primer/Surfacer

"Finish primer/surfacer" means, for purposes of 35 Ill. Adm. Code 218 and 219, a coating applied with a wet film thickness of less than 10 mils prior to the application of a topcoat for purposes of providing corrosion resistance, adhesion of subsequent coatings, a moisture barrier, or promotion of a uniform surface necessary for filling in surface imperfections.

(Source: Added at 34 Ill. Reg. _____, effective_____)

Section 211.2360 Flexible Coating

"Flexible coating" means:

Prior to May 1, 20122011, a paint with the ability to withstand dimensional changes;

On and after May 1, 20122011, a coating that is required to comply with engineering specifications for impact resistance, mandrel bend, or elongation as defined by the original manufacturer of the equipment being coated.

(Source: Amended Added at 34 Ill. Reg. _____, effective_____)

Section 211.2369 Flexible Vinyl

"Flexible vinyl" means, for purposes of 35 Ill. Adm. Code 218 and 219, non-rigid polyvinyl chloride plastic with a 5 percent by weight plasticizer content.

(Source: Added at 34 Ill. Reg. _____, effective_____)

Section 211.2415 Fog Coat

"Fog coat" means, for purposes of 35 Ill. Adm. Code 218 and 219, a coating that is applied to a plastic part for the purpose of color matching without masking a molded-in texture. A fog coat
shall not be applied at a thickness of more than 0.5 mils of coating solids.
(Source: Added at 34 Ill. Reg, effective)
Section 211.2525 Gasket/Gasket Sealing Material
"Gasket/gasket sealing material" means, for purposes of 35 Ill. Adm. Code 218 and 219, a fluid applied to coat a gasket or replace and perform the same function as a gasket, including room temperature vulcanization seal material.
(Source: Added at 34 Ill. Reg, effective)
Section 211.2622 Glass Bonding Primer
"Glass bonding primer" means, for purposes of 35 Ill. Adm. Code 218 and 219, a primer applied to windshield or other glass, or to body openings, to prepare the glass or body opening for the application of glass bonding adhesives or the installation of adhesive bonded glass, including glass bonding/cleaning primers that perform both functions (cleaning and priming of the windshield or other glass, or body openings) prior to the application of adhesive or the installation of adhesive bonded glass.
(Source: Added at 34 Ill. Reg, effective)
Section 211.2825 Heat-Resistant Coating
"Heat-resistant coating" means, for purposes of 35 Ill. Adm. Code 218 and 219, a coating that must withstand a temperature of at least 204° C (400° F) during normal use.
(Source: Added at 34 Ill. Reg, effective)
Section 211.2955 High Bake Coating
"High bake coating" means, for purposes of 35 Ill. Adm. Code 218 and 219, a coating that is
designed to cure only at temperatures of more than 90° C (194° F).

Section 211.2956 High Build Primer/Surfacer

(Source: Added at 34 Ill. Reg. _____, effective_____)

purposes of providing corrosion resistance, adhesion of subsequent coatings, a moisture barrier, or promotion of a uniform surface necessary for filling in surface imperfections. (Source: Added at 34 III. Reg, effective) Section 211.2958 High Gloss Coating "High gloss coating" means, for purposes of 35 III. Adm. Code 218 and 219, any coating that achieves at least 85 percent reflectance on a 60° meter when tested using ASTM Method D 523-89, incorporated by reference in Section 211.101 of this Part. (Source: Added at 34 III. Reg, effective) Section 211.2960 High-Performance Architectural Coating "High-performance architectural coating" means, for purposes of 35 III. Adm. Code 218 and 219, a coating used to protect architectural subsections and that meets the requirements of the Architectural Aluminum Manufacturer Association's publication number AAMA 2604-05 (Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels), incorporated by reference in Section 211.101 of this Part, or 2605-05 (Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels), incorporated by reference in Section 211.101 of this Part. (Source: Added at 34 III. Reg, effective) Section 211.2980 High Temperature Coating "High temperature coating" means, for purposes of 35 III. Adm. Code 218 and 219, a coating that is certified to withstand a temperature of 538°C (1000°F) for 24 hours. (Source: Added at 34 III. Reg, effective) Section 211.3095 Indoor Floor Covering Installation Adhesive "Indoor floor covering installation adhesive" means, for purposes of 35 III. Adm. Code 218 and 219, any adhesive intended by the manufacturer for use in the installation of wood flooring, carpet, resilient tile, vinyl backed carpet, resilient sheet and roll, or artificial grass. Adhesives used to install ceramic tile and perimeter bonded she	"High build primer/surfacer" means, for purposes of 35 Ill. Adm. Code 218 and 219, a coating applied with a wet film thickness of 10 mils or more prior to the application of a topcoat for
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(Variance, Added of 24 III. Doc	219, any adhesive intended by the manufacturer for use in the installation of wood flooring, carpet, resilient tile, vinyl tile, vinyl backed carpet, resilient sheet and roll, or artificial grass. Adhesives used to install ceramic tile and perimeter bonded sheet flooring with vinyl backing

Section 211.3120 In-Line Repair

"In-line repair" means, for purposes of 35 Ill. Adm. Code 218 and 219, the operation performed and coating(s) applied to correct damage or imperfections in the topcoat on parts that are not yet on a completely assembled vehicle. The curing of the coatings applied in these operations is accomplished at essentially the same temperature as that used for curing the previously applied topcoat. "In-line repair" is also referred to as high bake repair or high bake reprocess. In-line repair is considered part of the topcoat operation.

Topan is constanted part of the topolar operation.
(Source: Added at 34 Ill. Reg, effective)
Section 211.3240 Laminate
"Laminate" means, for purposes of 35 Ill. Adm. Code 218 and 219, a product made by bonding together two or more layers of material.
(Source: Added at 34 Ill. Reg, effective)
Section 211.3505 Lubricating Wax/Compound
"Lubricating wax/compound" means, for purposes of 35 Ill. Adm. Code 218 and 219, a protective lubricating material applied to vehicle hubs and hinges.
(Source: Added at 34 Ill. Reg, effective)
Section 211.3640 Marine Coating
"Marine coating" means, for purposes of Section 211.4769, any coating, except unsaturated polyester resin (fiberglass) coatings, containing volatile organic materials and applied by brush, spray, roller, or other means to ships and boats.
(Source: Added at 34 Ill. Reg, effective)
Section 211.3665 Mask Coating
"Mask coating" means, for purposes of 35 Ill. Adm. Code 218 and 219, a thin film coating applied through a template to coat a small portion of a substrate.
(Source: Added at 34 Ill. Reg, effective)
Section 211.3760 Metallic Coating

"Metallic coating" means, for purposes of 35 Ill. Adm. Code 218 and 219, a coating that contains more than 5 grams of pure elemental metal, or a combination of elemental metals, per liter of coating as applied.

(Source: Added at 34 Ill. Reg, effective)
Section 211.3775 Metal to Urethane/Rubber Molding or Casting Adhesive
"Metal to urethane/rubber molding or casting adhesive" means, for purposes of 35 Ill. Adm. Code 218 and 219, any adhesive intended by the manufacturer to bond metal to high density or elastomeric urethane or molded rubber materials, in heater molding or casting processes, to fabricate products such as rollers for computer printers or other paper handling equipment.
(Source: Added at 34 Ill. Reg, effective)
Section 211.3785 Military Specification Coating
"Military specification coating" means, for purposes of 35 Ill. Adm. Code 218 and 219, a coating that has a formulation approved by a United States military agency for use on military equipment.
(Source: Added at 34 Ill. Reg, effective)
Section 211.3820 Miscellaneous Industrial Adhesive Application Operation
"Miscellaneous industrial adhesive application operation" means, for purposes of Subparts JJ of 35 Ill. Adm. Code 218 and 219, a regularly occurring industrial process consisting of one or more adhesive applicators and any associated drying area and/or oven in which an adhesive is applied, dried, and/or cured.
(Source: Added at 34 Ill. Reg, effective)
Section 211.3925 Mold Seal Coating
"Mold seal coating" means, for purposes of 35 Ill. Adm. Code 218 and 219, the initial coating applied to a new mold or a repaired mold to provide a smooth surface that, when coated with a mold release coating, prevents products from sticking to the mold.
(Source: Added at 34 Ill. Reg, effective)
Section 211.3961 Motor Vehicle Adhesive
"Motor vehicle adhesive" means, for purposes of 35 Ill. Adm. Code 218 and 219, an adhesive, including glass bonding adhesive, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied for the purpose of bonding two vehicle surfaces together without regard to the substrates involved.
(Source: Added at 34 Ill. Reg, effective)

Section <u>211.3966</u> <u>211.3967</u> <u>Motor Vehicle Weatherstrip Adhesive</u>

"Motor vehicle weatherstrip adhesive" means, for purposes of 35 Ill. Adm. Code 218 and 219, an adhesive, used at a facility that is not an automobile or light-duty truck assembly coating facility,
applied to weatherstripping materials for the purpose of bonding the weatherstrip material to the
surface of the vehicle.
(Source: Added at 34 Ill. Reg, effective)
Section 211.3967 Mouth Waterproofing Sealant
"Mouth waterproofing sealant" means, for purposes of 35 Ill. Adm. Code 218.204(q)(1) and 219.204(q)(1), a coating applied in the manufacture of ammunition to provide a waterproof barrier between a shellcase mouth and bullet.
(Source: Added at 34 Ill. Reg. , effective)
Section 211.3968 Multi-Colored Coating
"Multi-colored coating" means, for purposes of 35 Ill. Adm. Code 218 and 219, a coating that exhibits more than one color when applied, and which is packaged in a single container and applied in a single coat.
(Source: Added at 34 Ill. Reg, effective)
Section 211.3969 Multi-Component Coating
"Multi-component coating" means, for purposes of 35 Ill. Adm. Code 218 and 219, a coating
requiring the addition of a separate reactive resin, commonly known as a catalyst or hardener,
before application to form an acceptable dry film.
(Source: Added at 34 Ill. Reg, effective)
Section 211.3975 Multipurpose Construction Adhesive
"Multipurpose construction adhesive" means, for purposes of 35 Ill. Adm. Code 218 and 219, any adhesive used in the installation or repair of various construction materials, including but not limited to drywall, subfloor, panel, fiberglass reinforced plastic (FRP), ceiling tile, and acoustical tile.
(Source: Added at 34 Ill. Reg, effective)

Section 211.4052 Non-Convertible Coating

"Non-convertible coating" means, for purposes of Section 211.1877, a coating that dries by
solvent evaporation with no change in the chemical nature of the binder. The coating remains
soluble in the original solvent after drying.
(Source: Added at 34 Ill. Reg, effective)
Section 211.4080 One-Component Coating
"One-component coating" means, for purposes of 35 III. Adm. Code 218 and 219, a coating that is ready for application as it comes out of its container to form an acceptable dry film. A thinner added to a coating to reduce the viscosity is not considered a component, and therefore does not impact the coating's classification as a one-component coating or multi-component coating.
(Source: Added at 34 Ill. Reg, effective)
Section 211.4220 Optical Coating
"Optical coating" means, for purposes of 35 Ill. Adm. Code 218 and 219, a coating applied to an optical lens.
(Source: Added at 34 Ill. Reg, effective)
Section 211.4280 Outdoor Floor Covering Installation Adhesive
"Outdoor floor covering installation adhesive" means, for purposes of 35 III. Adm. Code 218 and 219, any adhesive intended by the manufacturer for use in the installation of floor covering that is not in an enclosure and that is exposed to ambient weather conditions during normal use.
(Source: Added at 34 Ill. Reg, effective)
Section 211.4455 Pan-Backing Coating
"Pan-backing coating" means, for purposes of 35 Ill. Adm. Code 218 and 219, a coating applied to the surface of pots, pans, or other cooking implements that are exposed directly to a flame or other heating elements.
(Source: Added at 34 Ill. Reg, effective)
Section 211.4540 Perimeter Bonded Sheet Flooring
"Perimeter bonded sheet flooring" means, for purposes of 35 Ill. Adm. Code 218 and 219, sheet flooring with vinyl backing installed onto a nonporous substrate using an adhesive designed to be applied only to a strip of up to four inches wide around the perimeter of the sheet flooring.
(Source: Added at 34 Ill. Reg, effective)

Section 211.4735 Plastic

"Plastic" means, for purposes of Subparts JJ of 35 Ill. Adm. Code 218 and 219, a synthetic
material chemically formed by the polymerization of organic (carbon-based) substances. Plastics
are usually compounded with modifiers, extenders, and/or reinforcers and are capable of being
molded, extruded, cast into various shapes and films, or drawn into filaments.
<u> </u>
(Source: Added at 34 Ill. Reg, effective)
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Section 211.4760 Plastic Solvent Welding Adhesive
"Plastic solvent welding adhesive" means, for purposes of 35 Ill. Adm. Code 218 and 219, any
adhesive used to dissolve the surface of plastic to form a bond between mating surfaces.
(Source: Added at 34 Ill. Reg, effective)
Section 211.4765 Plastic Solvent Welding Adhesive Primer
"Plastic solvent welding adhesive primer" means, for purposes of 35 Ill. Adm. Code 218 and
219, any primer used to prepare plastic substrates prior to bonding or welding.
(Source: Added at 34 Ill. Reg, effective)
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Section 211.4768 Pleasure Craft
"Pleasure craft" means, for purposes of 35 Ill. Adm. Code 218 and 219, a vessel that is
manufactured or operated primarily for recreational purposes, or leased, rented, or chartered to a
person or business for recreational purposes.
person of business for recreational purposes.
(Source: Added at 34 Ill. Reg, effective)
(Bource: Added at 54 III. Reg)
Section 211.4769 Pleasure Craft Surface Coating
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"Pleasure craft surface coating" means, for purposes of 35 Ill. Adm. Code 218 and 219, any
marine-coating, except unsaturated polyester resin (fiberglass) coatings, containing volatile
organic materials and applied by brush, spray, roller, or other means to a pleasure craft.
(Source: Added at 34 Ill. Reg, effective)

Section 211.4895 Polyvinyl Chloride Plastic (PVC Plastic)

"Polyvinyl chloride plastic" or "PVC plastic" means, for purposes of 35 Ill. Adm. Code 218 and 219, a polymer of the chlorinated vinyl monomer that contains 57 percent or more chlorine.

(Source: Added at 34 Ill. Reg, effective)
Section 211.4900 Porous Material
"Porous material" means, for purposes of 35 Ill. Adm. Code 218 and 219, a substance that has tiny openings, often microscopic, in which fluids may be absorbed or discharged, including, but not limited to, paper and corrugated paperboard. Porous material does not include wood.
(Source: Added at 34 Ill. Reg, effective)
Section 211.5012 Prefabricated Architectural Coatings
"Prefabricated architectural coatings" means, for purposes of 35 Ill. Adm. Code 218 and 219, coatings applied to metal parts and products that are to be used as an architectural structure.
(Source: Added at 34 Ill. Reg, effective)
Section 211.5061 Pretreatment Coating
"Pretreatment coating" means, for purposes of 35 Ill. Adm. Code 218 and 219, a coating that contains no more than 12 percent solids by weight and at least 0.50 percent acid by weight, is used to provide surface etching, and is applied directly to metal surfaces to provide corrosion resistance, adhesion, and ease of stripping. (Source: Added at 34 Ill. Reg, effective)
Section 211.5062211.5061 Pretreatment Wash Primer (Renumbered)
"Pretreatment wash primer" means:
For purposes of Subparts HH of 35 Ill. Adm. Code 218 and 219, the first coating applied to bare metal if solventborne primers will be applied. This coating contains a minimum of 0.5 percent acid, by weight, is necessary to provide surface etching, and provides corrosion resistance and adhesion;
For purposes of Subparts F of 35 Ill. Adm. Code 218 and 219, a coating which contains no more than 12 percent solids by weight and at least 0.50 percent acids by weight, is used to provide surface etching, and is applied directly to fiberglass and metal surfaces to provide corrosion resistance and adhesion of subsequent coatings.
(Source: Renumbered from Section 211.5061 and amended at 34 Ill. Reg, effective)

Section 211.5075 Primer Sealant

"Primer sealant" means, for purposes of 35 Ill. Adm. Code 218.204(q) and 219.204(q), a sealant applied in the manufacture of ammunition to assembled primers to maintain the primer assembly and prevent explosive priming mix from dusting during the transfer of primers.

(Source: Added at 34 Ill. Reg., effective	
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Section 211.5090 Primer Surfacer Coat

- a) "Primer surfacer coat" means, for purposes of 35 Ill. Adm. Code 215.204(a), 218.204(a)(1), and 219.204(a)(1), a coating used to touch up areas on the surface of automobile or light-duty truck bodies not adequately covered by the prime coat before application of the top coat. The primer surfacer coat is applied between the prime coat and topcoat. An anti-chip coating applied to main body parts (e.g., rocker panels, bottom of doors and fenders, and leading edge of roof) is a primer surfacer coat. The primer surfacer coat is also referred to as a "guide coat."
- b) "Primer surfacer coat" means, for purposes of 35 Ill. Adm. Code Part-218, Subpart HH and Part-219, Subpart HH, a coating applied to motor vehicles, mobile equipment, or their parts and components at motor vehicle refinishing operations that fills in surface imperfections and builds a thickness in order to allow sanding.

"Primer surfacer coat" means, for purposes of 35 III. Adm. Code Sections 218.204(a)(2) and 219.204(a)(2), an intermediate protective coating applied over the electrodeposition primer and under the topcoat. Primer surfacer provides adhesion, protection, and appearance properties to the total finish. Primer surfacer may also be called guide coat or surfacer. Primer surfacer operations may include other coatings(s) (e.g., anti-chip, lower-body anti-chip, chip-resistant edge primer, spot primer, blackout, deadener, interior color, basecoat replacement coating, etc.) that are applied in the same spray booths.

(Source: Amended at 34 Ill. Reg. _____, effective_____)

Section 211.5400 Red Coating

"Red coating" means, for purposes of 35 Ill. Adm. Code 218 and 219, a coating that meets all of the following criteria:

Yellow limit: the hue of hostaperm scarlet;

Blue limit: the hue of monastral red-violet;

Lightness limit for metallics: 35 percent aluminum flake;

<u>Lightness limit for solids: 50 percent titanium dioxide white;</u>
Solid reds: hue angle of -11 to 38 degrees and maximum lightness of 23 to 45 units; and
Metallic reds: hue angle of -16 to 35 degrees and maximum lightness of 28 to 45 units.
These criteria are based on Cielab color space, 0/45 geometry. For spherical geometry, specular included, the upper limit is 49 units.
(Source: Added at 34 Ill. Reg, effective)
Section 211.5520 Reinforced Plastic Composite
'Reinforced plastic composite' means, for purposes of 35 Ill. Adm. Code 218 and 219, a composite material consisting of plastic reinforced with fibers.
(Source: Added at 34 Ill. Reg, effective)
Section 211.5550 Repair Coat
'Repair coat" means:
Withwith respect to coating wood furniture, coatings used to correct imperfections or damage to furniture surface;
For purposes of 35 Ill. Adm. Code Sections 218.204(q) and 219.204(q), a coat used to recoat portions of a previously coated product that has sustained mechanical damage to the coating following normal coating operations.
(Source: Amended at 34 Ill. Reg, effective)
Section 211.5800 Rubber
'Rubber' means, for purposes of Subparts JJ of 35 Ill. Adm. Code 218 and 219, any natural or manmade rubber substrate, including but not limited to, styrene-butadiene rubber, polychloroprene (neoprene), butyl rubber, nitrile rubber, chlorosulfonated polyethylene and ethylene propylene diene terpolymer.
(Source: Added at 34 Ill. Reg, effective)
Section 211.5890 Sealer

Except for purposes of 35 III. Adm. Code 218.204(a) and (q) and 219.204(a) and (q), "sealerSealer" means a coating containing binders that which seals wood prior to the application of the subsequent coatings:

For purposes of 35 Ill. Adm. Code Sections 218.204(a) and (q), and 219.204(a) and (q), "sealer" means a high viscosity material generally, but not always, applied in the paint shop after the body has received an electrodeposition primer coating and before the application of subsequent coatings (e.g., primer-surfacer). The primary purpose of sealer is to fill body joints completely so that there is no intrusion of water, gases, or corrosive materials into the passenger area of the body compartment. These materials are also referred to as sealant, sealant primer, or caulk.

(Source:	Amended at 34 Ill. Reg.	. effective

Section 211.5985 Sheet Rubber Lining Installation

"Sheet rubber lining installation" means, for purposes of 35 Ill. Adm. Code 218 and 219, the process of applying sheet rubber liners by hand to metal or plastic substrates to protect the underlying substrate from corrosion or abrasion. These operations also include laminating sheet rubber to fabric by hand.

(Source: Added at 34 Ill. Reg, effective	e)	1
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Section 211.5987 Shock-Free Coating

"Shock-free coating" means, for purposes of 35 Ill. Adm. Code Sections 218 and 219, a coating applied to electrical components to protect the user from electric shock. The coating has characteristics of being of low capacitance and high resistance, and having resistance to breaking down under high voltage.

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(Source:	Added at 34 Ill. Reg.	effective)

Section 211.6012 Silicone-Release Coating

"Silicone-release coating" means, for purposes of 35 Ill. Adm. Code 218 and 219, any coating that contains silicone resin and is intended to prevent food from sticking to metal surfaces such as baking pans.

(Source: Added at 34 Ill. Reg, effective
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Section 211.6015 Single-Ply Roof Membrane

"Single-ply roof membrane" means, for purposes of 35 Ill. Adm. Code 218 and 219, a prefabricated single sheet of rubber, normally ethylene-propylenediene terpolymer, that is field

applied to a building roof using one layer of membrane material. Single-ply roof membrane does
not include membranes prefabricated from EPDM.
(Source: Added at 34 Ill. Reg, effective)
Section 211.6017 Single-Ply Roof Membrane Adhesive Primer
"Single-ply roof membrane adhesive primer" means, for purposes of 35 III. Adm. Code 218 and 219, any primer labeled for use to clean and promote adhesion of the single-ply roof membrane sages or splices prior to bonding
seams or splices prior to bonding.
(Source: Added at 34 Ill. Reg, effective)
Section 211.6020 Single-Ply Roof Membrane Installation and Repair Adhesive
"Single-ply roof membrane installation and repair adhesive" means, for purposes of 35 Ill. Adm. Code 218 and 219, any adhesive labeled for use in the installation or repair of single-ply roof membrane. Installation includes, as a minimum, attaching the edge of the membrane to the edge of the roof and applying flashings to vents, pipes, and ducts that protrude through the membrane. Repair includes gluing the edges of A-4 torn membrane together, attaching a patch over a hole, and reapplying flashings to vents, pipes, or ducts installed through the membrane.
(Source: Added at 34 Ill. Reg, effective)
Section 211.6063 Solar-Absorbent Coating
"Solar-absorbent coating" means, for purposes of 35 Ill. Adm. Code 218 and 219, a coating that has as its prime purpose the absorption of solar radiation.
(Source: Added at 34 Ill. Reg, effective)
Section 211.6065 Solids Turnover Ratio (R _T)
"Solids turnover ratio (R_T)" or "Solids R_T " means, for purposes of 35 Ill. Adm. Code 218 and 219, the ratio of total volume of coating solids that is added to the EDP system in a calendar month to the total volume design capacity of the EDP system.
(Source: Added at 34 Ill. Reg, effective)
Section 211.6400 Stencil Coat
"Stencil coat" means:

Prior to May 1, 2012 2014, a coating that is applied over a stencil on a plastic part at a thickness of 1 mil or less of coating solids. Stencil coats are most frequently letters, numbers, or decorative designs;
On and after May 1, 2012 2011, an ink or pigmented coating that is rolled or brushed onto a template or stamp in order to add identifying letters, symbols, and/or numbers.
(Source: Amended at 34 Ill. Reg, effective)
Section 211.6427 Structural Glazing
"Structural glazing" means, for purposes of 35 Ill. Adm. Code 218 and 219, a process that includes the application of adhesive to bond glass, ceramic, metal, stone, or composite panels to exterior building frames.
(Source: Added at 34 Ill. Reg, effective)
Section 211.6460 Subfloor
"Subfloor" means, for purposes of 35 Ill. Adm. Code 218 and 219, subflooring material over floor joists, including any load bearing joists. Subflooring is covered by a finish surface material.
(Source: Added at 34 Ill. Reg, effective)
Section 211.6585 Thin Metal Laminating Adhesive
"Thin metal laminating adhesive" means, for purposes of 35 Ill. Adm. Code 218 and 219, any adhesive intended by the manufacturer for use in bonding multiple layers of metal to metal or metal to plastic in the production of electronic or magnetic components in which the thickness of the bond line(s) is less than 0.25 millimeters.
(Source: Added at 34 Ill. Reg, effective)
Section 211.6640 Tire Repair
"Tire repair" means, for purposes of 35 Ill. Adm. Code 218 and 219, a process that includes expanding a hole, tear, fissure, or blemish in a tire casing by grinding or gouging, applying adhesive, and filling the hole or crevice with rubber.
(Source: Added at 34 Ill. Reg, effective)
Section 211.6670 Topcoat
"Topcoat" means:

Except as used in 35 Ill. Adm. Code 218.204(a)(2) and (q)(5) and 219.204(a)(2) and (q)(5), a coating applied to a substrate in a multiple coat operation other than prime coat, primer surfacer coat or final repair coat;

For purposes of Sections 218.204(a)(2) and 219.204(a)(2), the final coating system applied to provide the final color and/or a protective finish. The topcoat may be a monocoat color or basecoat/clearcoat system. In-line repair and two-tone are part of topcoat;

For purposes of Sections 218.204(q)(5) and 219.204(q)(5), any final coating applied to the interior or exterior of a pleasure craft.

(Source: Amended at 34 Ill. Reg. _____, effective_____)

Section 211.6690 Topcoat Operation

"Topcoat operation" means the application <u>areasarea(s)</u>, flash-off <u>areasarea(s)</u>, and <u>ovensoven(s)</u> used to apply and dry or cure the topcoat (except final off-line repair) on automobile or light-duty truck bodies or body parts on a single assembly line. <u>A topcoat operation may include other coatings (e.g., blackout, interior color, etc.) that are applied in the same spray booths.</u>

(Source: Amended at 34 Ill. Reg. _____, effective_____)

Section 211.6720 Touch-Up Coating

"Touch-up coating" means:

Except as used in 35 Ill. Adm. Code 218.204(q) and 219.204(q), for purposes of motor vehicle refinishing operations, a coating applied by brush or hand held, non-refillable aerosol cans to repair minor surface damage and imperfections;

For purposes of Sections 218.204(q) and 218.219(q), a coating used to cover minor coating imperfections appearing after the main coating operation.

(Source: Amended at 34 Ill. Reg. _____, effective_____)

Section 211.6740 Translucent Coating

"Translucent coating" means, for purposes of 35 Ill. Adm. Code 218 and 219, a coating that contains binders and pigment, and is formulated to form a colored, but not opaque, film.

(Source: Added at 34 Ill. Reg. _____, effective_____)

Section 211.6780 Trunk Interior Coating

"Trunk interior coating" means, for purposes of 35 Ill. Adm. Code 218 and 219, a coating outside of the primer-surfacer and topcoat operations applied to the trunk interior to provide chip protection.
(Source: Added at 34 Ill. Reg, effective)
Section 211.6825 Underbody Coating
"Underbody coating" means, for purposes of 35 Ill. Adm. Code 218 and 219, a coating applied to the undercarriage or firewall to prevent corrosion and/or provide chip protection.
(Source: Added at 34 Ill. Reg, effective)
Section 211.6885 Vacuum Metalizing Coating
"Vacuum metalizing coating" means:
For purposes of 35 III. Adm. Code 218.204(q)(1) and (q)(2) and 219.204(q)(1) and (q)(2), the undercoat applied to the substrate on which the metal is deposited or the overcoat applied directly to the metal film;
For purposes of 35 Ill. Adm. Code 218.204(q)(3) and (q)(4) and 219.204(q)(3) and (q)(4), the topcoat and basecoat used in a vacuum-metalizing operation.
(Source: Added at 34 Ill. Reg, effective)
Section 211.7220 Waterproof Resorcinol Glue
"Waterproof resorcinol glue" means, for purposes of 35 Ill. Adm. Code 218 and 219, a two-part resorcinol-resin-based adhesive designed for applications where the bond line must be resistant to conditions of continuous immersion in fresh or salt water.
(Source: Added at 34 Ill. Reg, effective)
Section 211.7240 Weatherstrip Adhesive
"Weatherstrip adhesive" means, for purposes of Subparts F of 35 Ill. Adm. Code 218 and 219, an adhesive, used at an automobile or light-duty truck assembly coating facility, applied to weatherstripping materials for the purpose of bonding the weatherstrip material to the surface of the vehicle.
(Source: Added at 34 Ill. Reg, effective)

TITLE 35: ENVIRONMENTAL PROTECTION

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AUTHORITY: Implementing Section 10 and authorized by Sections 27, 28, and 28.5 of the Environmental Protection Act [415 ILCS 5/10, 27, 28, and 28.5].

SOURCE: Adopted at R91-7 at 15 III. Reg. 12231, effective August 16, 1991; amended in R91-24 at 16 III. Reg. 13564, effective August 24, 1992; amended in R91-28 and R91-30 at 16 III. Reg. 13864, effective August 24, 1992; amended in R93-9 at 17 III. Reg. 16636, effective September 27, 1993; amended in R93-14 at 18 III. Reg. 1945, effective January 24, 1994; amended in R94-12 at 18 III. Reg. 14973, effective September 21, 1994; amended in R94-15 at 18 III. Reg. 16392, effective October 25, 1994; amended in R94-16 at 18 III. Reg. 16950, effective November 15, 1994; amended in R94-21, R94-31 and R94-32 at 19 III. Reg. 6848, effective May 9, 1995; amended in R94-33 at 19 III. Reg. 7359, effective May 22, 1995; amended in R96-13 at 20 III. Reg. 14428, effective October 17, 1996; amended in R97-24 at 21 III. Reg. 7708, effective June 9, 1997; amended in R97-31 at 22 III. Reg. 3556, effective February 2, 1998; amended in R98-16 at 22 III. Reg. 14282, effective July 16, 1998; amended in R02-20 at 27 III. Reg. 7283, effective April 8, 2003; amended in R04-12/20 at 30 III. Reg. 9684, effective May 15, 2006; amended in R06-21 at 31 III. Reg. 7086, effective April 30, 2007; amended in R08-8 at 32 III. Reg. 14874, effective August 26, 2008; amended in R10-10 at 34 III. Reg. 5330, effective March 23, 2010; amended in R10-08 at 34 III. Reg. 9069, effective June 25,

2010; amended	in R10-8 at 34	ll. Red. 9096	5, effective June 25	5, 2010; amended	l in R10-20 at 34
Ill. Reg	, effective	•			

SUBPART A: GENERAL PROVISIONS

Section 218.105 Test Methods and Procedures

- a) Coatings, Inks and Fountain Solutions
 The following test methods and procedures shall be used to determine compliance of as applied coatings, inks, and fountain solutions with the limitations set forth in this Part.
 - Sampling: Samples collected for analyses shall be one-liter taken into a one-liter container at a location and time such that the sample will be representative of the coating as applied (i.e., the sample shall include any dilution solvent or other VOM added during the manufacturing process). The container must be tightly sealed immediately after the sample is taken. Any solvent or other VOM added after the sample is taken must be measured and accounted for in the calculations in subsection (a)(3) of this Section. For multiple package coatings, separate samples of each component shall be obtained. A mixed sample shall not be obtained as it will cure in the container. Sampling procedures shall follow the guidelines presented in:
 - A) ASTM D3925-81 (1985) standard practice for sampling liquid paints and related pigment coating. This practice is incorporated by reference in Section 218.112 of this Part.
 - B) ASTM E300-86 standard practice for sampling industrial chemicals. This practice is incorporated by reference in Section 218.112 of this Part.
 - 2) Analyses: The applicable analytical methods specified below shall be used to determine the composition of coatings, inks, or fountain solutions as applied.
 - A) Method 24 of 40 CFR 60, Appendix appendix A, incorporated by reference in Section 218.112 of this Part, shall be used to determine the VOM content and density of coatings. If it is demonstrated to the satisfaction of the Agency and the USEPA that plant coating formulation data are equivalent to Method 24 results, formulation data may be used. In the event of any inconsistency between a Method 24 test and a facility's formulation data, the Method 24 test will govern.

- B) Method 24A of 40 CFR Part-60, Appendix appendix A, incorporated by reference in Section 218.112 of this Part, shall be used to determine the VOM content and density of rotogravure printing inks and related coatings. If it is demonstrated to the satisfaction of the Agency and USEPA that the plant coating formulation data are equivalent to Method 24A results, formulation data may be used. In the event of any inconsistency between a Method 24A test and formulation data, the Method 24A test will govern.
- C) The following ASTM methods are the analytical procedures for determining VOM:
 - i) ASTM D1475-85: Standard test method for density of paint, varnish, lacquer and related products. This test method is incorporated by reference in Section 218.112 of this Part.
 - ii) ASTM D2369-87: Standard test method for volatile content of a coating. This test method is incorporated by reference in Section 218.112 of this Part.
 - iii) ASTM D3792-86: Standard test method for water content of water-reducible paints by direct injection into a gas chromatograph. This test method is incorporated by reference in Section 218.112 of this Part.
 - iv) ASTM D4017-81 (1987): Standard test method for water content in paints and paint materials by the Karl Fischer method. This test method is incorporated by reference in Section 218.112 of this Part.
 - v) ASTM D4457-85: Standard test method for determination of dichloromethane and 1,1,1, trichloroethane in paints and coatings by direct injection into a gas chromatograph. (The procedure delineated above can be used to develop protocols for any compounds specifically exempted from the definition of VOM.) This test method is incorporated by reference in Section 218.112 of this Part.
 - vi) ASTM D2697-86: Standard test method for volume nonvolatile matter in clear or pigmented coatings. This test method is incorporated by reference in Section 218.112 of this Part.

- vii) ASTM D3980-87: Standard practice for interlaboratory testing of paint and related materials. This practice is incorporated by reference in Section 218.112 of this Part.
- viii) ASTM E180-85: Standard practice for determining the precision data of ASTM methods for analysis of and testing of industrial chemicals. This practice is incorporated by reference in Section 218.112 of this Part.
- ix) ASTM D2372-85: Standard method of separation of vehicle from solvent-reducible paints. This method is incorporated by reference in Section 218.112 of this Part.
- D) Use of an adaptation to any of the analytical methods specified in subsections (a)(2)(A), (B), and (C) of this Section may not be used unless approved by the Agency and USEPA. An owner or operator must submit sufficient documentation for the Agency and USEPA to find that the analytical methods specified in subsections (a)(2)(A), (B), and (C) of this Section will yield inaccurate results and that the proposed adaptation is appropriate.
- 3) Calculations: Calculations for determining the VOM content, water content and the content of any compounds which are specifically exempted from the definition of VOM of coatings, inks and fountain solutions as applied shall follow the guidance provided in the following documents:
 - A) "A Guide for Surface Coating Calculation", EPA-340/1-86-016, incorporated by reference in Section 218.112 of this Part.
 - B) "Procedures for Certifying Quantity of Volatile Organic Compounds Emitted by Paint, Ink and Other Coatings" (revised June 1986), EPA-450/3-84-019, incorporated by reference in Section 218.112 of this Part.
 - C) "A Guide for Graphic Arts Calculations", August 1988, EPA-340/1-88-003, incorporated by reference in Section 218.112 of this Part.
- b) Automobile or Light-Duty Truck Test Protocol
 - 1) The protocol for testing, including determining the transfer efficiency of coating applicators, at primer surfacer operations and topcoat operations at an automobile or light-duty truck assembly source shall follow the procedures in the following:

- A) Prior to May 1, 20122011: "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations" ("topcoat protocol"), December 1988, EPA-450/3-88-018, incorporated by reference in Section 218.112 of this Part.
- B) On and after May 1, 20122011: "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Primer-Surfacer and Topcoat Operations" (topcoat protocol), September 2008, EPA-453/R-08-002, incorporated by reference in Section 218.112 of this Part.
- 2) Prior to testing pursuant to the <u>applicable</u> topcoat protocol, the owner or operator of a coating operation subject to the topcoat or primer surfacer limit in <u>Section Sections</u> 218.204(a)(1)(B)(2) or 218.204 (a)(1)(C)(3), (a)(2)(B), (a)(2)(C), or (a)(2)(E) shall submit a detailed testing proposal specifying the method by which testing will be conducted and how compliance will be demonstrated consistent with the applicable topcoat protocol. The proposal shall include, at a minimum, a comprehensive plan (including a rationale) for determining the transfer efficiency at each booth through the use of in-plant or pilot testing, the selection of coatings to be tested (for the purpose of determining transfer efficiency) including the rationale for coating groupings, the method for determining the analytic VOM content of as applied coatings and the formulation solvent content of as applied coatings, and a description of the records of coating VOM content as applied and coating's usage, that which will be kept to demonstrate compliance. Upon approval of the proposal by the Agency and USEPA, the compliance demonstration for a coating line may proceed.
- c) Capture System Efficiency Test Protocols
 - 1) Applicability
 The requirements of subsection (c)(2) of this Section shall apply to all
 VOM emitting process emission units employing capture equipment (e.g., hoods, ducts), except those cases noted below.
 - A) If an emission unit is equipped with (or uses) a permanent total enclosure (PTE) that meets Agency and USEPA specifications, and which directs all VOM to a control device, then the emission unit is exempted from the requirements described in subsection (c)(2) of this Section. The Agency and USEPA specifications to determine whether a structure is considered a PTE are given in Method 204 of Appendixappendix M of 40 CFR 51, incorporated

- by reference in Section 218.112 of this Part. In this instance, the capture efficiency is assumed to be 100 percent and the emission unit is still required to measure control efficiency using appropriate test methods as specified in subsection (d) of this Section.
- B) If an emission unit is equipped with (or uses) a control device designed to collect and recover VOM (e.g., carbon adsorber), an explicit measurement of capture efficiency is not necessary provided that the conditions given below are met. The overall control of the system can be determined by directly comparing the input liquid VOM to the recovered liquid VOM. The general procedure for use in this situation is given in 40 CFR 60.433, incorporated by reference in Section 218.112 of this Part, with the following additional restrictions:
 - i) Unless otherwise specified in subsection (c)(1)(B)(ii)below, the owner or operator shall obtain data each operating day for the solvent usage and solvent recovery to permit the determination of the solvent recovery efficiency of the system each operating day using a 7-day rolling period. The recovery efficiency for each operating day is computed as the ratio of the total recovered solvent for that day and the most recent prior 6 operating days to the total solvent usage for the same 7-day period used for the recovered solvent, rather than a 30-day weighted average as given in 40 CFR 60.433 incorporated by reference at Section 218.112 of this Part. This ratio shall be expressed as a percentage. The ratio shall be computed within 72 hours following each 7-day period. A source that believes that the 7-day rolling period is not appropriate may use an alterative multi-day rolling period not to exceed 30 days, with the approval of the Agency and USEPA. In addition, the criteria in subsection (c)(1)(B)(iii) or subsection (c)(1)(B)(iv) below-must be met.
 - ii) The owner or operator of the source engaged in printing located at 350 E. 22nd Street, Chicago, Illinois, shall obtain data each operating day for the solvent usage and solvent recovery to permit the determination of the solvent recovery efficiency of the system each operating day using a 14-day rolling period. The recovery efficiency for each operating day is computed as the ratio of the total recovered solvent for that day and the most recent prior 13 operating days to the total solvent usage for the same 14-day period used for the recovered solvent, rather than a 30-day

weighted average as given in 40 CFR 60.433, incorporated by reference in Section 218.112 of this Part. This ratio shall be expressed as a percentage. The ratio shall be computed within 17 days following each 14-day period. In addition, the criteria in subsection (c)(1)(B)(iii) or subsection (c)(1)(B)(iv) below-must be met.

- iii) The solvent recovery system (i.e., capture and control system) must be dedicated to a single coating line, printing line, or other discrete activity that by itself is subject to an applicable VOM emission standard, or
- iv) If the solvent recovery system controls more than one coating line, printing line or other discrete activity that by itself is subject to an applicable VOM emission standard, the overall control (i.e., the total recovered VOM divided by the sum of liquid VOM input from all lines and other activities venting to the control system) must meet or exceed the most stringent standard applicable to any line or other discrete activity venting to the control system.
- 2) Capture Efficiency Protocols

The capture efficiency of an emission unit shall be measured using one of the protocols given below. Appropriate test methods to be utilized in each of the capture efficiency protocols are described in Appendix appendix M of 40 CFR 51, incorporated by reference at Section 218.112 of this Part. Any error margin associated with a test method or protocol may not be incorporated into the results of a capture efficiency test. If these techniques are not suitable for a particular process, then an alternative capture efficiency protocol may be used, pursuant to the provisions of Section 218.108(b) of this Part.

A) Gas/gas method using temporary total enclosure (TTE). The Agency and USEPA specifications to determine whether a temporary enclosure is considered a TTE are given in Method 204 of Appendixappendix M of 40 CFR 51, incorporated by reference in Section 218.112 of this Part. The capture efficiency equation to be used for this protocol is:

$$CE = G_{_{\boldsymbol{w}}} / (G_{_{\boldsymbol{w}}} + F_{_{\boldsymbol{w}}})$$

where:

CE = Capture efficiency, decimal fraction;

G_w = Mass of VOM captured and delivered to control device

using a TTE;

 F_w = Mass of uncaptured VOM that escapes from a TTE.

Method 204B or 204C contained in <u>Appendix appendix</u> M of 40 CFR 51, incorporated by reference in Section 218.112 of this Part, is used to obtain G_w . Method 204D in <u>Appendix appendix</u> M of 40 CFR 51, incorporated by reference in Section 218.112 of this Part, is used to obtain F_w .

B) Liquid/gas method using TTE. The Agency and USEPA specifications to determine whether a temporary enclosure is considered a TTE are given in Method 204 of Appendixappendix M of 40 CFR 51, incorporated by reference in Section 218.112 of this Part. The capture efficiency equation to be used for this protocol is:

$$CE = (L - F_w)/L$$

where:

CE = Capture efficiency, decimal fraction;

L = Mass of liquid VOM input to process emission unit; F_w = Mass of uncaptured VOM that escapes from a TTE.

Method 204A or 204F contained in <u>Appendix appendix</u> M of 40 CFR 51, incorporated by reference in Section 218.112 of this Part, is used to obtain L. Method 204 D in <u>Appendix appendix</u> M of 40 CFR 51, incorporated by reference in Section 218.112 of this Part, is used to obtain F_w .

C) Gas/gas method using the building or room (building or room enclosure), in which the affected coating line, printing line or other emission unit is located, as the enclosure as determined by Method 204 of appendix appendix M of 40 CFR 51, incorporated by reference in Section 218.112 of this Part, and in which "F_B" and "G" are measured while operating only the affected line or emission unit. All fans and blowers in the building or room must be operated as they would under normal production. The capture efficiency equation to be used for this protocol is:

$$CE = G/(G + F_R)$$

where:

CE = Capture efficiency, decimal fraction;

G = Mass of VOM captured and delivered to control device;

F_B = Mass of uncaptured VOM that escapes from building enclosure.

Method 204B or 204C contained in <u>Appendix appendix</u> M of 40 CFR 51, incorporated by reference in Section 218.112 of this Part is used to obtain G. Method 204E in <u>Appendix appendix</u> M of 40 CFR 51, incorporated by reference in Section 218.112 of this Part is used to obtain F_B .

D) Liquid/gas method using the building or room (building or room enclosure), in which the affected coating line, printing line or other emission unit is located, as the enclosure as determined by Method 204 of Appendixappendix M of 40 CFR 51, incorporated by reference in Section 218.112 of this Part, and in which "F_B" and "L" are measured while operating only the affected line or emission unit. All fans and blowers in the building or room must be operated as they would under normal production. The capture efficiency equation to be used for this protocol is:

$$CE = (L - F_R)/L$$

where:

CE = Capture efficiency, decimal fraction;

L = Mass of liquid VOM input to process emission unit; F_B = Mass of uncaptured VOM that escapes from building enclosure.

Method 204A or 204F contained in <u>Appendix appendix</u> M of 40 CFR 51, incorporated by reference in Section 218.112 of this Part is used to obtain L. Method 204E in <u>Appendix appendix</u> M of 40 CFR 51, incorporated by reference in Section 218.112 of this Part is used to obtain F_B .

E) Mass balance using Data Quality Objective (DQO) or Lower Confidence Limit (LCL) protocol. For a liquid/gas input where an owner or operator is using the DQO/LCL protocol and not using an enclosure as described in Method 204 of Appendixappendix M of 40 CFR 51, incorporated by reference in Section 218.112 of this Part, the VOM content of the liquid input (L) must be determined using Method 204A or 204F in Appendixappendix M of 40 CFR 51, incorporated by reference in Section 218.112 of this Part. The VOM content of the captured gas stream (G) to the control device

must be determined using Method 204B or 204C in Appendixappendix M of 40 CFR 51, incorporated by reference in Section 218.112 of this Part. The results of capture efficiency calculations (G/L) must satisfy the DQO or LCL statistical analysis protocol as described in Section 3 of USEPA's "Guidelines for Determining Capture Efficiency," incorporated by reference atin Section 218.112 of this Part. Where capture efficiency testing is done to determine emission reductions for the purpose of establishing emission credits for offsets, shutdowns, and trading, the LCL protocol cannot be used for these applications. In enforcement cases, the LCL protocol cannot confirm noncompliance; capture efficiency must be determined using a protocol under subsection (c)(2)(A), (B), (C) or (D) of this Section, the DQO protocol of this subsection (c)(2)(E), or an alternative protocol pursuant to Section 218.108(b) of this Part.

BOARD NOTE: Where LCL was used in testing emission units that are the subject of later requests for establishing emission credits for offsets, shutdowns, and trading, prior LCL results may not be relied upon to determine the appropriate amount of credits. Instead, to establish the appropriate amount of credits, additional testing may be required that would satisfy the protocol of Section 218.105(c)(2)(A), (B), (C) or (D), the DQO protocol of Section 218.105(c)(2)(E), or an alternative protocol pursuant to Section 218.108(b) of this Part.

- 3) Simultaneous testing of multiple lines or emission units with a common control device. If an owner or operator has multiple lines sharing a common control device, the capture efficiency of the lines may be tested simultaneously, subject to the following provisions:
 - A) Multiple line testing must meet the criteria of Section 4 of USEPA's "Guidelines for Determining Capture Efficiency," incorporated by reference at Section 218.112 of this Part;
 - B) The most stringent capture efficiency required for any individual line or unit must be met by the aggregate of lines or units; and
 - C) Testing of all the lines of emission units must be performed with the same capture efficiency test protocol.
- 4) Recordkeeping and Reporting
 - A) All owners or operators affected by this subsection must maintain a copy of the capture efficiency protocol submitted to the Agency and the USEPA on file. All results of the appropriate test methods

- and capture efficiency protocols must be reported to the Agency within 60 days <u>after</u> of the test date. A copy of the results must be kept on file with the source for a period of 3 years.
- B) If any changes are made to capture or control equipment, then the source is required to notify the Agency and the USEPA of these changes and a new test may be required by the Agency or the USEPA.
- C) The source must notify the Agency 30 days prior to performing any capture efficiency or control test. At that time, the source must notify the Agency which capture efficiency protocol and control device test methods will be used. Notification of the actual date and expected time of testing must be submitted a minimum of 5 working days prior to the actual date of the test. The Agency may at its discretion accept notification with shorter advance notice provided that such arrangements do not interfere with the Agency's ability to review the protocol or observe testing.
- D) Sources utilizing a PTE must demonstrate that this enclosure meets the requirements given in Method 204 in Appendix M of 40 CFR 51, incorporated by reference in Section 218.112 of this Part, for a PTE during any testing of their control device.
- E) Sources utilizing a TTE must demonstrate that their TTE meets the requirements given in Method 204 in Appendixappendix M of 40 CFR 51, incorporated by reference in Section 218.112 of this Part, for a TTE during testing of their control device. The source must also provide documentation that the quality assurance criteria for a TTE have been achieved.
- F) Any source utilizing the DQO or LCL protocol must submit the following information to the Agency with each test report:
 - A copy of all test methods, Quality Assurance/Quality Control procedures, and calibration procedures to be used from those described in <u>Appendix appendix</u> M of 40 CFR 51, incorporated by reference in Section 218.112 of this Part;
 - ii) A table with information on each sample taken, including the sample identification and the VOM content of the sample;
 - iii) The quantity of material used for each test run;

- iv) The quantity of captured VOM for each test run;
- v) The capture efficiency calculations and results for each test run;
- vi) The DQO and/or LCL calculations and results; and
- vii) The Quality Assurance/Quality Control results, including how often the instruments were calibrated, the calibration results, and the calibration gases used.
- d) Control Device Efficiency Testing and Monitoring
 - The control device efficiency shall be determined by simultaneously measuring the inlet and outlet gas phase VOM concentrations and gas volumetric flow rates in accordance with the gas phase test methods specified in subsection (f) of this Section.
 - 2) An owner or operator:
 - A) That uses an afterburner or carbon adsorber to comply with any Section of Part 218 shall use Agency and USEPA approved continuous monitoring equipment which is installed, calibrated, maintained, and operated according to vendor specifications at all times the control device is in use except as provided in subsection (d)(3) of this Section. The continuous monitoring equipment must monitor the following parameters:
 - i) For each afterburner which does not have a catalyst bed, the combustion chamber temperature of each afterburner.
 - ii) For each afterburner which has a catalyst bed, commonly known as a catalytic afterburner, the temperature rise across each catalytic afterburner bed or VOM concentration of exhaust.
 - iii) For each carbon adsorber, the VOM concentration of each carbon adsorption bed exhaust or the exhaust of the bed next in sequence to be desorbed.
 - B) Must install, calibrate, operate and maintain, in accordance with manufacturer's specifications, a continuous recorder on the temperature monitoring device, such as a strip chart, recorder or

- computer, having an accuracy of \pm 1 percent of the temperature measured in degrees Celsius or \pm 0.5° C, whichever is greater.
- C) Of an automobile or light-duty truck primer surfacer operation or topcoat operation subject to subsection (d)(2)(A) above, shall keep a separate record of the following data for the control devices, unless alternative provisions are set forth in a permit pursuant to Title V of the Clean Air Act:
 - i) For thermal afterburners for which combustion chamber temperature is monitored, all 3-hour periods of operation in which the average combustion temperature was more than 28°C (50°F) below the average combustion temperature measured during the most recent performance test that demonstrated that the operation was in compliance.
 - ii) For catalytic afterburners for which temperature rise is monitored, all 3-hour periods of operation in which the average gas temperature before the catalyst bed is more than 28°C (50°F) below the average gas temperature immediately before the catalyst bed measured during the most recent performance test that demonstrated that the operation was in compliance.
 - iii) For catalytic afterburners and carbon adsorbers for which VOM concentration is monitored, all 3-hour periods of operation during which the average VOM concentration or the reading of organics in the exhaust gases is more than 20 percent greater than the average exhaust gas concentration or reading measured by the organic monitoring device during the most recent determination of the recovery efficiency of a carbon adsorber or performance test for a catalytic afterburner, which determination or test demonstrated that the operation was in compliance.
- An owner or operator that uses a carbon adsorber to comply with Section 218.401 of this Part may operate the adsorber during periods of monitoring equipment malfunction, provided that:
 - A) The owner or operator notifies in writing the Agency within, 10 days after the conclusion of any 72 hour period during which the adsorber is operated and the associated monitoring equipment is not operational, of such monitoring equipment failure and provides the duration of the malfunction, a description of the repairs made to the equipment, and the total to date of all hours in the calendar

- year during which the adsorber was operated and the associated monitoring equipment was not operational;
- B) During such period of malfunction the adsorber is operated using timed sequences as the basis for periodic regeneration of the adsorber;
- C) The period of such adsorber operation does not exceed 360 hours in any calendar year without the approval of the Agency and USEPA; and
- D) The total of all hours in the calendar year during which the adsorber was operated and the associated monitoring equipment was not operational shall be reported, in writing, to the Agency and USEPA by January 31st of the following calendar year.

e) Overall Efficiency

- The overall efficiency of the emission control system shall be determined as the product of the capture system efficiency and the control device efficiency or by the liquid/liquid test protocol as specified in 40 CFR 60.433, incorporated by reference in Section 218.112 of this Part, (and revised by subsection (c)(1)(B) of this Section) for each solvent recovery system. In those cases in which the overall efficiency is being determined for an entire line, the capture efficiency used to calculate the product of the capture and control efficiency is the total capture efficiency over the entire line.
- 2) For coating lines which are both chosen by the owner or operator to comply with Section 218.207(c), (d), (e), (f), or (g) of this Part by the alternative in Section 218.207(b)(2) of this Part and meet the criteria allowing them to comply with Section 218.207 of this Part instead of Section 218.204 of this Part, the overall efficiency of the capture system and control device, as determined by the test methods and procedures specified in subsections (c), (d) and (e)(1) of this Section, shall be no less than the equivalent overall efficiency which shall be calculated by the following equation:

$$E = ([VOM_a - VOM_l]/VOM_a) \times 100$$

Where:

E = Equivalent overall efficiency of the capture system

and control device as a percentage;

 VOM_a = Actual VOM content of a coating, or the daily-

weighted average VOM content of two or more coatings (if more than one coating is used), as applied to the subject coating line as determined by the applicable test methods and procedures specified in subsection (a) of this Section in units of kg VOM/1 (lb VOM/gal) of coating solids as applied;

 VOM_1 = The VOM emission limit specified in Section 218.204 or 218.205 of this Part in units of kg VOM/ ℓ (lb VOM/gal) of coating solids as applied.

- f) Volatile Organic Material Gas Phase Source Test Methods.

 The methods in 40 CFR Part-60, Appendix A, incorporated by reference in Section 218.112 of this Part delineated below shall be used to determine control device efficiencies.
 - 1) 40 CFR Part-60, Appendix appendix A, Method 18, 25 or 25A, incorporated by reference in Section 218.112 of this Part as appropriate to the conditions at the site, shall be used to determine VOM concentration. Method selection shall be based on consideration of the diversity of organic species present and their total concentration and on consideration of the potential presence of interfering gases. Except as indicated in subsections (f)(1)(A) and (B) below, the test shall consist of three separate runs, each lasting a minimum of 60 minutes, unless the Agency and the USEPA determine that process variables dictate shorter sampling times.
 - A) When the method is to be used to determine the efficiency of a carbon adsorption system with a common exhaust stack for all the individual adsorber vessels, the test shall consist of three separate runs, each coinciding with one or more complete sequences through the adsorption cycles of all the individual absorber vessels.
 - B) When the method is to be used to determine the efficiency of a carbon adsorption system with individual exhaust stacks for each absorber vessel, each adsorber vessel shall be tested individually. The test for each absorber vessel shall consist of three separate runs. Each run shall coincide with one or more complete absorption cycles.
 - 2) 40 CFR Part-60, Appendix appendix A, Method 1 or 1A, incorporated by reference in Section 218.112 of this Part, shall be used for sample and velocity traverses.
 - 3) 40 CFR Part-60, Appendix appendix A, Method 2, 2A, 2C or 2D, incorporated by reference in Section 218.112 of this Part, shall be used for velocity and volumetric flow rates.

- 4) 40 CFR Part 60, Appendix A, Method 3, incorporated by reference in Section 218.112 of this Part, shall be used for gas analysis.
- 5) 40 CFR Part-60, Appendix appendix A, Method 4, incorporated by reference in Section 218.112 of this Part, shall be used for stack gas moisture.
- 6) 40 CFR Part-60, Appendix appendix A, Methods 2, 2A, 2C, 2D, 3 and 4, incorporated by reference in Section 218.112 of this Part, shall be performed, as applicable, at least twice during each test run.
- Use of an adaptation to any of the test methods specified in subsections (f)(1), (2), (3), (4), (5) and (6) of this Section may not be used unless approved by the Agency and the USEPA on a case by case basis. An owner or operator must submit sufficient documentation for the Agency and the USEPA to find that the test methods specified in subsections (f)(1), (2), (3), (4), (5) and (6) of this Section will yield inaccurate results and that the proposed adaptation is appropriate.
- g) Leak Detection Methods for Volatile Organic Material Owners or operators required by this Part to carry out a leak detection monitoring program shall comply with the following requirements:
 - 1) Leak Detection Monitoring
 - A) Monitoring shall comply with 40 CFR 60, <u>Appendix appendix</u> A, Method 21, incorporated by reference in Section 218.112 of this Part.
 - B) The detection instrument shall meet the performance criteria of Method 21.
 - C) The instrument shall be calibrated before use on each day of its use by the methods specified in Method 21.
 - D) Calibration gases shall be:
 - i) Zero air (less than 10 ppm of hydrocarbon in air); and
 - ii) A mixture of methane or n-hexane and air at a concentration of approximately, but no less than, 10,000 ppm methane or n-hexane.

- E) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21.
- 2) When equipment is tested for compliance with no detectable emissions as required, the test shall comply with the following requirements:
 - A) The requirements of subsections (g)(1)(A) through (g)(1)(E) of this Section above shall apply.
 - B) The background level shall be determined as set forth in Method 21.
- 3) Leak detection tests shall be performed consistent with:
 - A) "APTI Course SI 417 controlling Volatile Organic Compound Emissions from Leaking Process Equipment", EPA-450/2-82-015, incorporated by reference in Section 218.112 of this Part.
 - B) "Portable Instrument User's Manual for Monitoring VOC Sources", EPA-340/1-86-015, incorporated by reference in Section 218.112 of this Part.
 - C) "Protocols for Generating Unit-Specific Emission Estimates for Equipment Leaks of VOC and VHAP", EPA-450/3-88-010, incorporated by reference in Section 218.112 of this Part.
 - D) "Petroleum Refinery Enforcement Manual", EPA-340/1-80-008, incorporated by reference in Section 218.112 of this Part.
- h) Bulk Gasoline Delivery System Test Protocol
 - The method for determining the emissions of gasoline from a vapor recovery system are delineated in 40 CFR 60, Subpart XX, Sectionsection 60.503, incorporated by reference in Section 218.112 of this Part.
 - 2) Other tests shall be performed consistent with:
 - A) "Inspection Manual for Control of Volatile Organic Emissions from Gasoline Marketing Operations: Appendix D", EPA-340/1-80-012, incorporated by reference in Section 218.112 of this Part.
 - B) "Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals: Appendix A", EPA-450/2-77-026, incorporated by reference in Section 218.112 of this Part.

- i) Notwithstanding other requirements of this Part, upon request of the Agency where it is necessary to demonstrate compliance, an owner or operator of an emission unit which is subject to this Part shall, at his own expense, conduct tests in accordance with the applicable test methods and procedures specific in this Part. Nothing in this Section shall limit the authority of the USEPA pursuant to the Clean Air Act, as amended, to require testing.
- j) Stage II Gasoline Vapor Recovery Test Methods The methods for determining the acceptable performance of Stage II Gasoline Vapor Recovery System are delineated in "Technical Guidance-Stage II Vapor Recovery Systems for Control of Vehicle Refueling Emissions at Gasoline Dispensing Facilities," found at EPA 450/3-91-022b and incorporated by reference in Section 218.112 of this Part. Specifically, the test methods are as follows:
 - 1) Dynamic Backpressure Test is a test procedure used to determine the pressure drop (flow resistance) through balance vapor collection and control systems (including nozzles, vapor hoses, swivels, dispenser piping and underground piping) at prescribed flow rates.
 - 2) Pressure Decay/Leak Test is a test procedure used to quantify the vapor tightness of a vapor collection and control system installed at gasoline dispensing facilities.
 - 3) Liquid Blockage Test is a test procedure used to detect low points in any vapor collection and control system where condensate may accumulate.

(Source:	Amended at 34	1 III Reg	. effective	
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Section 218.106 Compliance Dates

- a) Except as otherwise provided in this Section or as otherwise provided in a specific Subpart of this Part, compliance with the requirements of all rules is required by July 1, 1991, or September 1, 1991, for all sources located in Cook, DuPage, Kane, Lake, McHenry, or Will Counties, consistent with the appropriate provisions of Section 218.103 of this Subpart.
- b) Except as otherwise provided in this Section or as otherwise provided in a specific Subpart of this Part, compliance with the requirements of this Part is required by November 15, 1993, for all sources located in Aux Sable Township or Goose Lake Township in Grundy County, or in Oswego Township in Kendall County.

- All emission units which meet the applicability requirements of Sections 218.402(a)(2), 218.611(b), 218.620(b), 218.660(a), 218.680(a), 218.920(b), 218.940(b), 218.960(b) or 218.980(b) of this Part, including emission units at sources which are excluded from the applicability criteria of Sections 218.402(a)(1), 218.611(a), 218.620(a), 218.920(a), 218.940(a), 218.960(a), or 218.980(a) of this Part by virtue of permit conditions or other enforceable means, must comply with the requirements of Subparts H, Z, AA, CC, DD, PP, QQ, RR or TT of this Part, respectively, by March 15, 1995. Any owner or operator of an emission unit which has already met the applicability requirements of Sections 218.402(a)(1), 218.611(a), 218.620(a), 218.920(a), 218.940(a), 218.960(a) 218.980(a) of this Part on or by the effective date of this subsection is required to comply with all compliance dates or schedules found in Sections 218.106(a) or 218.106(b), as applicable.
- d) Any owner or operator of a source with an emission unit subject to the requirements of Section 218.204(m)(2) or (m)(3) of this Part shall comply with those requirements by March 25, 1995.
- e) Any owner or operator of a source subject to the requirements of Section 218.204(c)(2), 218.204(g)(2), or 218.204(h)(2) of this Part shall comply with the applicable requirements in the applicable subsections, as well as all applicable requirements in Sections 218.205 through 218.214 and 218.218, by May 1, 2011.
- f) Any owner or operator of a source subject to the requirements of Section 218.204(p) of this Part shall comply with the requirements in Section 218.204(p), as well as all applicable requirements in Sections 218.205 through 218.211, 218.214, and 218.217 by August 1, 2010.
- <u>Any owner or operator of a source subject to the requirements of Section 218.204(a)(2) or 218.204(q) of this Part shall comply with the applicable requirements in those Sections, as well as all applicable requirements in Section 218.205 through 218.214 and 218.219, by May 1, 20122011.</u>

(Source:	Amended at 34 Ill. Reg.	, effective
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Section 218.112 Incorporations by Reference

The following materials are incorporated by reference and do not contain any subsequent additions or amendments.

- a) American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-9555:
 - 1) ASTM D2879-86

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- 2) ASTM D323-82
- 3) ASTM D86-82
- 4) ASTM D-369-69 (1971)
- 5) ASTM D-396-69
- 6) ASTM D2880-71
- 7) ASTM D-975-68
- 8) ASTM D3925-81 (1985)
- 9) ASTM E300-86
- 10) ASTM D1475-85
- 11) ASTM D2369-87
- 12) ASTM D3792-86
- 13) ASTM D4017-81 (1987)
- 14) ASTM D4457-85
- 15) ASTM D2697-86
- 16) ASTM D3980-87
- 17) ASTM E180-85
- 18) ASTM D2372-85
- 19) ASTM D97-66
- 20) ASTM E-168-67 (1977)
- 21) ASTM E-169-87
- 22) ASTM E-260-91
- 23) ASTM D2504-83
- 24) ASTM D2382-83

- 25) ASTM D323-82 (approved 1982)
- 26) ASTM D2099-00
- b) Standard Industrial Classification Manual, published by Executive Office of the President, Office of Management and Budget, Washington, D.C., 1987.
- c) American Petroleum Institute Bulletin 2517, "Evaporation Loss From Floating Roof Tanks", Second ed., February 1980.
- d) 40 CFR 60 (July 1, 1991) and 40 CFR 60, Appendix A, Method 24 (57 FR 30654, July 10, 1992).
- e) 40 CFR 61 (July 1, 1991).
- f) 40 CFR 50 (July 1, 1991).
- g) 40 CFR 51 (July 1, 1991) and 40 CFR Part 51, Appendix appendix M, Methods 204-204F (July 1, 1999).
- h) 40 CFR 52 (July 1, 1991).
- i) 40 CFR 80 (July 1, 1991) and 40 CFR Part-80, Appendixes appendices D, E, and F (July 1, 1993).
- j) "A Guide for Surface Coating Calculation", July 1986, United States Environmental Protection Agency, Washington, D.C., EPA-340/1-86-016.
- k) "Procedures for Certifying Quantity of Volatile Organic Compounds Emitted by Paint, Ink and Other Coating" (revised June 1986), United States Environmental Protection Agency, Washington, D.C., EPA-450/3-84-019.
- l) "A Guide for Graphic Arts Calculations", August 1988, United States Environmental Protection Agency, Washington, D.C., EPA-340/1-88-003.
- m) "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations", December 1988, United States Environmental Protection Agency, Washington, D.C., EPA-450/3-88-018.
- n) "Control of Volatile Organic Emissions from Manufacturing of Synthesized Pharmaceutical Products", December 1978, United States Environmental Protection Agency, Washington, D.C., EPA-450/2-78-029.

- o) "Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems", December 1978, Appendix B, United States Environmental Protection Agency, Washington, D.C., EPA-450/-78-051.
- p) "Control of Volatile Organic Compound Emissions from Large Petroleum Dry Cleaners", September 1982, United States Environmental Protection Agency, Washington, D.C., EPA-450/3-82-009.
- q) "APTI Course SI417 Controlling Volatile Organic Compound Emissions from Leaking Process Equipment", 1982, United States Environmental Protection Agency, Washington, D.C., EPA-450/2-82-015.
- r) "Portable Instrument User's Manual for Monitoring VOC Sources", June 1986, United States Environmental Protection Agency, Washington, D.C., EPA-340/1-86-015.
- s) "Protocols for Generating Unit-Specific Emission Estimates for Equipment Leaks of VOC and VHAP", October 1988, Unites States Environmental Protection Agency, Washington, D.C., EPA-450/3-88-010.
- t) "Petroleum Refinery Enforcement Manual", March 1980, United States Environmental Protection Agency, Washington, D.C., EPA-340/1-80-008.
- u) "Inspection Manual for Control of Volatile Organic Emissions from Gasoline Marketing Operations: Appendix D", 1980, United States Environmental Protection Agency, Washington, D.C., EPA-340/1-80-012.
- v) "Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals: Appendix A", December 1977, United States Environmental Protection Agency, Washington, D.C., EPA-450/2-77-026.
- w) "Technical Guidance Stage II Vapor Recovery Systems for Control of Vehicle Refueling Emissions at Gasoline Dispensing Facilities", November 1991, United States Environmental Protection Agency, Washington, D.C., EPA-450/3-91-022b.
- x) California Air Resources Board, Compliance Division. Compliance Assistance Program: Gasoline Marketing and Distribution: Gasoline Facilities Phase I & II (October 1988, rev. November 1993) (CARB Manual).
- y) South Coast Air Quality Management District (SCAQMD), Applied Science & Technology Division, Laboratory Services Branch, SCAQMD Method 309-91, Determination of Static Volatile Emissions (February 1993).

- z) South Coast Air Quality Management District (SCAQMD), Applied Science & Technology Division, Laboratory Services Branch, SCAQMD Method 312-91, Determination of Percent Monomer in Polyester Resins (April 1996).
- "Guidelines for Determining Capture Efficiency;". January 1995, Office of Air Quality Planning and Standards, United States Environmental Protection Agency, Research Triangle Park, NC.
- bb) Memorandum "Revised Capture Efficiency Guidance for Control of Volatile Organic Compound Emissions,", February, 1995, John S. Seitz, Director, Office of Air Quality Planning and Standards, United States Environmental Protection Agency.
- "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Primer-Surfacer and Topcoat Operations", September 2008, United States Environmental Protection Agency, Washington, D.C., EPA-453/R-08-002.
- dd) 40 CFR 63, Subpart PPPP, Appendixappendix A (2008).
- ee) 46 CFR Subchapter Q (2007).
- <u>ff)</u> 46 CFR Subchapter T (2008).

(Source: Amended at 34 Ill. Reg. _____, effective _____)

SUBPART F: COATING OPERATIONS

Section 218.204 Emission Limitations

Except as provided in Sections 218.205, 218.207, 218.208, 218.212, 218.215 and 218.216 of this Subpart, no owner or operator of a coating line shall apply at any time any coating in which the VOM content exceeds the following emission limitations for the specified coating. Except as otherwise provided in subsections (a), (c), (g), (h), (j), (l), (n), and (q) of this Section, compliance with the emission limitations marked with an asterisk in this Section is required on and after March 15, 1996, and compliance with emission limitations not marked with an asterisk is required until March 15, 1996. The following emission limitations are expressed in units of VOM per volume of coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied at each coating applicator, except where noted. Compounds which are specifically exempted from the definition of VOM should be treated as water for the purpose of calculating the "less water" part of the coating composition. Compliance with this Subpart must be demonstrated through the applicable coating analysis test methods and procedures specified in Section 218.105(a) of this Part and the recordkeeping and reporting requirements specified in Section 218.211(c) of this Subpart except where noted.

(Note: The equation presented in Section 218.206 of this Part shall be used to calculate emission limitations for determining compliance by add-on controls, credits for transfer efficiency, emissions trades and cross-line averaging.) The emission limitations are as follows:

a)		Auto	mobile or Light-Duty Truck Coating	kg/l	lb/gal
	<u>1)</u>	Prior t	o May 1, <u>20122011:</u>		
		<u>A</u> 1)	Prime coat	0.14 0.14*	(1.2) (1.2)*
		<u>B</u> 2)	Primer surface coat	1.81 1.81*	(15.1) (15.1)*

BOARD NOTE(Note: The primer surface coat limitation is in units of kg (lbs) of VOM per l (gal) of coating solids deposited. Compliance with the limitation shall be based on the daily-weighted average from an entire primer surfacer operation. Compliance shall be demonstrated in accordance with the topcoat protocol referenced in Section 218.105(b)(1)(A) and the recordkeeping and reporting requirements specified in Section 218.211(f). Testing to demonstrate compliance shall be performed in accordance with the topcoat protocol and a detailed testing proposal approved by the Agency and USEPA specifying the method of demonstrating compliance with the protocol. Section 218.205 does not apply to the primer surfacer limitation.)

<u>C</u> 3)	Topcoat	kg/l	lb/gal
		1.81	(15.1)
		1 81*	(15.1)*

BOARD NOTE(Note: The topcoat limitation is in units of kg (lbs) of VOM per l (gal) of coating solids deposited. Compliance with the limitation shall be based on the daily-weighted average from an entire topcoat operation. Compliance shall be demonstrated in accordance with the topcoat protocol referenced in Section 218.105(b)(1)(A) of this Part and the recordkeeping and reporting requirements specified in Section 218.211(f). Testing to demonstrate compliance shall be performed in accordance with the topcoat protocol and a detailed testing proposal approved by the Agency and USEPA specifying the method of demonstrating compliance with the protocol. Section 218.205 of this Part does not apply to the topcoat limitation.)

<u>D</u> 4)	Final repair coat	kg/l	lb/gal
		0.58	(4.8)
		0.58*	(4.8)*

- On and after May 1, 20122011, subject automobile and light-duty truck coating lines shall comply with the following limitations. These limitations shall not apply to materials supplied in containers with a net volume of 0.47 liters (16 oz) or less, or a net weight of 0.45 kg (1 lb) or less:
 - A) Electrodeposition primer (EDP) operations. For purposes of this subsection (a)(2)(A), "electrodeposition" means a water-borne dip coating process in which opposite electrical charges are applied to the substrate and the coating. The coating is attracted to the substrate due to the electrochemical potential difference that is created.

			kg VOM/l coating solids applied	lb VOM/gal coating solids applied
	<u>i)</u>	When solids turnover ratio (R_T) is greater than or equal to 0.160	0.084	(0.7)
	<u>ii)</u>	$\frac{\text{When } R_T \text{ is greater than or}}{\text{equal to } 0.040 \text{ and less than}}$ $\frac{0.160}{\text{constant}}$	$\frac{0.084 \text{ x}}{350^{0.160-R}}$	$\frac{(0.084 \text{ x}}{350^{0.160-R}\text{T}}\text{x}$ $\frac{8.34)}{}$
<u>B)</u>	<u>Prin</u>	ner surfacer operations	kg VOM/l coating solids deposited	lb VOM/gal coating solids deposited
	<u>i)</u>	VOM content limitation	<u>1.44</u>	<u>(12.0)</u>

ii) Compliance with the limitation set forth in subsection
(a)(2)(B)(i) shall be based on the daily-weighted average from an entire primer surfacer operation. Compliance shall be demonstrated in accordance with the topcoat protocol referenced in Section 218.105(b)(1)(B) and the recordkeeping and reporting requirements specified in Section 218.211(f).

Testing to demonstrate compliance shall be performed in accordance with the topcoat protocol and a detailed testing proposal approved by the Agency and USEPA specifying the method of demonstrating compliance with the protocol.

Section 218.205 does not apply to the primer surfacer limitation.

<u>C)</u> Topcoat operations

kg VOM/l	lb VOM/gal
coating	coating solids
<u>solids</u>	deposited
deposited	

i) VOM content limitation 1.44 (12.0)

ii) Compliance with the limitation set forth in subsection
(a)(2)(C)(i) shall be based on the daily-weighted average from an entire topcoat operation. Compliance shall be demonstrated in accordance with the topcoat protocol referenced in Section 218.105(b)(1)(B) and the recordkeeping and reporting requirements specified in Section 218.211(f). Testing to demonstrate compliance shall be performed in accordance with the topcoat protocol and a detailed testing proposal approved by the Agency and USEPA specifying the method of demonstrating compliance with the protocol. Section 218.205 does not apply to the topcoat limitation.

<u>D)</u> Combined primer surfacer and topcoat operations

kg VOM/l	lb VOM/gal
coating	coating solids
<u>solids</u>	<u>deposited</u>
deposited	

i) VOM content limitation 1.44 (12.0)

ii) Compliance with the limitation set forth in subsection
(a)(2)(D)(i) shall be based on the daily-weighted average from
the combined primer surfacer and topcoat operations.
Compliance shall be demonstrated in accordance with the
topcoat protocol referenced in Section 218.105(b)(1)(B) and
the recordkeeping and reporting requirements specified in
Section 218.211(f). Testing to demonstrate compliance shall
be performed in accordance with the topcoat protocol and a
detailed testing proposal approved by the Agency and USEPA
specifying the method of demonstrating compliance with the
protocol. Section 218.205 does not apply to the combined
primer surfacer and topcoat limitation.

VOM content limitation

E) Final repair coat operations

i)

kg/l	<u>lb/gal</u>
coatings	coatings
0.58	(4.8)

ii) Compliance with the final repair operations limitation set forth in subsection (a)(2)(E)(i) shall be on an occurrence-weighted average basis, calculated in accordance with the equation below, in which clear coatings shall have a weighting factor of 2 and all other coatings shall have a weighting factor of 1.

$$VOM_{tot} = \frac{2VOM_{cc} + \sum_{i=1}^{n} VOM_{i}}{n+2}$$

where:

 $\underline{\text{VOM}}_{\text{tot}} \equiv \underline{\text{Total VOM content of all coatings, as applied, on an}}$

occurrence weighted average basis, and used to determine

compliance with this subsection (a)(2)(E).

<u>i</u> = <u>Subscript denoting a specific coating applied.</u>

 \underline{n} = Total number of coatings applied in the final repair

operation, other than clear coatings.

 $\underline{VOM}_{cc} \equiv \underline{The VOM content}$, as applied, of the clear coat used in the

final repair operation.

<u>VOM_i</u> = The VOM content of each coating used in the final repair

operation, as applied, other than clear coatings.

F) Miscellaneous Materials. For reactive adhesives subject to this subsection (a)(2)(F), compliance shall be demonstrated in accordance with the methods and procedures set forth in Appendix A to Subpart PPPP of 40 CFR 63, incorporated by reference in Section 218.112 of this Part.

<u>i)</u>	Glass bonding primer	<u>kg/l</u> 0.90	<u>lb/gal</u> (7.51)
ii)	Adhesive	0.25	(2.09)

			<u>iii)</u>	Cavity wax	<u>0.65</u>	(5.42)
			<u>iv)</u>	Trunk sealer	0.65	(5.42)
			<u>v)</u>	<u>Deadener</u>	<u>0.65</u>	(5.42)
			<u>vi)</u>	Gasket/gasket sealing material	0.20	(1.67)
			<u>vii)</u>	<u>Underbody coating</u>	<u>0.65</u>	(5.42)
			<u>viii)</u>	Trunk interior coating	<u>0.65</u>	(5.42)
			<u>ix)</u>	Bedliner	0.20	(1.67)
			<u>x)</u>	Weatherstrip adhesive	<u>0.75</u>	(6.26)
			<u>xi)</u>	<u>Lubricating wax/compound</u>	0.70	(5.84)
b)	Can Co	oating			kg/l	lb/gal
	1)	Sheet b	asecoat	and overvarnish		
		A)	Sheet b	asecoat	0.34 0.26*	(2.8) (2.2)*
		B)	Overva	rnish	0.34 0.34	(2.8) (2.8)*
	2)	Exterio	or basec	oat and overvarnish	0.34	(2.8)
	3)	Interior	r body s	spray coat	0.25*	(2.1)*
		A)	Two pi	ece	0.51 0.44*	(4.2) (3.7)*
		B)	Three p	iece	0.51 0.51*	(4.2) (4.2)*
	4)	Exterio	or end co	oat	0.51 0.51*	(4.2) (4.2)*
	5)	Side se	am spra	ay coat	0.66 0.66*	(5.5)* (5.5)*

	6)	End sea	lling compound coat	0.44 0.44*	(3.7) (3.7)*
c)	Pape	r Coating			
	1)	Prior (to May 1, 2011:	kg/l 0.28	lb/gal (2.3)
	2)	On an	d after May 1, 2011:	kg VOM/kg (lb VOM/lb) solids applied	kg VOM/kg (lb VOM/lb) coatings applied
		A)	Pressure sensitive tape and label surface coatings	0.20	(0.067)

All other paper coatings

The paper coating limitation set forth in this subsection (c) shall not apply to any owner or operator of any paper coating line on which flexographic, rotogravure, lithographic, or letterpress printing is performed if the paper coating line complies with the applicable emissions limitations in Subpart H of this Part. In addition, screen printing on paper is not regulated as paper coating, but is regulated under Subpart TT of this Part. On and after May 1, 2011, the paper coating limitation shall also not apply to coating performed on or in-line with any digital printing press, or to size presses and on-machine coaters on papermaking machines applying sizing or water-based clays.

0.40

(0.08)

d)	Coil Coating	kg/l 0.31 0.20*	lb/gal (2.6) (1.7)*
e)	Fabric Coating	0.35 0.28*	(2.9) (2.3)*
f)	Vinyl Coating	0.45 0.28*	(3.8) (2.3)*

g) Metal Furniture Coating

B)

1) Prior to May 1, 2011:

	A)	Air dried	kg/l 0.34	lb/gal (2.8)		
	B)	Baked	0.28	(2.3)		
2)	On an	nd after May 1, 2011:	kg/l (lb/gal)	kg/l (lb/gal) solids applied		
	A)	General, One-Component	0.275 (2.3)	0.40 (3.3)		
	B)	General, Multi-Component				
		i) Air Dried <u>dried</u>	0.340 (2.8)	0.55 (4.5)		
		ii) Baked	0.275 (2.3)	0.40 (3.3)		
	C)	Extreme High Gloss				
		i) Air Dried <u>dried</u>	0.340 (2.8)	0.55 (4.5)		
		ii) Baked	0.360 (3.0)	0.61 (5.1)		
	D)	Extreme Performance				
		i) Air Dried <u>dried</u>	0.420 (3.5)	0.80 (6.7)		
		ii) Baked	0.360 (3.0)	0.61 (5.1)		
	E)	Heat Resistant				
		i) Air Dried <u>dried</u>	0.420 (3.5)	0.80 (6.7)		
		ii) Baked	0.360 (3.0)	0.61 (5.1)		
	F)	Metallic	0.420 (3.5)	0.80 (6.7)		

G)	Pretreatment Coatings	0.420 (3.5)	0.80 (6.7)
H)	Solar Absorbent		
	i) Air Dried <u>dried</u>	0.420 (3.5)	0.80 (6.7)
	ii) Baked	0.360 (3.0)	0.61 (5.1)

On and after May 1, 2011, the limitations set forth in this subsection (g) shall not apply to stencil coatings, safety-indicating coatings, solid-film lubricants, electric-insulating and thermal-conducting coatings, touch-up and repair coatings, or coating applications utilizing hand-held aerosol cans.

h)	h) Large Appliance Coating						
	1)	Prior	to May 1, 2011:	kg/l	b/gal		
		A)	Air Dried dried	0.34	[2.8]		
		B)	Baked	0.28	[2.3)		
	2)	On ar	nd after May 1, 2011:	kg/l	kg/l [lb/gal)		
				lb/gal)	solids applied		
		A)	General, One Component).275).40		
				(2.3)	(3.3)		
		3)	General, Multi-Component				
) Air Dried <u>dried</u>	0.340).55		
				2.8)	(4.5)		
			i) Baked).275).40		
				2.3)	(3.3)		

C)	Extreme High Gloss	I	
) Air Dried dried	0.340).55
		(2.8)	(4.5)
	i) Baked	0.360).61
		[3.0)	[5.1)
D)	Extreme Performance		
) Air Dried <u>dried</u>	0.420	0.80
		[3.5)	(6.7)
	i) Baked	0.360).61
		(3.0)	(5.1)
Ε)	Heat Resistant		
) Air Dried dried	0.420	0.80
		[3.5)	(6.7)
	i) Baked	0.360	0.61
		[3.0)	[5.1)
F)	Metallic	0.420	0.80
		[3.5)	(6.7)
G)	Pretreatment Coatings	0.420	0.80
		(3.5)	(6.7)
H)	Solar Absorbent		
) Air Dried <u>dried</u>	0.420).80
		3.5)	(6.7)
	i) Baked	0.360).61
		(3.0)	[5.1)

The limitations set forth in this subsection (h) shall not apply to the use of quick-drying lacquers for repair of scratches and nicks that occur during assembly, provided that the volume of coating does not exceed 0.95 1 (1 quart) in any one rolling eight-hour period. On and after May 1, 2011, these limitations shall also not apply to stencil coatings, safety-indicating coatings, solid-film lubricants, electric-insulating and thermal-conducting coatings, touch-up and repair coatings, or coating applications utilizing hand-held aerosol cans.

i)	Mag	net Wire	Coating		kg/1 0.20 0.20*	lb/gal (1.7) (1.7)*
j)	<u>Prior</u>	to May	<u>, 20122011:</u> Miscellaneou	ıs Metal Pa	rts and Product	ts Coating
	1)	Clear co	Clear coating		0.52 0.52*	(4.3) (4.3)*
	2)	Extreme	performance coating			
		A) A	ir dried		0.42 0.42*	(3.5) (3.5)*
		B) B	aked		0.42 0.40*	(3.5) (3.3)*
	3)	Steel pa	el pail and drum interior coating		0.52 0.52*	(4.3) (4.3)*
	4)	All other coatings				
		A)	Air <u>dried</u> Dried		0.42 0.40*	(3.5) (3.3)*
		B)	Baked		0.36 0.34*	(3.0) (2.8)*
	5)	Marine	engine coating			
		A)	Air <u>dried</u> Dried		0.42 0.42*	(3.5) (3.5)*
		B)	Baked			
			i) Primer/Topcoat		0.42 0.42*	(3.5) (3.5)*

		ii) Corrosion resistant basecoat	0.42 0.28*	(3.5) (2.3)*
	C)	Clear Coating	0.52 0.52*	(4.3) (4.3)*
6)	Metallic	Coating		
	A)	Air Dried dried	0.42 0.42*	(3.5) (3.5)*
	B)	Baked	0.36 0.36	(3.0) (3.0)*

7) Definitions

- A) For purposes of subsection (j)(5) of this Section, the following terms are defined:
 - i) "Corrosion resistant basecoat" means, for purposes of subsection 218.204(j)(5)(B)(ii) of this Section, a water-borne epoxy coating applied via an electrodeposition process to a metal surface prior to spray coating, for the purpose of enhancing corrosion resistance.
 - ii) "Electrodeposition process" means, for purposes of subsection 218.204(j)(5) of this Section, a water-borne dip coating process in which opposite electrical charges are applied to the substrate and the coating. The coating is attracted to the substrate due to the electrochemical potential difference that is created.
 - iii) "Marine engine coating" means, for purposes of subsection 218.204(j)(5) of this Section, any extreme performance protective, decorative or functional coating applied to an engine that is used to propel watercraft.
- B) For purposes of subsection (j)(6) of this Section, "metallic coating" means a coating which contains more than ½ lb/gal of metal particles, as applied.

BOARD NOTE: On and after May 1, 20122011, the limitations in Section 218.204(q) shall apply to this category of coating.

k)	Heavy	kg/l	lb/gal	
	1)	Extreme performance prime coat	0.42 0.42*	(3.5) (3.5)*
	2)	Extreme performance topcoat (air dried)	0.42 0.42*	(3.5) (3.5)*
	3)	Final repair coat (air dried)	0.42 0.42*	(3.5) (3.5)*

4) All other coatings are subject to the emission limitations for miscellaneous metal parts and products coatings in subsection (j).

1) Wood Furniture Coating

1)	Limitations before March 15, 1998:			lb/gal
	A)	Clear topcoat	0.67	(5.6)
	B)	Opaque stain	0.56	(4.7)
	C)	Pigmented coat	0.60	(5.0)
	D)	Repair coat	0.67	(5.6)
	E)	Sealer	0.67	(5.6)
	F)	Semi-transparent stain	0.79	(6.6)
	G)	Wash coat	0.73	(6.1)

BOARD NOTE: (Note: Prior to March 15, 1998, an owner or operator of a wood furniture coating operation subject to this Section shall apply all coatings, with the exception of no more than 37.8 I (10 gal) of coating per day used for touch-up and repair operations, using one or more of the following application systems: airless spray application system, air-assisted airless spray application system, electrostatic spray application system, electrostatic bell or disc spray application system, heated airless spray application system, roller coating, brush or wipe coating application system, dip coating application system or high volume low pressure (HVLP) application system.)

2) On and after March 15, 1998, wood furniture sealers and topcoats must comply with one of the limitations specified in subsections (l)(2)(A) through (E):

			kg VOM/ kg solids	lb VOM/ lb solids
A)	Topcoa	at	0.8	(0.8)
B)	Sealers and topcoats with the following limits:			
	i)	Sealer other than acid-cured alkyd amino vinyl sealer	1.9	(1.9)
	ii)	Topcoat other than acid- cured alkyd amino conversion varnish topcoat	1.8	(1.8)
	iii)	Acid-cured alkyd amino vinyl sealer	2.3	(2.3)
	iv)	Acid-cured alkyd amino conversion varnish topcoat	2.0	(2.0)

- C) Meet the provisions of Section 218.215 of this Subpart for use of an averaging approach;
- D) Achieve a reduction in emissions equivalent to the requirements of subsection (l)(2)(A) or (B) of this Section, as calculated using Section 218.216 of this Subpart; or
- E) Use a combination of the methods specified in subsections (1)(2)(A) through (D) of this Section.
- 3) Other wood furniture coating limitations on and after March 15, 1998:

		kg/l	lb/gal
A)	Opaque stain	0.56	(4.7)
B)	Non-topcoat pigmented coat	0.60	(5.0)
C)	Repair coat	0.67	(5.6)

D)	Semi-transparent stain	0.79	(6.6)
E)	Wash coat	0.73	(6.1)

- 4) Other wood furniture coating requirements on and after March 15, 1998:
 - A) No source subject to the limitations of subsection (1)(2) or (3) of this Section and utilizing one or more wood furniture coating spray booths shall use strippable spray booth coatings containing more than 0.8 kg VOM/kg solids (0.8 lb VOM/lb solids), as applied.
 - B) Any source subject to the limitations of subsection (1)(2) or (3) of this Section shall comply with the requirements of Section 218.217 of this Subpart.
 - C) Any source subject to the limitations of subsection (l)(2)(A) or (B) of this Section and utilizing one or more continuous coaters shall, for each continuous coater, use an initial coating which complies with the limitations of subsection (l)(2)(A) or (B) of this Section. The viscosity of the coating in each reservoir shall always be greater than or equal to the viscosity of the initial coating in the reservoir. The owner or operator shall:
 - Monitor the viscosity of the coating in the reservoir with a viscosity meter or by testing the viscosity of the initial coating and retesting the coating in the reservoir each time solvent is added;
 - ii) Collect and record the reservoir viscosity and the amount and weight of VOM per weight of solids of coating and solvent each time coating or solvent is added; and
 - iii) Maintain these records at the source for a period of three years.

m)		ing Diesel-Electric Locomotive Coating in Cook County	kg/l	lb/gal
	1)	Extreme performance prime coat	0.42 0.42*	(3.5) (3.5)*
	2)	Extreme performance top-coat (air dried)	0.42 0.42*	(3.5) (3.5)*
	3)	Final repair coat (air dried)	0.42	(3.5)

					0.42*	(3.5)*
	4)	High-	tempera	ture aluminum coating	0.72 0.72*	(6.0) (6.0)*
	5)	All ot	her coat	ings	0.36 0.36*	(3.0) (3.0)*
n)		o May 1, 2012 2011: Plastic Parts Coating: kg/l lb/gal notive/Transportation				
	1)	Interi	ors			
		A)	Baked			
			i)	Color coat	0.49*	(4.1)*
			ii)	Primer	0.46*	(3.8)*
		B)	Air Dr	ied dried		
			i)	Color coat	0.38*	(3.2)*
			ii)	Primer	0.42*	(3.5)*
	2)	Exter	iors (flex	xible and non-flexible)		
		A)	Baked			
			i)	Primer	0.60*	(5.0)*
			ii)	Primer non-flexible	0.54*	(4.5)*
			iii)	Clear coat	0.52*	(4.3)*
			iv)	Color coat	0.55*	(4.6)*
		B)	Air Dr	ied dried		
			i)	Primer	0.66*	(5.5)*
			ii)	Clear coat	0.54*	(4.5)*
			iii)	Color coat (red & black)	0.67*	(5.6)*

		iv)	Color coat (others)	0.61*	(5.1)*
3)	Speci	ialty			
	A)		um metallizing basecoats, e base coats	0.66*	(5.5)*
	B)	coatin	coatings, reflective argent gs, air bag cover coatings, oft coatings	0.71*	(5.9)*
	C)		reducers, vacuum metallizing ats, and texture topcoats	0.77*	(6.4)*
	D)	ink pa	l coatings, adhesion primers, d coatings, electrostatic prep gs, and resist coatings	0.82*	(6.8)*
	E)	Headl	amp lens coatings	0.89*	(7.4)*
			and after May 1, 20122011, the y to this category of coating.	e limitations in	n Section
	to <u>May</u> ess Ma		2011: Plastic Parts Coating:	kg/l	lb/gal
1)	Prime	er		0.14*	(1.2)*
2)	Colo	r coat (n	on-texture coat)	0.28*	(2.3)*
3)	Colo	r coat (te	exture coat)	0.28*	(2.3)*
4)	frequ	_	etic interference/radio erference (EMI/RFI) tings	0.48*	(4.0)*
5)	Speci	ialty Co	atings coatings		
	A)	Soft co	oat	0.52*	(4.3)*
	B)	Plating	g resist	0.71*	(5.9)*
	C)	Plating	g sensitizer	0.85*	(7.1)*

o)

- BOARD NOTE: On and after May 1, 20122011, the limitations in Section 218.204(q) shall apply to this category of coating.
- p) Flat Wood Paneling Coatings. On and after August 1, 2010, flat wood paneling coatings shall comply with one of the following limitations:
 - 1) 0.25 kg VOM/1 of coatings (2.1 lb VOM/gal coatings); or
 - 2) 0.35 kg VOM/1 solids (2.9 lb VOM/gal solids).
- Miscellaneous Metal Parts and Products Coatings and Plastic Parts and Products Coatings On and After May 1, 20122011. On and after May 1, 20122011, the owner or operator of a miscellaneous metal or plastic parts coating line shall comply with the limitations in this subsection (q). The limitations in this subsection (q) shall not apply to aerosol coating products. The powder coatings, or primer sealants and ejection cartridge sealants used in ammunition manufacturing. Primer sealants and ejection cartridge sealants shall instead be regulated under Subpart TT of this Part.
 - Metal Parts and Products. For purposes of this subsection (q)(1),
 "corrosion resistant basecoat" means a water-borne epoxy coating applied
 via an electrodeposition process to a metal surface prior to spray coating,
 for the purpose of enhancing corrosion resistance. Also for purposes of
 this subsection (q)(1), "marine engine coating" means any extreme
 performance protective, decorative, or functional coating applied to an
 engine that is used to propel watercraft. The limitations in this subsection
 (q)(1) shall not apply to stencil coats, safety-indicating coatings, solidfilm lubricants, electric-insulating and thermal-conducting coatings,
 magnetic data storage disk coatings, and plastic extruded onto metal parts
 to form a coating. The limitations in Section 218.219, however, shall
 apply to these coatings unless specifically excluded in Section 218.219.

<u>A)</u>	Genera	l one component coating	kg/l (lb/gal) coatings	kg/l (lb/gal) solids
	<u>i)</u>	Air dried	<u>0.34</u> (2.8)	<u>0.54</u> (4.52)
	<u>ii)</u>	Baked	<u>0.28</u> (2.3)	<u>0.40</u> (3.35)
	<u>iii)</u>	Clear coating	<u>0.52</u> (4.3)	1.24 (10.34)

<u>B)</u>	General multi-component coating				
	<u>i)</u>	Air dried	<u>0.34</u> (2.8)	0.54 (4.52)	
	<u>ii)</u>	Baked	<u>0.28</u> (2.3)	<u>0.40</u> (3.35)	
<u>C)</u>	Camou	flage coating	<u>0.42</u> (3.5)	0.80 (6.67)	
<u>D)</u>	Electric	e-insulating varnish	<u>0.42</u> (3.5)	0.80 (6.67)	
<u>E)</u>	Etching	<u>g filler</u>	<u>0.42</u> (3.5)	0.80 (6.67)	
<u>F)</u>	Extrem	e high-gloss coating			
	<u>i)</u>	Air dried	<u>0.42</u> (3.5)	0.80 (6.67)	
	<u>ii)</u>	Baked	<u>0.36</u> (3.0)	<u>0.61</u> (5.06)	
<u>G)</u>	Extrem	e performance coating			
	<u>i)</u>	Air dried	<u>0.42</u> (3.5)	0.80 (6.67)	
	<u>ii)</u>	Baked	<u>0.36</u> (3.0)	0.61 (5.06)	
<u>H)</u>	Heat-re	sistant coating	<u>0.66*</u>	(5.5)*	
	<u>i)</u>	Air dried	<u>0.42</u> (3.5)	0.80 (6.67)	
	<u>ii)</u>	Baked	<u>0.36</u> (3.0)	<u>0.61</u> (5.06)	
<u>I)</u>	High po	erformance architectural	<u>0.74</u> (6.2)	4.56 (38.0)	

<u>J)</u>	High ter	mperature coating	<u>0.42</u> (3.5)	0.80 (6.67)
<u>K)</u>	Metallic	coating		
	<u>i)</u>	Air dried	<u>0.42</u> (3.5)	0.80 (6.67)
	<u>ii)</u>	<u>Baked</u>	<u>0.36</u> (3.0)	<u>0.61</u> (5.06)
<u>L)</u>	Military	specification coating		
	<u>i)</u>	Air dried	<u>0.34</u> (2.8)	<u>0.54</u> (4.52)
	<u>ii)</u>	<u>Baked</u>	<u>0.28</u> (2.3)	<u>0.40</u> (3.35)
<u>M)</u>	Mold-se	eal coating	<u>0.42</u> (3.5)	<u>0.80</u> (6.67)
<u>N)</u>	Pan bac	king coating	<u>0.42</u> (3.5)	0.80 (6.67)
<u>O)</u>		cated architectural multi-component		
	<u>i)</u>	Air dried	<u>0.42</u> (3.5)	0.80 (6.67)
	<u>ii)</u>	<u>Baked</u>	<u>0.28</u> (2.3)	<u>0.40</u> (3.35)
<u>P)</u>		cated architectural one-component		
	<u>i)</u>	Air dried	<u>0.42</u> (3.5)	<u>0.80</u> (6.67)
	<u>ii)</u>	<u>Baked</u>	<u>0.28</u> (2.3)	<u>0.40</u> (3.35)
<u>Q)</u>	Pretreat	ment coating	<u>0.42</u> (3.5)	<u>0.80</u> (6.67)

<u>R)</u>	Repair coats and touch-up coatings				
	<u>i)</u>	Air dried	<u>0.42</u> (3.5)		
	<u>ii)</u>	Baked	<u>0.36</u> (3.01)		
<u>S)</u>	Silicon	e release coating	<u>0.42</u> (3.5)	<u>0.80</u> (6.67)	
<u>T)</u>	Solar-a	bsorbent coating			
	<u>i)</u>	Air dried	<u>0.42</u> (3.5)	<u>0.80</u> (6.67)	
	<u>ii)</u>	Baked	<u>0.36</u> (3.0)	<u>0.61</u> (5.06)	
<u>U)</u>	Vacuum-metalizing coating		<u>0.42</u> (3.5)	<u>0.80</u> (6.67)	
<u>V)</u>	<u>Drum c</u>	coating, new, exterior	<u>0.34</u> (2.8)	<u>0.54</u> (4.52)	
<u>W)</u>	<u>Drum c</u>	coating, new, interior	<u>0.42</u> (3.5)	0.80 (6.67)	
<u>X)</u>	Drum c	coating, reconditioned,	<u>0.42</u> (3.5)	<u>0.80</u> (6.67)	
<u>Y)</u>	Drum coating, reconditioned, interior		0.50 (4.2)	1.17 (9.78)	
<u>Z)</u>	Steel pail and drum interior coating		<u>0.52</u> (4.3)	1.24 (10.34)	
<u>AA)</u>	Marine engine coating				
	<u>i)</u>	Air dried	<u>0.42</u> (3.5)	<u>0.80</u> (6.67)	
	<u>ii)</u>]	Baked: primer/topcoat	<u>0.42</u> (3.5)	0.80 (6.67)	

		Baked: corrosion resistant pasecoat	<u>0.28</u> (2.3)	<u>0.40</u> (3.35)
	<u>iv)</u>	Clear coating	<u>0.52</u> (4.3)	1.24 (10.34)
<u>BB)</u>	<u>Ammui</u>	nition sealants		
	<u>i)</u> 4	<u>Air dried</u>	<u>0.42</u> (3.5)	<u>0.80</u> (6.67)
	<u>ii)</u> <u>l</u>	<u>Baked</u>	<u>0.36</u> (3.0)	<u>0.61</u> (5.06)
<u>CC)</u>	Electric coating	eal switchgear compartment s		
	<u>i)</u>	<u>Air Drieddried</u> :	<u>0.42</u>	<u>0.80</u>
			<u>(3.5)</u>	<u>(6.67)</u>
	<u>ii)</u>	<u>Baked</u>	<u>0.36</u>	<u>0.61</u>
			<u>(3.0)</u>	<u>(5.06)</u>
<u>DD)</u>	All other	er coatings		
	<u>i)</u>	Air Dried:	0.40	<u>.73</u>
			(3.3)	(5.98)
	<u>ii)</u>	Baked:	<u>0.34</u> (2.8)	<u>0.54</u> (4.52)

Plastic Parts and Products: Miscellaneous. For purposes of this subsection (q)(2), miscellaneous plastic parts and products are plastic parts and products that are not subject to subsection (q)(3), (q)(4), (q)(5), or (q)(6) of this Section. The limitations in subsection (q)(2) shall not apply to touch-up and repair coatings; stencil coats applied on clear or transparent substrates; clear or translucent coatings; coatings applied at a paint manufacturing facility while conducting performance tests on the coatings; any individual coating category used in volumes less than 189.2 liters (50 gallons) in any one calendar year, if the total usage of all such coatings does not exceed 756.9 liters (200 gallons) per calendar year per source and substitute compliant coatings are not available; reflective coatings applied to highway cones; mask coatings that are less than 0.5

mm thick (dried) if the area coated is less than 25 square inches; electromagnetic interference/radio frequency interference (EMI/RFI) shielding coatings; and heparin-benzalkonium chloride (HBAC)-containing coatings applied to medical devices if the total usage of all such coatings does not exceed 378.4 liters (100 gallons) per calendar year per source. The limitations in Section 218.219, however, shall apply to such coatings unless specifically excluded in Section 218.219.

		kg/l (lb/gal) coatings	kg/l (lb/gal) solids
<u>A)</u>	General one component coating	<u>0.28</u> (2.3)	<u>0.40</u> (3.35)
<u>B)</u>	General multi-component	<u>0.42</u> (3.5)	<u>0.80</u> (6.67)
<u>C)</u>	Electric dissipating coatings and shock-free coatings	<u>0.80</u> (6.7)	8.96 (74.7)
<u>D)</u>	Extreme performance (2-pack coatings)	<u>0.42</u> (3.5)	<u>0.80</u> (6.67)
<u>E)</u>	Metallic coating	<u>0.42</u> (3.5)	<u>0.80</u> (6.67)
<u>F)</u>	Military specification coating		
	i) 1-pack coatings	<u>0.28</u> (2.3)	<u>0.54</u> (4.52)
	ii) 2-pack coatings	<u>0.42</u> (3.5)	<u>0.80</u> (6.67)
<u>G)</u>	Mold-seal coating	<u>0.76</u> (6.3)	<u>5.24</u> (43.7)
<u>H)</u>	Multi-colored coating	<u>0.68</u> (5.7)	3.04 (25.3)
<u>I)</u>	Optical coating	0.80 (6.7)	8.96 (74.7)
<u>J)</u>	Vacuum-metalizing coating	<u>0.80</u>	<u>8.96</u>

				<u>(6.7)</u>	<u>(74.7)</u>
3)			s and Products: e/Transportation		
				kg/l (lb/gal) coatings	kg/l (lb/gal) solids
	<u>A)</u>		h bake coatings – interior and erior parts		
		<u>i)</u>	Flexible primer	<u>0.54</u> (4.5)	1.39 (11.58)
		<u>ii)</u>	Non-flexible primer	<u>0.42</u> <u>(3.5)</u>	<u>0.80</u> (6.67)
		<u>iii)</u>	Basecoats	<u>0.52</u> (4.3)	1.24 (10.34)
		<u>iv)</u>	<u>Clear coat</u>	<u>0.48</u> (4.0)	1.05 (8.76)
		<u>v)</u>	Non-basecoat/clear coat	<u>0.52</u> (4.3)	1.24 (10.34)
	<u>B)</u>		v bake/air dried coatings — erior parts		
		<u>i)</u>	<u>Primers</u>	<u>0.58</u> (4.8)	1.66 (13.80)
		<u>ii)</u>	Basecoat	<u>0.60</u> (5.0)	1.87 (15.59)
		<u>iii)</u>	<u>Clear coats</u>	<u>0.54</u> (4.5)	1.39 (11.58)
		<u>iv)</u>	Non-basecoat/clear coat	<u>0.60</u> (5.0)	1.87 (15.59)
	<u>C)</u>		v bake/air dried coatings – rior parts		

	<u>i)</u>	<u>Color coat</u>	<u>0.38</u> (3.2)	<u>0.67</u> (5.66)
	<u>ii)</u>	<u>Primer</u>	<u>0.42</u> (3.5)	0.80 (6.67)
<u>D)</u>	<u>Tou</u>	chup and repair coatings	<u>0.62</u> (5.2)	2.13 (17.72)
<u>E)</u>	Spe	cialty		
	<u>i)</u>	Vacuum metallizing basecoats, texture basecoats	<u>0.66</u> (5.5)	2.62 (21.8)
	<u>ii)</u>	Reflective argent coatings, air bag cover coatings, and soft coatings	<u>0.71</u> (5.9)	3.64 (29.7)
	<u>iii)</u>	Gloss reducers, vacuum metallizing topcoats, and texture topcoats	<u>0.77</u> (6.4)	6.06 (49.1)
	<u>iv)</u>	Stencil coats, adhesion primers, ink pad coatings, electrostatic prep coats, and resist coats	<u>0.82</u> (6.8)	(11.67) (89.4)
	<u>v)</u>	Head lamp lens coating	0.89 (7.4)	

- F) Red, yellow, and black coatings: Subject coating lines shall comply with a limit determined by multiplying the appropriate limit in subsections (q)(3)(A) through (q)(3)(E) of this Section by 1.15.
- 4) Plastic Parts and Products: Business Machine. The limitations of this subsection (q)(4) shall not apply to vacuum metallizing coatings, gloss reducers, texture topcoats, adhesion primers, electrostatic preparation coatings, stencil coats, and resist coats other than plating resist coats. The limitations in Section 218.219, however, shall apply to such coatings unless specifically excluded in Section 218.219.

kg/lkg/l(lb/gal)(lb/gal)coatingssolids

	<u>A)</u>	<u>Primers</u>	<u>0.14</u> (1.2)	<u>0.17</u> (1.4)
	<u>B)</u>	<u>Topcoat</u>	<u>0.35</u> (2.9)	<u>0.57</u> (4.80)
	<u>C)</u>	Color coat (texture coat)	<u>0.28</u> (2.3)	<u>0.40</u> (4.80)
	<u>D)</u>	Color coat (non-texture coat)	<u>0.28</u> (2.3)	<u>0.40</u> (4.80)
	<u>E)</u>	Texture coats other than color texture coats	<u>0.35</u> (2.9)	<u>0.57</u> (4.80)
	<u>F)</u>	EMI/RFI shielding coatings	<u>0.48</u> (4.0)	1.05 (8.76)
	<u>G)</u>	Fog coat	<u>0.26</u> (2.2)	<u>0.38</u> (3.14)
	<u>H)</u>	Touchup and repair	<u>0.35</u> (2.9)	<u>0.57</u> (4.80)
	<u>I)</u>	Specialty coatings		
		i) Soft coat	<u>0.52</u> (4.3)	1.24 (10.34)
		ii) Plating resist	<u>0.71</u> (5.9)	3.64 (29.7)
		iii) Plating sensitizer	<u>0.85</u> (7.1)	(23.4) (201.0)
5)	Pleasu	re Craft Surface Coatings		
			kg/l (lb/gal) coatings	kg/l (lb/gal) solids
	<u>A)</u>	Extreme high gloss coating – topcoat	<u>0.49</u> (4.1)	1.10 (9.2)
	<u>B)</u>	<u>High gloss coating – topcoat</u>	0.42	<u>0.80</u>

			(3.5)	<u>(6.7)</u>
	<u>C)</u>	Pretreatment wash primer	<u>0.78</u> (6.5)	6.67 (55.6)
	<u>D)</u>	Finish primer/surfacer	<u>0.42</u> (3.5)	<u>0.80</u> (6.7)
	<u>E)</u>	High build primer/surfacer	<u>0.34</u> (2.8)	<u>0.55</u> (4.6)
	<u>F)</u>	Aluminum substrate antifoulant coating	<u>0.56</u> (4.7)	1.53 (12.8)
	<u>G)</u>	Other substrate antifoulant coating	<u>0.33</u> (2.8)	<u>0.53</u> (4.4)
	<u>H)</u>	All other pleasure craft surface coatings for metal or plastic	<u>0.42</u> (3.5)	0.80 (6.7)
6)	Motor	Vehicle Materials		
			kg/l (lb/gal) coatings	
	<u>A)</u>	<u>Cavity wax</u>	(lb/gal)	
	<u>A)</u> <u>B)</u>	Cavity wax Sealer	(lb/gal) coatings 0.65	
			(lb/gal) coatings 0.65 (5.42) 0.65	
	<u>B)</u>	Sealer	(lb/gal) coatings 0.65 (5.42) 0.65 (5.42) 0.65	
	<u>B)</u>	Sealer Deadener	(lb/gal) coatings 0.65 (5.42) 0.65 (5.42) 0.65 (5.42) 0.65 (5.42)	
	<u>B)</u> <u>C)</u> <u>D)</u>	Sealer Deadener Gasket/gasket sealing material	(lb/gal) coatings 0.65 (5.42) 0.65 (5.42) 0.65 (5.42) 0.20 (1.67) 0.65	

				<u>(1.67)</u>
	<u>H)</u>	Lubricating wa	ax/compound	<u>0.70</u> (5.84)
(Source: An	nended a	at 34 Ill. Reg	, effective)

Section 218.205 Daily-Weighted Average Limitations

No owner or operator of a coating line subject to the limitations of Section 218.204 of this Subpart and complying by means of this Section shall operate the subject coating line unless the owner or operator has demonstrated compliance with subsection (a), (b), (c), (d), (e), (f), (g), (h), (i), or (k) of this Section (depending upon the category of coating) through the applicable coating analysis test methods and procedures specified in Section 218.105(a) of this Part and the recordkeeping and reporting requirements specified in Section 218.211(d) of this Subpart:

- a) No owner or operator of a coating line subject to only one of the limitations from among Section 218.204(a)(1)(A), (a)(1)(D)(4), (a)(2)(A), (a)(2)(E), (a)(2)(F), (c)(1), (d), (e), (f), (i), or (p), or, prior to May 1, 2011, (e) of this Subpart shall apply coatings on any such coating line, during any day, whose daily-weighted average VOM content exceeds the emission limitation to which the coatings are subject.
- b) <u>Prior to May 1, 20122011,</u> noNo owner or operator of a miscellaneous metal parts and products coating line subject to the limitations of Section 218.204(j) of this Subpart shall apply coatings to miscellaneous metal parts or products on the subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this Section are met.
 - 1) For each coating line which applies multiple coatings, all of which are subject to the same numerical emission limitation within Section 218.204(j) during the same day (e.g., all coatings used on the line are subject to 0.42 kg/l (3.5 lbs/gal)), the daily-weighted average VOM content shall not exceed the coating VOM content limit corresponding to the category of coating used; or
 - Policy Statement (and related policy), 51 Fed. Reg. 43814 (December 4, 1986), must be satisfied.

- c) No owner or operator of a can coating line subject to the limitations of Section 218.204(b) of this Subpart shall operate the subject coating line using a coating with a VOM content in excess of the limitations specified in Section 218.204(b) of this Subpart unless all of the following requirements are met:
 - An alternative daily emission limitation shall be determined for the can coating operation, i.e., for all of the can coating lines at the source, according to subsection (c)(2) of this Section. Actual daily emissions shall never exceed the alternative daily emission limitation and shall be calculated by use of the following equation.

$$E_d = \sum_{i=1}^n V_i C_i$$

where:

 E_d = Actual VOM emissions for the day in units of kg/day (lbs/day);

i = Subscript denoting a specific coating applied;

n = Total number of coatings applied in the can coating operation, i.e., all can coating lines at the source;

V_i = Volume of each coating applied for the day in units of I/day (gal/day) of coating (minus water and any compounds that are specifically exempted from the definition of VOM);

C_i = The VOM content of each coating as applied in units of kg VOM/l (lbs VOM/gal) of coating (minus water and any compounds that are specifically exempted from the definition of VOM).

2) The alternative daily emission limitation (A_d) shall be determined for the can coating operation, i.e., for all of the can coating lines at the source, on a daily basis as follows:

$$A_{d} = \sum_{i=1}^{n} V_{i} L_{i} \left(\frac{D_{i} - C_{i}}{D_{i} - L_{i}} \right)$$

where:

 A_d = The VOM emissions allowed for the day in units of kg/day (lbs/day);

- i = Subscript denoting a specific coating applied;
- n = Total number of surface coatings applied in the can coating operation;
- C_i = The VOM content of each surface coating as applied in units of kg VOM/l (lbs VOM/gal) of coating (minus water and any compounds that are specifically exempted from the definition of VOM);
- D_i = The density of VOM in each coating applied. For the purposes of calculating A_d , the density is 0.882 kg VOM/l VOM (7.36 lbs VOM/gal VOM);
- V_i = Volume of each surface coating applied for the day in units of l
 (gal) of coating (minus water and any compounds that are specifically exempted from the definition of VOM);
- L_i = The VOM emission limitation for each surface coating applied as specified in Section 218.204(b) of this Subpart in units of kg VOM/l (lbs VOM/gal) of coating (minus water and any compounds that are specifically exempted from the definition of VOM).
- d) No owner or operator of a heavy off-highway vehicle products coating line subject to the limitations of Section 218.204(k) of this Subpart shall apply coatings to heavy off-highway vehicle products on the subject coating line unless the requirements of subsection (d)(1) or (d)(2) of this Section are met.
 - 1) For each coating line which applies multiple coatings, all of which are subject to the same numerical emission limitation within Section 218.204(k) of this Subpart, during the same day (e.g., all coatings used on the line are subject to 0.42 kg/l (3.5 lbs/gal)), the daily-weighted average VOM content shall not exceed the coating VOM content limit corresponding to the category of coating used; or
 - 2) For each coating line which applies coatings subject to more than one numerical emission limitation in Section 218.204(k) of this Subpart, during the same day, the owner or operator shall have a site specific proposal approved by the Agency and approved by the USEPA as a SIP revision. To receive approval, the requirements of USEPA's Emissions Trading Policy Statement (and related policy), 51 Fed. Reg. 43814 (December 4, 1986), must be satisfied.
- e) No owner or operator of a wood furniture coating line subject to the limitations of Section 218.204(l)(1) or (l)(3) of this Subpart shall apply coatings to wood

furniture on the subject coating line unless the requirements of subsection (e)(1) or subsection (e)(2) of this Section, in addition to the requirements specified in the note to Section 218.204(l)(1) of this Subpart, are met.

- 1) For each coating line which applies multiple coatings, all of which are subject to the same numerical emission limitation within Section 218.204(l)(1) or (l)(3) of this Subpart, during the same day (e.g., all coatings used on the line are subject to 0.67 kg/l (5.6 lbs/gal)), the daily-weighted average VOM content shall not exceed the coating VOM content limit corresponding to the category of coating used; or
- Professional Series applies coatings subject to more than one numerical emission limitation in Section 218.204(l)(1) or (l)(3) of this Subpart, during the same day, the owner or operator shall have a site specific proposal approved by the Agency and approved by the USEPA as a SIP revision. To receive approval, the requirements of USEPA's Emissions Trading Policy Statement (and related policy), 51 Fed. Reg. 43814 (December 4, 1986), must be satisfied.
- f) No owner or operator of an existing diesel-electric locomotive coating line in Cook County, subject to the limitations of Section 218.204(m) of this Subpart shall apply coatings to diesel-electric locomotives on the subject coating line unless the requirements of subsection (f)(1) or (f)(2) of this Section are met.
 - 1) For each coating line which applies multiple coatings, all of which are subject to the same numerical emission limitation within Section 218.204(m) of this Subpart, during the same day (e.g., all coatings used on the line are subject to 0.42 kg/l (3.5 lbs/gal)), the daily-weighted average VOM content shall not exceed the coating VOM content limit corresponding to the category of coating used; or
 - 2) For each coating line which applies coatings subject to more than one numerical emission limitation in Section 218.204(m) of this Subpart, during the same day, the owner or operator shall have a site specific proposal approved by the Agency and approved by the USEPA as a SIP revision. To receive approval, the requirements of USEPA's Emissions Trading Policy Statement (and related policy) must be satisfied.
- g) <u>Prior to May 1, 2012</u>2011, noNo owner or operator of a plastic parts coating line, subject to the limitations of Section 218.204(n) or (o) of this Subpart shall apply coatings to business machine or automotive/transportation plastic parts on the subject coating line unless the requirements of subsection (g)(1) or (g)(2) of this Section are met:

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- For each coating line which applies multiple coatings, all of which are subject to the same numerical emission limitation within Section 218.204(n) or (o) of this Subpart, during the same day (e.g., all coatings used on the line are subject to 0.42 kg/l (3.5 lbs/gal)), the daily-weighted average VOM content shall not exceed the coating VOM content limit corresponding to the category of coating used; or
- 2) For each coating line which applies coatings subject to more than one numerical emission limitation in Section 218.204(n) or (o) of this Subpart, during the same day, the owner or operator shall have a site specific proposal approved by the Agency and approved by the USEPA as a SIP revision. To receive approval, the requirements of USEPA's Emissions Trading Policy Statement (and related policy) must be satisfied.
- h) No owner or operator of a metal furniture coating line, subject to the limitations of Section 218.204(g) of this Subpart shall apply coatings on the subject coating line unless the requirements of subsection (h)(1) or (h)(2) of this Section are met:
 - 1) For each coating line which applies multiple coatings, all of which are subject to the same numerical emission limitation within Section 218.204(g) of this Subpart, during the same day (e.g., all coatings used on the line are subject to 0.34 kg/l (2.8 lbs/gal)), the daily-weighted average VOM content shall not exceed the coating VOM content limit corresponding to the category of coating used; or
 - 2) For each coating line which applies coatings subject to more than one numerical emission limitation in Section 218.204(g) of this Subpart, during the same day, the owner or operator shall have a site specific proposal approved by the Agency and approved by the USEPA as a SIP revision. To receive approval, the requirements of USEPA's Emissions Trading Policy Statement (and related policy) must be satisfied.
- i) No owner or operator of a large appliance coating line, subject to the limitations of Section 218.204(h) of this Subpart shall apply coatings on the subject coating line unless the requirements of subsection (i)(1) or (i)(2) of this Section are met:
 - 1) For each coating line which applies multiple coatings, all of which are subject to the same numerical emission limitation within Section 218.204(h) of this Subpart, during the same day (e.g., all coatings used on the line are subject to 0.34 kg/l (2.8 lbs/gal)), the daily-weighted average VOM content shall not exceed the coating VOM content limit corresponding to the category of coating used; or
 - 2) For each coating line which applies coatings subject to more than one numerical emission limitation in Section 218.204(h) of this Subpart,

during the same day, the owner or operator shall have a site specific proposal approved by the Agency and approved by the USEPA as a SIP revision. To receive approval, the requirements of USEPA's Emissions Trading Policy Statement (and related policy) must be satisfied.

- j) On and after May 1, 2011, no owner or operator of a paper coating line subject to the limitations of Section 218.204(c) of this Subpart shall apply coatings on the subject coating line unless the requirements in subsection (j)(1) or (j)(2) of this Section are met:
 - 1) For each coating line that applies multiple coatings, all of which are subject to the same numerical emission limitation within Section 218.204(c) during the same day (e.g., all coatings used on the line are subject to 0.40 kg/kg solids (0.08 kg/kg coatings)), the daily-weighted average VOM content shall not exceed the coating VOM content limit corresponding to the category of coating used; or
 - 2) For each coating line that applies coatings subject to more than one numerical emission limitation in Section 218.204(c) during the same day, the owner or operator shall have a site-specific proposal approved by the Agency and approved by USEPA as a SIP revision. To receive approval, the requirements of USEPA's Emissions Trading Policy Statement (and related policy), 51 Fed. Reg. 43814 (December 4, 1986), must be satisfied.
- On and after May 1, 2012 2011, no owner or operator of a miscellaneous metal parts and products coating line, plastic parts or products coating line, pleasure craft surface coating line, or motor vehicle materials coating line subject to the limitations of Section 218.204(q) of this Subpart shall apply coatings on the subject coating line unless the requirements of subsection (k½)(1) or (k½)(2) of this Section are met:
 - For each coating line that applies multiple coatings, all of which are subject to the same numerical emission limitation within Section 218.204(q) of this Subpart, during the same day (e.g., all coatings used on the line are subject to 0.42 kg/l (3.5 lbs/gal)), the daily-weighted average VOM content shall not exceed the coating VOM content limit corresponding to the category of coating used; or
 - 2) For each coating line that applies coatings subject to more than one numerical emission limitation in Section 218.204(q) of this Subpart, during the same day, the owner or operator shall have a site specific proposal approved by the Agency and approved by USEPA as a SIP revision. To receive approval, the requirements of USEPA's Emissions Trading Policy Statement (and related policy) must be satisfied.

(Source:	Amended at	t 34 III.	Reg.	, effective)
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Section 218.207 Alternative Emission Limitations

- a) Any owner or operator of a coating line subject to Section 218.204 of this Subpart, except coating lines subject to Section 218.204(q)(6), may comply with this Section, rather than with Section 218.204 of this Subpart, if a capture system and control device are operated at all times the coating line is in operation and the owner or operator demonstrates compliance with subsections (c), (d), (e), (f), (g), (h), (i), (j), (k), (l), $\frac{\partial \mathbf{r}}{\partial t}$ (m), or (n) of this Section (depending upon the source category) through the applicable coating analysis and capture system and control device efficiency test methods and procedures specified in Section 218.105 of this Part and the recordkeeping and reporting requirements specified in Section 218.211(e) of this Subpart; and the control device is equipped with the applicable monitoring equipment specified in Section 218.105(d) of this Part and the monitoring equipment is installed, calibrated, operated and maintained according to vendor specifications at all times the control device is in use. A capture system and control device, which does not demonstrate compliance with subsection (c), (d), (e), (f), (g), (h), (i), (j), (k), (l), $\frac{\partial F}{\partial x}$ (m), or (n), of this Section may be used as an alternative to compliance with Section 218.204 of this Subpart only if the alternative is approved by the Agency and approved by the USEPA as a SIP revision. The owner or operator of a pleasure craft surface coating operation subject to Section 218.204(q)(5)(A) through (G) of this Subpart may also comply with subsection (o) of this Section, rather than with Section 218.204 of this Subpart.
- b) Alternative Add-On Control Methodologies
 - 1) The coating line is equipped with a capture system and control device that provides 81 percent reduction in the overall emissions of VOM from the coating line and the control device has a 90 percent efficiency; or
 - The system used to control VOM from the coating line is demonstrated to have an overall efficiency sufficient to limit VOM emissions to no more than what is allowed under Section 218.204 of this Subpart. Use of any control system other than an afterburner, carbon adsorption, condensation, or absorption scrubber system can be allowed only if approved by the Agency and approved by the USEPA as a SIP revision. The use of transfer efficiency credits can be allowed only if approved by the Agency and approved by the USEPA as a SIP revision. Baseline transfer efficiencies and transfer efficiency test methods must be approved by the Agency and the USEPA. Such overall efficiency is to be determined as follows:
 - A) Obtain the emission limitation from the appropriate subsection in Section 218.204 of this Subpart;

- B) Unless complying with an emission limitation in Section 218.204 that is already expressed in terms of weight of VOM per volume of solids, calculate Calculate "S" according to the equation in Section 218.206 of this Subpart;
- C) Calculate the overall efficiency required according to Section 218.105(e) of this Part. For the purposes of calculating this value, according to the equation in Section 218.105(e)(2) of this Part, VOM₁ is equal to the value of "S" as determined in subsection (b)(2)(B) of this Section. If the coating line is complying with an emission limitation in Section 218.204 of this Subpart that is already expressed in terms of weight of VOM per volume of solids, VOM₁ is equal to that emission limitation.
- No owner or operator of a coating line subject to only one of the emission limitations from among Section 218.204(a)(1)(A), (a)(1)(D)(4), (a)(2)(A), (a)(2)(E), (a)(2)(F), (c)(1), (d), (e), (f), or (i), or, prior to May 1, 2011, (e) of this Subpart and equipped with a capture system and control device shall operate the subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this Section are met. No owner or operator of a coating line subject to Section 218.204(a)(1)(B)(2), or (a)(1)(C)(3), (a)(2)(B), (a)(2)(C), or (a)(2)(D) of this Subpart and equipped with a capture system and control device shall operate the coating line unless the owner or operator demonstrates compliance with such limitation in accordance with the topcoat protocol referenced in Section 218.105(b)(1)(A) or (b)(1)(B), as applicable.
- d) No owner or operator of a miscellaneous metal parts and products coating line that applies one or more coatings during the same day, all of which are subject to the same numerical emission limitation within Section 218.204(j) of this Subpart (e.g., all coatings used on the line are subject to 0.42 kg/l (3.5 lbs/gal), and that is equipped with a capture system and control device shall operate the subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this Section are met.
- e) No owner or operator of a heavy off-highway vehicle products coating line that applies one or more coatings during the same day, all of which are subject to the same numerical emission limitation within Section 218.204(k) of this Subpart (e.g., all coatings used on the line are subject to 0.42 kg/1 (3.5 lbs/gal)), and that is equipped with a capture system and control device shall operate the subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this Section are met.
- f) No owner or operator of an existing diesel-electric locomotive coating line in Cook County that applies one or more coatings during the same day, all of which

are subject to the same numerical emission limitation within Section 218.204(m) of this Subpart (e.g., all coatings used on the line are subject to 0.42 kg/1 (3.5 lbs/gal)), and that is equipped with a capture system and control device shall operate the subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this Section are met.

- No owner or operator of a wood furniture coating line that applies one or more coatings during the same day, all of which are subject to the same numerical emission limitation within Section 218.204(l) of this Subpart (e.g., all coatings used on the line are subject to 0.67 kg/l (5.6 lbs/gal)), and that is equipped with a capture system and control device shall operate the subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this Section are met. If compliance is achieved by meeting the requirements in subsection (b)(2) of this Section, then the provisions in the note to Section 218.204(l) of this Subpart must also be met.
- h) No owner or operator of a can coating line that is equipped with a capture system and control device shall operate the subject coating line unless the requirements in subsection (h)(1) or (h)(2) of this Section are met.
 - An alternative daily emission limitation shall be determined for the can coating operation, i.e., for all of the can coating lines at the source, according to Section 218.205(c)(2) of this Subpart. Actual daily emissions shall never exceed the alternative daily emission limitation and shall be calculated by use of the following equation:

$$E_d = \sum_{i=1}^n V_i C_i \left(1 - F_i \right)$$

where:

 E_d = Actual VOM emissions for the day in units of kg/day (lbs/day);

i = Subscript denoting the specific coating applied;

n = Total number of surface coatings as applied in the can coating operation;

 V_i = Volume of each coating as applied for the day in units of l/day (gal/day) of coating (minus water and any compounds that are specifically exempted from the definition of VOM);

- C_i = The VOM content of each coating as applied in units of kg VOM/l (lbs VOM/gal) of coating (minus water and any compounds that are specifically exempted from the definition of VOM); and
- F_i = Fraction, by weight, of VOM emissions from the surface coating, reduced or prevented from being emitted to the ambient air. This is the overall efficiency of the capture system and control device.
- 2) The coating line is equipped with a capture system and control device that provide 75 percent reduction in the overall emissions of VOM from the coating line and the control device has a 90 percent efficiency.
- i) No owner or operator of a plastic parts coating line, that applies one or more coatings during the same day, all of which are subject to the same numerical emission limitation within Section 218.204(n) or (o) of this Subpart (e.g., all coatings used on the line are subject to 0.42 kg/l (3.5 lbs/gal)), and that is equipped with a capture system and control device shall operate the subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this Section are met.
- j) Prior to May 1, 2011, no owner or operator of a metal furniture coating line that applies one or more coatings during the same day, all of which are subject to the same numerical emission limitation within Section 218.204(g) of this Subpart (e.g., all coatings used on the line are subject to 0.34 kg/l (2.8 lbs/gal)), and that is equipped with a capture system and control device shall operate the subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this Section are met.
- k) Prior to May 1, 2011, no owner or operator of a large appliance coating line that applies one or more coatings during the same day, all of which are subject to the same numerical emission limitation within Section 218.204(h) of this Subpart (e.g., all coatings used on the line are subject to 0.34 kg/l (2.8 lbs/gal)), and that is equipped with a capture system and control device shall operate the subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this Section are met.
- 1) On and after May 1, 2011, no owner or operator of a paper coating line, metal furniture coating line, or large appliance coating line that is equipped with a capture system and control device shall operate the subject coating line unless either:
 - 1) The capture system and control device provide at least 90 percent reduction in the overall emissions of VOM from the coating line; or

- 2) The owner or operator complies with the applicable limitation set forth in Section 218.204 of this Subpart by utilizing a combination of low-VOM coatings and a capture system and control device.
- m) No owner or operator of a flat wood paneling coating line that is equipped with a capture system and control device shall operate the subject coating line unless either:
 - 1) The capture system and control device provide at least 90 percent reduction in the overall emissions of VOM from the coating line; or
 - 2) The owner or operator of the flat wood paneling coating line complies with all requirements set forth in subsection (b)(2) of this Section.
- <u>4n)</u> On and after May 1, 20122011, no owner or operator of a miscellaneous metal parts and products coating line, plastic parts and products coating line, or pleasure craft surface coating line that is equipped with a capture system and control device shall operate the subject coating line unless:
 - 1) The capture system and control device provide at least 90 percent reduction in the overall emissions of VOM from the coating line; or
 - 2) The owner or operator of the coating line complies with all requirements set forth in subsection (b)(2) of this Section.
- Emissions Averaging Alternative for Pleasure Craft Surface Coating Operations.

 The owner or operator of a source with coating operations subject to the requirements of Section 218.204(q)(5)(A) through (G) may elect to include such operations in the emissions averaging alternative. Coating operations utilizing this alternative shall comply with a source-specific VOM emission limit on a 12-month rolling average basis, calculated at the end of each calendar month.

 Subject coating operations that do not utilize the emissions averaging alternative, and coating operations subject to Section 218.204(q)(5)(H), shall comply with the requirements in Section 218.204(q)(5) or 218.205, or subsection (n) of this Section, as applicable, as well as with all other applicable requirements in this Subpart.
 - The total actual VOM emissions determined by Equation 2 shall be equal to or less than the total allowable VOM emissions determined by Equation

 1. The owner or operator of a source subject to this subsection (o) shall use Equation 1 to determine the total allowable source-specific VOM mass emission limit for pleasure craft coatings included in the emissions average:

Equation 1:

$$VOM_{Allowable} \ = \sum_{i=A}^{G} LIM_{i}V_{i}$$

Where:

Total allowable mass of VOM that can be emitted $VOM_{Allowable} \equiv$

> from the pleasure craft coating operations included in the average, expressed in kilograms per 12-month

period.

<u>LIM</u>i The applicable VOM content limit for a specified \equiv

pleasure craft coating category from Section 218.204(q)(5)(A) through (G), expressed in

kilograms per liter.

 V_i Volume of specified pleasure craft coating category \equiv

> from Section 218.204(q)(5)(A) through (G) used in the past 12 months, excluding water and any compounds that are exempt, expressed in liters.

<u>i</u> Subscript denoting a specific pleasure craft coating \equiv

category from Section 218.204(q)(5)(A) through

(G)

At the end of the first 12-month averaging period, and at the end of each 2) subsequent month, the owner or operator of a source subject to this subsection (o) shall use Equation 2 to calculate the total actual VOM emissions from the pleasure craft coating operations included in the emissions average.

Equation 2:

$$VOM_{Actual} = \sum_{i=A}^{G} VOM_i V_i$$

Where:

VOM_{Actual} VOM emissions calculated using the VOM content \equiv

for all coatings from Section 218.204(q)(5)(A) through (G) that are included in the average and the volume of those coatings used, expressed in

kilograms.

<u>VOMi</u> = Weighted average of actual VOM content for a specified pleasure craft coating category from Section 218.204(q)(5)(A) through (G), expressed in kilograms per liter.
 <u>Vi</u> = Total volume of specified pleasure craft coating category from Section 218.204(q)(5)(A) through (G) used in the past 12 months, excluding water and any compounds that are exempt, expressed in liters.
 <u>i</u> = Subscript denoting a specific pleasure craft coating category from Section 218.204(q)(5)(A) through

3) For purposes of Equation 2, the owner or operator of a source subject to this subsection (o) shall use Equation 3 to calculate the weighted average VOM content for each coating included in the emissions average for the previous 12 months.

(G).

Equation 3:

$$VOM_{i} = \frac{\sum_{j=1}^{n} VOM_{j}V_{j}}{\sum_{j=1}^{n} V_{j}}$$

Where:

 $\frac{VOM_{\underline{i}}}{Section \ 218.204(\underline{q})(5)(\underline{A})} \equiv \frac{\underline{Weighted \ average \ of \ actual \ VOM \ content \ for \ a}}{\underline{Section \ 218.204(\underline{q})(5)(\underline{A}) \ through \ (\underline{G}), \ expressed \ in}}$

 $\frac{\text{VOM}_{j}}{\text{over the previous 12 months within a specific}} \equiv \frac{\text{VOM content of each pleasure craft coating used}}{\text{over the previous 12 months within a specific}}$

 $\underline{V_i}$ \equiv Volume of each pleasure craft coating used in the previous 12 months, excluding water and any compounds that are exempt, within a specific pleasure craft coating category, i.

 $= \underbrace{ \begin{array}{c} \underline{Subscript \ denoting \ a \ specific \ pleasure \ craft \ coating} \\ \underline{category \ from \ Section \ 218.204(q)(5)(A) \ through} \\ \underline{(G)}. \end{array} }$

j <u>Subscript denoting a specific pleasure craft coating</u>

within a specified coating category, i.

<u>Number of coatings applied within a specific</u>

coating category, i.

(Source: Amended at 34 Ill. Reg. _____, effective _____)

Section 218.208 Exemptions from Emission Limitations

- a) Exemptions for all coating categories except wood furniture coating. The limitations of this Subpart shall not apply to coating lines within a source, that otherwise would be subject to the same subsection of Section 218.204 (because they belong to the same coating category, e.g., can coating), provided that combined actual emissions of VOM from all lines at the source subject to that subsection never exceed 6.8 kg/day ([15 lbs/day]) before the application of capture systems and control devices. (For example, can coating lines within a source would not be subject to the limitations of Section 218.204(b) of this Subpart if the combined actual emissions of VOM from the can coating lines never exceed 6.8 kg/day ({15 lbs/day}) before the application of capture systems and control devices.) Prior to May 1, 20122011, volatile Volatile organic material emissions from heavy off-highway vehicle products coating lines must be combined with VOM emissions from miscellaneous metal parts and products coating lines to determine applicability. On and after May 1, 20122011, VOM emissions from heavy off-highway vehicle products coating lines shall be combined with VOM emissions from miscellaneous metal arts and products coating lines and plastic parts and products coatings lines to determine applicability. Any owner or operator of a coating source shall comply with the applicable coating analysis test methods and procedures specified in Section 218.105(a) of this Part and the recordkeeping and reporting requirements specified in Section 218.211(a) of this Subpart if total VOM emissions from the subject coating lines are always less than or equal to 6.8 kg/day (£15 lbs/day-) before the application of capture systems and control devices and, therefore, are not subject to the limitations of Section 218.204 of this Subpart. Once a category of coating lines at a source is subject to the limitations in Section 218.204 of this Subpart the coating lines are always subject to the limitations in Section 218.204 of this Subpart.
- b) Applicability for wood furniture coating
 - The limitations of this Subpart shall apply to a source's wood furniture coating lines if the source contains process emission units, not regulated by Subparts B, E, F (excluding Section 218.204(l) of this Subpart), H (excluding Section 218.405 of this Part), Q, R, S, T (excluding Section 218.486 of this Part), V, X, Y, Z or BB of this Part, which as a group both:

- A) Have a maximum theoretical emissions of 91 Mg (100 tons) or more per calendar year of VOM if no air pollution control equipment were used; and
- B) Are not limited to less than 91 Mg (100 tons) of VOM per calendar year if no air pollution control equipment were used, through production or capacity limitations contained in a federally enforceable permit or SIP revision.
- The limitations of this Subpart shall apply to a source's wood furniture coating lines, on and after March 15, 1996, if the source contains process emission units, which as a group, have a potential to emit 22.7 Mg (25 tons) or more of VOM per calendar year and have not limited emissions to less than 22.7 Mg (25 tons) of VOM per calendar year through production or capacity limitations contained in a federally enforceable operating permit or SIP revision, and that which:
 - A) Are not regulated by Subparts B, E, F (excluding Section 218.204(l) of this Subpart), H, Q, R, S, T (excluding Section 218.486 of this Part), V, X, Y, Z or BB of this Part; and
 - B) Are not included in any of the following categories: synthetic organic chemical manufacturing industry (SOCMI) distillation, SOCMI reactors, plastic parts coating (business machines), plastic parts coating (other), offset lithography, industrial wastewater, autobody refinishing, SOCMI batch processing, volatile organic liquid storage tanks and clean-up solvents operations.
- 3) If a source ceases to fulfill the criteria of subsection (b)(1) or (b)(2) of this Section, the limitations of Section 218.204(l) of this Subpart shall continue to apply to any wood furniture coating line which was ever subject to the limitations of Section 218.204(l) of this Subpart.
- 4) For the purposes of subsection (b) of this Section, an emission unit shall be considered to be regulated by a Subpart if it is subject to the limitations of that Subpart. An emission unit is not considered regulated by a Subpart if it is not subject to the limits of that Subpart, e.g., the emission unit is covered by an exemption in the Subpart or the applicability criteria of the Subpart are not met.
- Any owner or operator of a wood furniture coating line to which the limitations of this Subpart are not applicable due to the criteria in subsection (b) of this Section shall, upon request by the Agency or the USEPA, submit records to the Agency and the USEPA within 30 calendar

days from the date of the request that document that the coating line is exempt from the limitations of this Subpart.

- On and after March 15, 1996, the limitations of this Subpart shall not apply to touch-up and repair coatings used by a coating source described by <u>Sectionsubsections</u> 218.204(b), (d), (f), (g), and (i), (j), (n) and (o) of this Subpart; provided that the source-wide volume of such coatings used does not exceed 0.95 1 (1 quart) per eight-hour period or exceed 209 1/yr (£55 gal/yr]) for any rolling <a href="Text-up-the-limits-text-up
- d) Prior to May 1, 2012 2014, the limitations of this Subpart shall not apply to touch-up and repair coatings used by a coating source described in Section 218.204(j), (n), and (o) of this Subpart, provided that the source-wide volume of the coatings used does not exceed 0.95 l (1 quart) per eight-hour period or exceed 209 l/yr (55 gal/yr) for any rolling 12 month period. Recordkeeping and reporting for touch-up and repair coatings shall be consistent with subsection (e) of this Section.
- On and after March 15, 1996, the owner or operator of a coating line or a group of coating lines using touch-up and repair coatings that are exempted from the limitations of Section 218.204(b), (d), (f), (g), (i), (j), (n) and (o) of this Subpart because of the provisions of <u>subsectionSection-218.208</u> (c) or (d) of this <u>SectionSubpart</u> shall:
 - 1) Collect and record the name, identification number, and volume used of each touch-up and repair coating, as applied on each coating line, per eight-hour period and per month;
 - 2) Perform calculations on a daily basis, and maintain at the source records of such calculations, of the combined volume of touch-up and repair coatings used source-wide for each eight-hour period;
 - 3) Perform calculations on a monthly basis, and maintain at the source records of such calculations, of the combined volume of touch-up and repair coatings used source-wide for the month and the rolling 12 twelve month period;
 - Prepare and maintain at the source an annual summary of the information required to be compiled pursuant to subsections (ed)(1) and (ed)(2) of this Section on or before January 31 of the following year;
 - 5) Maintain at the source for a minimum period of three years all records required to be kept under this subsection (e) and make such records available to the Agency upon request;

- Notify the Agency in writing if the use of touch-up and repair coatings at the source ever exceeds a volume of 0.95 1 (1 quart) per eight-hour period or exceeds 209 1/yr (55 gal/yr) for any rolling 12 twelve month period within 30 days after any such exceedance. Such notification shall include a copy of any records of such exceedance; and
- 7) "Touch-up and repair coatings" means, for purposes of 35 Ill. Adm. Code 218.208, any coating used to cover minor scratches and nicks that occur during manufacturing and assembly processes.

(Source:	Amended a	t 20 III.	Reg.	, effective	`
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Section 218.210 Compliance Schedule

Every owner or operator of a coating line (of a type included within Section 218.204 of this Subpart) shall comply with the requirements of Section 218.204, 218.205, 218.207 or 218.208 and Section 218.211 or Sections 218.212 and 218.213 of this Subpart in accordance with the appropriate compliance schedule as specified in subsection (a), (b), (c), (d), (e), (f), (g), or (i) of this Section:

- a) No owner or operator of a coating line that is exempt from the limitations of Section 218.204 of this Subpart because of the criteria in Section 218.208(a) or (b) of this Subpart shall operate said coating line on or after a date consistent with Section 218.106 of this Part, unless the owner or operator has complied with, and continues to comply with, Section 218.211(b) of this Subpart.
- b) No owner or operator of a coating line complying by means of Section 218.204 of this Subpart shall operate said coating line on or after a date consistent with Section 218.106 of this Part, unless the owner or operator has complied with, and continues to comply with, Sections 218.204 and 218.211(c) of this Subpart.
- c) No owner or operator of a coating line complying by means of Section 218.205 of this Subpart shall operate said coating line on or after a date consistent with Section 218.106 of this Part, unless the owner or operator has complied with, and continues to comply with, Sections 218.205 and 218.211(d) of this Subpart.
- d) No owner or operator of a coating line complying by means of Section 218.207 of this Subpart shall operate said coating line on or after a date consistent with Section 218.106 of this Part, unless the owner or operator has complied with, and continues to comply with, Sections 218.207 and 218.211(e) of this Subpart.
- e) No owner or operator of a coating line subject to one or more of the emission limitations contained in Section 218.204 of this Subpart on or after March 15, 1996, choosing to comply by means of Section 218.204, 218.205 or 218.207 of this Subpart, shall operate said coating line on or after March 15, 1996, unless the

- owner or operator complies with and continues to comply with, respectively, the applicable requirements in Section 218.204, or the alternative control options in Section 218.205 or 218.207 and the requirements of Section 218.211.
- f) No owner or operator of a coating line subject to one or more of the emission limitations contained in Section 218.204 of this Subpart on or after March 15, 1996, choosing to comply by means of Section 218.212 of this Subpart, shall operate said coating line on or after March 15, 1996, unless the owner or operator complies with and continues to comply with the requirements of Sections 218.212 and 218.213 of this Subpart.
- g) No owner or operator of a coating line subject to the emission limitations in Section 218.204(c)(2), (g)(2), or (h)(2) of this Subpart shall operate that coating line on or after a date consistent with Section 218.106(e) of this Part, unless the owner or operator has complied with, and continues to comply with, Section 218.204(c)(2), (g)(2), or (h)(2), as applicable, or the alternative control options in Section 218.205 or 218.207, and all applicable requirements in Sections 218.211 and 218.218 of this Subpart.
- h) No owner or operator of a coating line subject to the emission limitations contained in Section 218.204(p) of this Subpart shall operate that coating line on or after a date consistent with Section 218.106(fe) of this Part, unless the owner or operator has complied with, and continues to comply with, Section 218.204(p) or the alternative control options in Section 218.205 or 218.207, and the requirements of Sections 218.211 and 218.217 of this Subpart, as applicable.
- No owner or operator of a coating line subject to the emissions limitations in Section 218.204(a)(2) or (q) of this Subpart, or subject to the limitations in Section 218.219 of this Subpart, shall operate the coating line on or after a date consistent with Section 218.106(ge) of this Part, unless the owner or operator has complied with, and continues to comply with, Sections 218.204(a)(2) or (q), if applicable, or the alternative control options in Section 218.205 or 218.207, and all applicable requirements in Section 218.211 and 218.219 of this Subpart.

(Source: Amended at 34 Ill. Reg. _____, effective _____)

Section 218.211 Recordkeeping and Reporting

a) The VOM content of each coating and the efficiency of each capture system and control device shall be determined by the applicable test methods and procedures specified in Section 218.105 of this Part to establish the records required under this Section.

- b) Any owner or operator of a coating line that is exempted from the limitations of Section 218.204 of this Subpart because of Section 218.208(a) or (b) of this Subpart shall comply with the following:
 - For sources exempt under Section 218.208(a) of this Subpart, by a date consistent with Section 218.106 of this Part, the owner or operator of a coating line or a group of coating lines referenced in subsection (b) of this Section shall certify to the Agency that the coating line or group of coating lines is exempt under the provisions of Section 218.208(a) of this Subpart. Such certification shall include:
 - A) A declaration that the coating line or group of coating lines is exempt from the limitations of Section 218.204 of this Subpart because of Section 218.208(a) of this Subpart; and
 - B) Calculations that demonstrate that the combined VOM emissions from the coating lines or group of coating lines never exceed 6.8 kg (15 lbs) per day before the application of capture systems and control devices. The following equation shall be used to calculate total VOM emissions:

$$T_e = \sum_{j=1}^m \sum_{i=1}^n (A_i B_i)_j$$

where:

T_e = Total VOM emissions from coating lines each day before the application of capture systems and control devices in units of kg/day (lbs/day);

m = Number of coating lines at the source that otherwise would be subject to the same subsection of Section 218.104 of this Part (because they belong to the same category, e.g., can coating);

j = Subscript denoting an individual coating line;

n = Number of different coatings as applied each day on each coating line;

i = Subscript denoting an individual coating;

- $A_i = \begin{tabular}{ll} Weight of VOM per volume of each coating (minus water and any compounds that are specifically exempted from the definition of VOM) as applied each day on each coating line in units of kg VOM/l (lbs VOM/gal); and$
- B_i = Volume of each coating (minus water and any compounds that are specifically exempted from the definition of VOM) as applied each day on each coating line in units of l/day (gal/day). The instrument or method by which the owner or operator accurately measured or calculated the volume of each coating as applied on each coating line each day shall be described in the certification to the Agency.
- 2) For sources exempt under Section 218.208(b) of this Subpart, by March 15, 1998, or upon initial start-up, the owner or operator of a coating line or a group of coating lines referenced in subsection (b) of this Section shall certify to the Agency that the source is exempt under the provisions of Section 218.208(b) of this Subpart. Such certification shall include:
 - A) A declaration that the source is exempt from the limitations of Section 218.204(l) of this Subpart because of Section 218.208(b) of this Subpart; and
 - B) Calculations <u>that</u>which demonstrate that the source meets the criteria for exemption because of Section 218.208(b) of this Subpart.
- 3) For sources exempt under Section 218.208(a) of this Subpart, on and after a date consistent with Section 218.106 of this Part, the owner or operator of a coating line or group of coating lines referenced in this subsection (b) shall collect and record all of the following information each day for each coating line and maintain the information at the source for a period of three years:
 - A) The name and identification number of each coating as applied on each coating line; and
 - B) The weight of VOM per volume and the volume of each coating (minus water and any compounds that which are specifically exempted from the definition of VOM) as applied each day on each coating line.
- 4) For sources exempt under Section 218.208(b) of this Subpart, on and after March 15, 1998, the owner or operator of a coating line or group of

coating lines referenced in this subsection (b) shall collect and record all of the following information for each coating line and maintain the information at the source for a period of three years:

- A) The name and identification number of each coating as applied on each coating line; and
- B) The weight of VOM per volume and the volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied on each coating line on a monthly basis.
- On and after a date consistent with Section 218.106 of this Part, the owner or operator of a coating line or group of coating lines exempted from the limitations of Section 218.204 of this Subpart because of Section 218.208(a) of this Subpart shall notify the Agency of any record showing that total VOM emissions from the coating line or group of coating lines exceed 6.8 kg (15 lbs) in any day before the application of capture systems and control devices by sending a copy of such record to the Agency within 30 days after the exceedance occurs.
- On and after March 15, 1998, any owner or operator of a source exempt from the limitations of Section 218.204(l) of this Subpart because of Section 218.208(b) of this Subpart shall notify the Agency if the source's VOM emissions exceed the limitations of Section 218.208(b) of this Subpart by sending a copy of calculations showing such an exceedance within 30 days after the change occurs.
- c) Any owner or operator of a coating line subject to the limitations of Section 218.204 of this Subpart other than Section 218.204(a)(1)(B)(2), or (a)(1)(C)(3), (a)(2)(B), (a)(2)(C), or (a)(2)(D) of this Subpart and complying by means of Section 218.204 of this Subpart shall comply with the following:
 - By a date consistent with Section 218.106 of this Part, or upon initial start-up of a new coating line, or upon changing the method of compliance from an existing subject coating line from Section 218.205, Section 218.207, Section 218.215, or Section 218.216 of this Subpart to Section 218.204 of this Subpart; the owner or operator of a subject coating line shall certify to the Agency that the coating line will be in compliance with Section 218.204 of this Subpart on and after a date consistent with Section 218.106 of this Part, or on and after the initial start-up date. The certification shall include:
 - A) The name and identification number of each coating as applied on each coating line;

- B) The weight of VOM per volume of each coating (minus water and any compounds that are specifically exempted from the definition of VOM) as applied each day on each coating line;
- C) On and after March 15, 1998, for coating lines subject to the limitations of Section 218.204(l)(2)(A) or (B) of this Subpart, the weight of VOM per weight of solids in each coating as applied each day on each coating line;
- D) For coating lines subject to the limitations of Section 218.204(c)(2) of this Subpart, the weight of VOM per weight of solids (or the weight of VOM per weight of coatings, as applicable) in each coating as applied each day on each coating line;
- E) For coating lines subject to the limitations of Section 218.204(g)(2) or (h)(2) of this Subpart, the application methods used to apply coatings on the subject coating line and the weight of VOM per volume of each coating (or the weight of VOM per volume of solids in each coating, as applicable) as applied each day on each coating line;—and
- F) For coating lines subject to the limitations of Section 218.204(p) of this Subpart, the weight of VOM per volume of coatings or solids, as applicable, as applied each day on each coating line;
- For coatings line subject to the limitations of Section
 218.204(a)(2)(A) of this Subpart, the weight of VOM per volume
 of solids in each coating as applied each day on each coating line,
 and the solids turnover ratio of the EDP operation, with supporting
 calculations;
- For coatings subject to the limitations of Section 218.204(a)(2)(E), the weight of VOM per volume of each coating as applied each day on each coating line, calculated on an occurrence weighted average basis;
- For coating lines subject to the limitations of Section 218.204(q) of this Subpart, the weight of VOM per volume of each coating, or the weight of VOM per volume of solids in each coating, as applicable, as applied each day on each coating line.
- 2) On and after a date consistent with Section 218.106 of this Part, or on and after the initial start-up date, the owner or operator of a subject coating line shall collect and record all of the following information each day,

<u>unless otherwise specified</u>, for each coating line and maintain the information at the source for a period of three years:

- A) The name and identification number of each coating as applied on each coating line;
- B) The weight of VOM per volume of each coating (minus water and any compounds <u>that</u> which are specifically exempted from the definition of VOM) as applied each day on each coating line;
- C) On and after March 15, 1998, for coating lines subject to the limitations of Section 218.204(l)(2)(A) or (B) of this Subpart, the weight of VOM per weight of solids in each coating as applied each day on each coating line and certified product data sheets for each coating;
- D) On and after March 15, 1998, for wood furniture coating spray booths subject to the limitations of Section 218.204(1)(4)(A) of this Subpart, the weight of VOM per weight of solids in each strippable spray booth coating as applied each day on each spray booth and certified product data sheets for each coating;
- E) For coating lines subject to the limitations of Section 218.204(c)(2) of this Subpart, the weight of VOM per weight of solids (or the weight of VOM per weight of coatings, as applicable) in each coating as applied each day on each coating line, and certified product data sheets for each coating;
- F) For coating lines subject to the limitations of Section 218.204(g)(2) or 218.204(h)(2) of this Subpart, the weight of VOM per volume of each coating (or the weight of VOM per volume of solids in each coating, as applicable) as applied each day on each coating line, and certified product data sheets for each coating; and
- G) For coating lines subject to the limitations of Section 218.204(p) of this Subpart, the weight of VOM per volume of coatings or solids, as applicable, as applied each day on each coating line:
- For coatings line subject to the limitations of Section

 218.204(a)(2)(A) of this Subpart, the weight of VOM per volume
 of solids in each coating as applied each day on each coating line,
 certified product data sheets for each coating, and the solids
 turnover ratio for the EDP operation, with supporting calculations;

- For coatings subject to the limitations of Section 218.204(a)(2)(E), the weight of VOM per volume of each coating as applied each day on each coating line, calculated on an occurrence weighted average basis, and certified product data sheets for each coating:
- For coating lines subject to the limitations of Section 218.204(q) of this Subpart, the weight of VOM per volume of each coating, or the weight of VOM per volume of solids in each coating, as applicable, as applied each day on each coating line, and certified product data sheets for each coating.
- 3) On and after a date consistent with Section 218.106 of this Part, the owner or operator of a subject coating line shall notify the Agency in the following instances:
 - A) Any record showing violation of Section 218.204 of this Subpart shall be reported by sending a copy of such record to the Agency within 30 days following the occurrence of the violation.
 - B) At least 30 calendar days before changing the method of compliance from Section 218.204 of this Subpart to Section 218.205 or Section 218.207 of this Subpart, the owner or operator shall comply with all requirements of subsection (d)(1), or (i)(1) of this Section, as applicable respectively. Upon changing the method of compliance from Section 218.204 of this Subpart to Section 218.205 of this Subpart or Section 218.207 of this Subpart, the owner or operator shall comply with all requirements of subsection (d), or (i) of this Section, as applicable respectively.
- d) Any owner or operator of a coating line subject to the limitations of Section 218.204 of this Subpart and complying by means of Section 218.205 of this Subpart shall comply with the following:
 - By a date consistent with Section 218.106 of this Part, or upon initial startup of a new coating line, or upon changing the method of compliance for an existing subject coating line from Section 218.204 or Section 218.207 of this Subpart to Section 218.205 of this Subpart; the owner or operator of the subject coating line shall certify to the Agency that the coating line will be in compliance with Section 218.205 of this Subpart on and after a date consistent with Section 218.106 of this Part, or on and after the initial start-up date. The certification shall include:
 - A) The name and identification number of each coating line which will comply by means of Section 218.205 of this Subpart.

- B) The name and identification number of each coating as applied on each coating line.
- C) The weight of VOM per volume and the volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating line.
- D) On and after March 15, 1998, for coating lines subject to the limitations of Section 218.204(l)(2)(A) or (B) of this Subpart, the weight of VOM per weight of solids in each coating as applied each day on each coating line.
- E) For coating lines subject to the limitations of Section
 218.204(a)(2)(A) of this Subpart, the weight of VOM per volume
 of solids in each coating as applied each day on each coating line.
- F) For coating lines subject to the limitations of Section 218.204(c)(2) of this Subpart, the weight of VOM per weight of solids (or the weight of VOM per weight of coatings, as applicable) in each coating as applied each day on each coating line.
- G) For coating lines subject to the limitations of Section 218.204(g)(2) or (h)(2) of this Subpart, the weight of VOM per volume of each coating (or the weight of VOM per volume of solids in each coating, as applicable) as applied each day on each coating line.
- H) For coating lines subject to the limitations of Section 218.204(p) of this Subpart, the weight of VOM per volume of coatings or solids, as applicable, as applied each day on each coating line.
- I) For coating lines subject to the limitations of Section 218.204(q) of this Subpart, the weight of VOM per volume of each coating, or the weight of VOM per volume of solids in each coating, as applicable, as applied each day on each coating line.
- <u>JE</u>) The instrument or method by which the owner or operator will accurately measure or calculate the volume of each coating as applied each day on each coating line.

- **KF**) The method by which the owner or operator will create and maintain records each day as required in subsection (d)(2) of this Section.
- \underline{LG}) An example of the format in which the records required in subsection (d)(2) of this Section will be kept.
- 2) On and after a date consistent with Section 218.106 of this Part, or on and after the initial start-up date, the owner or operator of a subject coating line shall collect and record all of the following information each day for each coating line and maintain the information at the source for a period of three years:
 - A) The name and identification number of each coating as applied on each coating line.
 - B) The weight of VOM per volume and the volume of each coating (minus water and any compounds <u>that which</u> are specifically exempted from the definition of VOM) as applied each day on each coating line.
 - C) On and after March 15, 1998, for coating lines subject to the limitations of Section 218.204(l)(2)(A) or (B) of this Subpart, the weight of VOM per weight of solids in each coating as applied each day on each coating line.
 - <u>D)</u> For coating lines subject to the limitations of Section
 218.204(a)(2)(A) of this Subpart, the weight of VOM per volume of solids in each coating as applied each day on each coating line.
 - For coating lines subject to the limitations of Section 218.204(c)(2) of this Subpart, the weight of VOM per weight of solids (or the weight of VOM per weight of coatings, as applicable) in each coating as applied each day on each coating line.
 - FE) For coating lines subject to the limitations of Section 218.204(g)(2) or (h)(2) of this Subpart, the weight of VOM per volume of each coating (or the weight of VOM per volume of solids in each coating, as applicable) as applied each day on each coating line.
 - For coating lines subject to the limitations of Section 218.204(p) of this Subpart, the weight of VOM per volume of coatings or solids, as applicable, as applied each day on each coating line.

- H) For coating lines subject to the limitations of Section 218.204(q) of this Subpart, the weight of VOM per volume of each coating, or the weight of VOM per volume of solids in each coating, as applicable, as applied each day on each coating line.
- The daily-weighted average VOM content of all coatings as applied on each coating line as defined in Section 218.104 of this Part.
- 3) On and after a date consistent with Section 218.106 of this Part, the owner or operator of a subject coating line shall notify the Agency in the following instances:
 - A) Any record showing violation of Section 218.205 of this Subpart shall be reported by sending a copy of such record to the Agency within 30 days following the occurrence of the violation.
 - B) At least 30 calendar days before changing the method of compliance with this Subpart from Section 218.205 of this Subpart to Section 218.204 or Section 218.207 of this Subpart, the owner or operator shall comply with all requirements of subsection (c)(1), or (i)(1) of this Section, as applicable respectively. Upon changing the method of compliance with this Subpart subpart from Section 218.205 to Section 218.204 or Section 218.207 of this Subpart, the owner or operator shall comply with all requirements of subsection (c) of this Section, as applicable respectively.
- e) Any owner or operator of a coating line subject to the limitations of Section 218.207 of this Subpart and complying by means of Section 218.207(c), (d), (e), (f), (g), (h), (l), or (m), or (n) of this Subpart shall comply with the following:
 - By a date consistent with Section 218.106 of this Part, or upon initial start-up of a new coating line, or upon changing the method of compliance for an existing coating line from Section 218.204 or Section 218.205 of this Subpart to Section 218.207 of this Subpart, the owner or operator of the subject coating line shall perform all tests and submit to the Agency the results of all tests and calculations necessary to demonstrate that the subject coating line will be in compliance with Section 218.207 of this Subpart on and after a date consistent with Section 218.106 of this Part, or on and after the initial start-up date.
 - 2) On and after a date consistent with Section 218.106 of this Part, or on and after the initial start-up date, the owner or operator of a subject coating line shall collect and record all of the following information each day for

each coating line and maintain the information at the source for a period of three years:

- A) The weight of VOM per volume of coating solids as applied each day on each coating line, if complying pursuant to Section 218.207(b)(2) of this Subpart.
- B) Control device monitoring data.
- C) A log of operating time for the capture system, control device, monitoring equipment and the associated coating line.
- D) A maintenance log for the capture system, control device and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.
- 3) On and after a date consistent with Section 218.106 of this Part, the owner or operator of a subject coating line shall notify the Agency in the following instances:
 - A) Any record showing violation of Section 218.207 of this Subpart shall be reported by sending a copy of such record to the Agency within 30 days following the occurrence of the violation.
 - B) At least 30 calendar days before changing the method of compliance with this Subpart from Section 218.207 of this Subpart to Section 218.204 or Section 218.205 of this Subpart, the owner or operator shall comply with all requirements of subsection (c)(1) or (d)(1) of this Section, respectively. Upon changing the method of compliance with this subpart from Section 218.207 of this Subpart to Section 218.204 or Section 218.205 of this Subpart, the owner or operator shall comply with all requirements of subsection (c) or (d) of this Section, respectively.
- f) Any owner or operator of a primer surfacer operation or topcoat operation, or a combined primer surface and topcoat operation, subject to the limitations of Section 218.204(a)(1)(B)(2), or (a)(1)(C)(3), (a)(2)(B), (a)(2)(C), or (a)(2)(D) of this Subpart shall comply with the following:
 - By a date consistent with Section 218.106 of this Part, or upon initial startup of a new coating operation, the owner or operator of a subject coating operation shall certify to the Agency that the operation will be in compliance with Section 218.204 of this Subpart on and after a date

consistent with Section 218.106 of this Part, or on and after the initial start-up date. The certification shall include:

- A) The name and identification number of each coating operation that which will comply by means of Section 218.204(a)(1)(B)(2), and (a)(1)(C)(3), (a)(2)(B), (a)(2)(C), or (a)(2)(D) of this Subpart and the name and identification number of each coating line in each coating operation.
- B) The name and identification number of each coating as applied on each coating line in the coating operation.
- C) The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating line.
- D) The transfer efficiency and control efficiency measured for each coating line.
- E) Test reports, including raw data and calculations documenting the testing performed to measure transfer efficiency and control efficiency.
- F) The instrument or method by which the owner or operator will accurately measure or calculate the volume of each coating as applied each day on each coating line.
- G) The method by which the owner or operator will create and maintain records each day as required in subsection (f)(2) of this Section.
- H) An example format for presenting the records required in subsection (f)(2) of this Section.
- On and after a date consistent with Section 218.106 of this Part, or on and after the initial start-up date, the owner or operator of a subject coating operation shall collect and record all of the following information each day for each operation and maintain the information at the source for a period of three years:
 - A) All information necessary to calculate the daily-weighted average VOM emissions from the coating operations in kg/l (lbs/gal) of coating solids deposited in accordance with the proposal submitted, and approved pursuant to Section 218.204(a)(1)(B)(2),

or (a)(1)(C)(3), (a)(2)(B), (a)(2)(C), or (a)(2)(D) of this Subpart including:

- i) The name and identification number of each coating as applied on each coating operation.
- ii) The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating operation.
- B) If a control device or devices are used to control VOM emissions, control device monitoring data; a log of operating time for the capture system, control device, monitoring equipment and the associated coating operation; and a maintenance log for the capture system, control device and monitoring equipment, detailing all routine and non-routine maintenance performed including dates and duration of any outages.
- On and after a date consistent with Section 218.106 of this Part or on and after the initial start-up date, the owner or operator of a subject coating operation shall determine and record the daily VOM emissions in kg/l (lbs/gal) of coating solids deposited in accordance with the proposal submitted and approved pursuant to Section 218.204(a)(1)(B), (a)(1)(C), (a)(2)(B), (a)(2)(C), or (a)(2)(D)(a)(2) or (a)(3) of this Subpart within 10 days from the end of the month and maintain this information at the source for a period of three years.
- 4) On and after a date consistent with Section 218.106 of this Part, the owner or operator of a subject coating operation shall notify the Agency in the following instances:
 - A) Any record showing a violation of Section 218.204(a)(1)(B), (a)(1)(C), (a)(2)(B), (a)(2)(C), or (a)(2)(D)(a)(2) or (a)(3) of this Subpart shall be reported by sending a copy of such record to the Agency within 15 days from the end of the month in which the violation occurred.
 - B) The owner or operator shall notify the Agency of any change to the operation at least 30 days before the change is effected. The Agency shall determine whether or not compliance testing is required. If the Agency determines that compliance testing is required, then the owner or operator shall submit a testing proposal to the Agency within 30 days and test within 30 days after the approval of the proposal by the Agency and USEPA.

- g) On and after a date consistent with Section 218.106(e) of this Part, or on and after the initial startup date, whichever is later, the owner or operator of a coating line subject to the requirements of Section 218.218 of this Subpart shall comply with the following:
 - 1) By May 1, 2011, or upon initial startup, whichever is later, submit a certification to the Agency that includes a description of the practices and procedures that the source will follow to ensure compliance with the applicable requirements in Section 218.218 of this Subpart;
 - 2) Notify the Agency of any violation of Section 218.218 of this Subpart by providing a description of the violation and copies of records documenting the violation to the Agency within 30 days following the occurrence of the violation; and
 - 3) Maintain at the source all records required by this subsection (g) for a minimum of three years from the date the document was created and make those records available to the Agency upon request.
- <u>On and after a date consistent with Section 218.106 of this Part, or on and after the initial startup date, whichever is later, the owner or operator of a coating line subject to the requirements of Section 218.219 of this Subpart shall comply with the following:</u>
 - 1) By May 1, 2012 2011, or upon initial startup, whichever is later, submit a certification to the Agency that includes
 - A) A description of the practices and procedures that the source will follow to ensure compliance with the applicable requirements in Section 218.219 of this Subpart;
 - B) For sources subject to Section 218.219(a)(6), the work practices plan specified in that Section;
 - C) For sources subject to Section 218.219(b)(6), the application methods used to apply coatings on the subject coating line;
 - Notify the Agency of any violation of Section 218.219 of this Subpart by providing a description of the violation and copies of records documenting the violation to the Agency within 30 days following the occurrence of the violation; and

- <u>Maintain at the source all records required by this subsection (h) for a minimum of three years from the date the document was created and make those records available to the Agency upon request.</u>
- On and after a date consistent with Section $218.106(\underline{f}e)$ of this Part, or on and after the initial start-up date, whichever is later, the owner or operator of a flat wood paneling coating line subject to the requirements in Section 218.217 of this Subpart shall comply with the following:
 - 1) By August 1, 2010, or upon initial start-up, whichever is later, submit a certification to the Agency that includes a description of the practices and procedures that the source will follow to ensure compliance with the applicable requirements in Section 218.217(c) and (d) of this Subpart; and
 - 2) Notify the Agency of any violation of Section 218.217 of this Subpart by providing a description of the violation and copies of records documenting such violation to the Agency within 30 days following the occurrence of the violation.
- j) Each owner or operator of a pleasure craft surface coating operation subject to the limitations in Section 218.204(q)(5)(A) through (G) of this Subpart and complying by means of Section 218.207(o) of this Subpart shall comply with the following:
 - By a date consistent with Section 218.106 of this Part, or upon initial start-up of a new pleasure craft surface coating operation, whichever is later, or upon changing the method of compliance for an existing subject coating operation from Section 218.204, 218.205, or 218.207(m) of this Subpart to Section 218.207(o) of this Subpart, the owner or operator of a subject coating operation shall perform all tests and calculations necessary to demonstrate that the subject coating line will be in compliance with Section 218.207(o) on and after a date consistent with Section 218.106 of this Part, or on and after the initial start-up date.
 - 2) On and after a date consistent with Section 218.106 of this Part, or on and after the initial start-up date, whichever is later, the owner or operator of a subject pleasure craft coating operation shall:
 - A) Collect and record the following information each month:
 - <u>The amount of each pleasure craft surface coating used in each subject coating operation;</u>
 - <u>iii)</u> The VOM content of each pleasure craft surface coating used in each subject coating operation;

- <u>iii)</u> Total monthly VOM emissions for all subject pleasure craft surface coating operations;
- B) At the end of the first 12-month averaging period, and at the end of each subsequent month, collect and record the following information:
 - i) The VOM mass emission limit for all subject pleasure craft surface coating operations for the applicable 12-month averaging period, with supporting calculations;
 - <u>ii)</u> The total actual emissions of VOM from all subject pleasure craft surface coating operations for the applicable 12-month averaging period;
- C) Notify the Agency in writing of any violation of the requirements of Section 218.207(o) within 30 days following the occurrence of the violation and provide records documenting the violation upon request by the Agency;
- <u>Notify the Agency in writing at least 30 calendar days before</u>
 <u>changing the method of compliance with this Subpart from Section</u>
 218.207(o) to Section 218.204, 218.205, or 218.207(n). <u>Upon</u>
 <u>changing the method of compliance, the owner or operator shall</u>
 <u>comply with all requirements set forth in subsection (c), (d), or (e)</u>
 of this Section, as applicable;
- E) Maintain at the source all records required by this subsection (j) for a minimum of three years from the date the document was created, and provide such records to the Agency upon request.

(Source: Amended at 34	. III. кед	. effective

Section 218.212 Cross-Line Averaging to Establish Compliance for Coating Lines

a) On and after March 15, 1996, any owner or operator of a coating line subject to the limitations set forth in Section 218.204 of this Subpart, except coating lines subject to the limitations in Section 218.204(a)(2), (c)(2), (g)(2), (h)(2), or-(p), or (q) of this Subpart, and with coating lines in operation prior to January 1, 1991 ("pre-existing coating lines"), may, for pre-existing coating lines only, elect to comply with the requirements of this Section, rather than complying with the applicable emission limitations set forth in Section 218.204, if an operational change of the type described below has been made after January 1, 1991, to one or more pre-existing coating lines at the source. An operational change occurs

when a pre-existing coating line is replaced with a line using lower VOM coating for the same purpose as the replaced line ("replacement line"). A source electing to rely on this Section to demonstrate compliance with the requirements of this Subpart shall operate pursuant to federally enforceable permit conditions approved by the Agency and USEPA.

- b) An owner or operator of pre-existing coating lines subject to a VOM content limitation in Section 218.204 of this Subpart and electing to rely on this Section to demonstrate compliance with this Subpart must establish, by use of the equations in subsection (d) of this Section, that the calculated actual daily VOM emissions from all participating coating lines, as defined in this subsection below, are less than the calculated daily allowable VOM emissions from the same group of coating lines. For any pre-existing coating line to be aggregated for the purposes of Section 218.212, 218.213, or 218.214 of this Subpart ("participating coating lines"), the source must establish that:
 - 1) All coatings applied on the participating coating line shall, at all times, have a VOM content less than or equal to the applicable VOM content limitation for such coating listed in Appendix H of this Part; and
 - On the date the source elects to rely on this Section to demonstrate compliance with this Subpart, all coatings applied on the participating coating line are not already in compliance with the VOM content limitation for such coating effective on or after March 15, 1996; or the participating coating line is a replacement line, as defined in subsection (a) of this Section with an operational change occurring on or after January 1, 1991.
- Notwithstanding subsection (a) of this Section, any owner or operator of a coating line subject to the limitations set forth in Section 218.204 of this Subpart and electing to rely on this Section to demonstrate compliance with this Subpart, may also include as a participating coating line, until December 31, 1999, only, any replacement line that satisfies all of the following conditions:
 - 1) The replacement line is operated as a powder coating line;
 - 2) The replacement line was added after July 1, 1988; and
 - 3) The owner or operator also includes as a participating coating line one or more coating lines that satisfy the criteria of a replacement line, as described in subsection (a) of this Section.
- d) To demonstrate compliance with this Section, a source shall establish the following:

1) An alternative daily emission limitation shall be determined for all participating coating lines at the source according to subsection (d)(2) of this Section. All participating coating lines shall be factored in each day to demonstrate compliance. Provided compliance is established pursuant to the requirements in this subsection, nothing in this Section requires daily operation of each participating line. Actual daily emissions from all participating coating lines (E_d) shall never exceed the alternative daily emission limitation (A_d) and shall be calculated by use of the following equation:

$$E_d = \sum_{i=1}^n V_i C_i$$

where:

 E_d = Actual daily VOM emissions from participating coating lines in units of kg/day (lbs/day);

i = Subscript denoting a specific coating applied;

n = Total number of coatings applied by all participating coating lines at the source;

V_i = Volume of each coating applied for the day in units of l/day (gal/day) of coating (minus water and any compounds that are specifically exempted from the definition of VOM); and

 C_i = The VOM content of each coating as applied in units of kg VOM/l (lbs VOM/gal) of coating (minus water and any compounds that are specifically exempted from the definition of VOM).

The alternative daily emission limitation (A_d) shall be determined for all participating coating lines at the source on a daily basis as follows:

$$A_d = A_i + A_p$$

where A_i and A_p are defined in subsections (d)(2)(A) and (d)(2)(B) of this Section.

A) The portion of the alternative daily emissions limitation for coating operations at a source using non-powder coating (A_l) shall be determined for all such participating non-powder coating lines on a daily basis as follows:

$$A_i = \sum_{i=1}^n V_i L_i \left(\frac{D_i - C_i}{D_i - L_i} \right)$$

where:

A_i = The VOM emissions allowed for the day in units of kg/day (lbs/day);

i = Subscript denoting a specific coating applied;

n = Total number of coatings applied in the participating coating lines;

C_i = The VOM content of each coating as applied in units of kg VOM/l (lbs VOM/gal) of coating (minus water and any compounds that are specifically exempted from the definition of VOM);

D_i = The density of VOM in each coating applied. For the purposes of calculating A₁, the density is 0.882 kg VOM/1 VOM (7.36 lbs VOM/gal VOM);

 V_i = Volume of each coating applied for the day in units of l (gal) of coating (minus water and any compounds that are specifically exempted from the definition of VOM); and

L_i = The VOM emission limitation for each coating applied, as specified in Section 218.204 of this Subpart, in units of kg VOM/I (lbs VOM/gal) of coating (minus water and any compounds that are specifically exempted from the definition of VOM).

B) The portion of the alternative daily emission limitation for coating operations at a source using powdered coating (A_p) shall be determined for all such participating powder coating lines at the source on a daily basis as follows:

$$A_{p} = \sum_{k=1}^{m} \sum_{j=1}^{n} \frac{V_{j} L_{j} D_{j} K_{k}}{(D_{j} - L_{j})}$$

where:

- A_p = The VOM emissions allowed for the day in units of kg/day (lbs/day);
- h = Subscript denoting a specific powder coating line;
- j = Subscript denoting a specific powder coating applied;
- m = Total number of participating powder coating lines;
- n = Total number of powder coatings applied in the participating coating lines;
- D_j = The assumed density of VOM in liquid coating, 0.882 kg VOM/l VOM (7.36 lbs VOM/gal VOM);
- V_j = Volume of each powder coating consumed for the day in units of l (gal) of coating;
- L_j = The VOM emission limitation for each coating applied, as specified in Section 218.204 of this Subpart, in units of kg VOM/l (lbs VOM/gal) of coating (minus water and any compounds that are specifically exempted from the definition of VOM); and
- K = A constant for each individual coating line representing the ratio of the volume of coating solids consumed on the liquid coating system that has been replaced to the volume of powder coating consumed on the replacement line to accomplish the same coating job. This value shall be determined by the source based on tests conducted and records maintained pursuant to the requirements of Section 218.213 of this Subpart demonstrating the amount of coating solids consumed as both liquid powder. Test methods and recordkeeping requirements shall be approved by the Agency and USEPA and shall be contained in the source's operating permit as federally enforceable permit conditions, subject to the following restrictions:
 - i) K cannot exceed 0.9 for non-recycled powder coating systems; or
 - ii) K cannot exceed 2.0 for recycled powder coating systems.

(Source:	Amended at	t 34 III.	Reg.	, effective)
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Section 218.219 Work Practice Standards for Automobile and Light-Duty Truck Assembly Coatings and Miscellaneous Metal and Plastic Parts Coatings

- <u>a)</u> Every owner or operator of a coating line subject to the requirements of Section 218.204(a)(2) of this Subpart shall:
 - 1) Store all VOM-containing coatings, thinners, coating-related waste materials, cleaning materials, and used shop towels in closed containers;
 - 2) Ensure that mixing and storage containers used for VOM-containing coatings, thinners, and coating-related waste materials are kept closed at all times except when depositing or removing those materials;
 - 3) Minimize spills of VOM-containing coatings, thinners, and coating-related waste materials;
 - 4) Convey VOM-containing coatings, thinners, and coating-related waste materials from one location to another in closed containers or pipes;
 - 5) Minimize VOM emissions from cleaning of storage, mixing, and conveying equipment;
 - Develop and implement a work practice plan to minimize VOM emissions from cleaning and from purging of equipment associated with coating lines subject to the limitations in Section 218.204(a)(2). The plan shall specify practices and procedures that the source will follow to ensure that VOM emissions from the operations listed in this subsection (a)(6) are minimized. If the owner or operator of the subject coating line has already implemented a work practice plan for the coating line pursuant to Subpart IIII of 40 CFR 63, incorporated by reference in Section 218.112 of this Part, the owner or operator may revise the plan as necessary to comply with this Section.
 - A) Vehicle body wiping;
 - B) Coating line purging;
 - <u>C)</u> Flushing of coating systems;
 - D) Cleaning of spray booth grates, walls, and equipment; and
 - <u>F)</u> <u>Cleaning of external spray booth areas.</u>

- b) Except as provided in subsection (c) of this Section, every owner or operator of a coating line described in Section 218.204(q) of this Subpart shall:
 - 1) Store all VOM-containing coatings, thinners, coating-related waste materials, cleaning materials, and used shop towels in closed containers;
 - 2) Ensure that mixing and storage containers used for VOM-containing coatings, thinners, coating-related waste materials, and cleaning materials are kept closed at all times except when depositing or removing these materials;
 - 3) Minimize spills of VOM-containing coatings, thinners, coating-related waste materials, and cleaning materials;
 - 4) <u>Convey VOM-containing coatings, thinners, coating-related waste</u> materials, and cleaning materials from one location to another in closed containers or pipes;
 - 5) Minimize VOC emissions from cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers; and
 - <u>Apply all coatings using one or more of the following application</u> methods:
 - A) Electrostatic spray;
 - B) High volume low pressure (HVLP) spray;
 - C) Flow coating. For the purposes of this subsection (b)(6)(C), flow coating means a non-atomized technique of applying coating to a substrate with a fluid nozzle with no air supplied to the nozzle;
 - <u>D)</u> Roll coating;
 - E) Dip coating, including electrodeposition. For purposes of this subsection (b)(6)(E), electrodeposition means a water-borne dip coating process in which opposite electrical charges are applied to the substrate and the coating. The coating is attracted to the substrate due to the electrochemical potential difference that is created;
 - F) Airless spray;

- <u>G)</u> <u>Air-assisted airless spray; or</u>
- <u>Another coating application method capable of achieving a transfer efficiency equal to or better than that achieved by HVLP spraying, if the method is approved in writing by the Agency.</u>
- <u>Notwithstanding subsection (b) of this Section, the application method limitations in subsection (b)(6) shall not apply to the following:</u>
 - 1) Coating lines complying with Section 218.207(n)(1);
 - <u>For metal parts and products coating operations: touch-up coatings, repair coatings, textured finishes, stencil coatings, safety-indicating coatings, solid-film lubricants, electric-insulating and thermal-conducting coatings, magnetic data storage disk coatings, and plastic extruded onto metal parts to form a coating;</u>
 - 3) For pleasure craft surface coating operations: extreme high gloss coatings;
 - 4) For plastic parts and products coating operations: airbrush operations using 18.9 liters (5 gallons) or less of coating per year; €
 - <u>5)</u> For ammunition sealant operations: cap sealants and mouth waterproofing sealants.

(Source:	Added at 34	Ill. Reg.	, effective	
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SUBPART II: FIBERGLASS BOAT MANUFACTURING MATERIALS

Section 218.890 Applicability

- a) Except as provided in subsection (b) of this Section, on and after May 1, 20122011, the requirements of this Subpart shall apply to the owners or operators of sources that manufacture hulls or decks of boats from fiberglass, or that build molds to make hulls or decks of boats from fiberglass, and that emit 6.8 kg/day (15 lbs/day) or more of VOM, calculated in accordance with Section 218.894(a)(1)(B), from open molding resin and gel coat operations, resin and gel coat mixing operations, and resin and gel coat application equipment cleaning operations, in the absence of air pollution control equipment. If a source is subject to this Subpart based upon such criteria, the limitations of this Subpart shall apply to the manufacture of all fiberglass boat parts at the source.
- b) Notwithstanding subsection (a) of this Section, the requirements of this Subpart shall not apply to the following:

- 1) Surface coatings applied to fiberglass boats;
- 2) Industrial adhesives used in the assembly of fiberglass boats. Polyester resin putties used to assemble fiberglass parts shall not be considered industrial adhesives for purposes of this exclusion;
- 3) Closed molding operations.
- c) If a source is or becomes subject to one or more of the limitations in this Subpart, the source is always subject to the applicable provisions of this Subpart.
- d) The owner or operator of a source exempt from the limitations of this Subpart because of the criteria in this Section is subject to the recordkeeping and reporting requirements specified in Section 218.894(a) of this Subpart.

(Source: Added at 34 Ill. Reg. _____, effective _____)

Section 218.891 Emission Limitations and Control Requirements

a) Except as provided in subsection (f) of this Section, no owner or operator of a source subject to the requirements of this Subpart shall use a subject resin or gel coat at the source unless the resin and gel coat comply with subsection (b)(1) or (b)(2), (c), or (d) of this Section, as well as with subsections (e), (g), and (h) of this Section. For sources complying pursuant to subsection (b) or (c) of this Section, if the non-monomer VOM content of a resin or gel coat exceeds 5 percent, by weight, the excess non-monomer VOM shall be added to the monomer VOM content of the resin or gel coat in accordance with the equation below:

$$\frac{\text{Weighted Average}}{\text{Monomer VOM}} = \frac{\sum_{i=1}^{n} M_{i} VOM_{i}}{\sum_{i=1}^{n} M_{i}} + \frac{\sum_{i=1}^{n} M_{i} VOM_{nm} - \sum_{i=1}^{n} 0.05 * M_{i}}{\sum_{i=1}^{n} M_{i}}$$

where:

 $\underline{M_i}$ = $\underline{Mass of open molding resin or gel coat (i) used in the past 12 months in an operation, in megagrams.$

 $\underline{VOM_i} = \underline{Monomer\ VOM\ content}$, by weight percent, of open molding resin or gel coat (i) used in the past 12 months in

<u>b)</u>

<u>E)</u>

Tooling gel coat

		an operation.	
<u>i</u>	Ξ	Subscript denoting a specific open moldicoat applied.	ing resin or gel
<u>n</u>	Ξ	Number of different open molding resins in the past 12 months in an operation.	s or gel coats used
<u>VOI</u>	$\underline{\mathbf{M}}_{\mathrm{nm}} \equiv$	Non-monomer VOM content, by weight molding resin or gel coat (i) used in the pan operation.	
VOM	Conten	t Limitations	
<u>1)</u>	_	t as provided in subsection (e) of this Sect at of a subject resin or gel coat shall not extions:	
			Weighted average monomer VOM content (weight percent)
	<u>A)</u>	<u>Production resin</u>	
		i) Atomized spray	<u>28</u>
		ii) Non-atomized	<u>35</u>
	<u>B)</u>	Pigmented gel coat	<u>33</u>
	<u>C)</u>	Clear gel coat	<u>48</u>
	<u>D)</u>	Tooling resin	
		<u>i)</u> <u>Atomized</u>	<u>30</u>
		ii) Non-atomized	<u>39</u>

2) Except as provided in subsection (e) of this Section, the weighted average monomer VOM content of a subject resin or gel coat shall not exceed the applicable limitation set forth in subsection (b)(1) of this Section on a 12-month rolling average basis. Equation 1 below shall be used to determine

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the weighted average monomer VOM content for resin and gel coat materials.

Equation 1:

$$\frac{\text{Weighted Average}}{\text{Monomer VOM}} = \frac{\sum_{i=1}^{n} M_i VOM_i}{\sum_{i=1}^{n} M_i}$$

where:

 $\underline{M_i}$ = $\underline{Mass of open molding resin or gel coat (i) used in the past 12 months in an operation, in megagrams;$

<u>VOM_i</u> = Monomer VOM content, by weight percent, of open molding resin or gel coat (i) used in the past 12 months in an operation;

<u>n</u> = Number of different open molding resins or gel coats used in the past 12 months in an operation.

- Emissions Averaging Alternative. The owner or operator of a source subject to the requirements of this Subpart may elect to include some or all of the subject resin and gel coat operations at the source in the emissions averaging alternative.

 Resin and gel coat operations utilizing the emissions averaging alternative shall comply with a source-specific monomer VOM mass emission limit on a 12-month rolling average basis, calculated at the end of each calendar month. All subject resin and gel coat operations that do not utilize the emissions averaging alternative shall comply with the requirements in subsection (b) or (d) of this Section, as well as with all other applicable requirements in this Section.
 - 1) The owner or operator of a source subject to this subsection (c) shall use Equation 2 to determine the source-specific monomer VOM mass emission limit for resin and gel coats included in the emissions average:

Equation 2:

$$\frac{\text{Monomer}}{\text{VOM Limit}} \equiv \frac{46(M_R) + 159(M_{PG}) + 291(M_{CG}) + 54(M_{TR}) + 214(M_{TG})}{46(M_R) + 159(M_{PG}) + 291(M_{CG}) + 54(M_{TR}) + 214(M_{TG})}$$

where:

<u>Monomer</u> = <u>Total allowable monomer VOM that can be emitted</u>

VOM from the open molding operations included in the LimitCont average, expressed in kilograms per 12-month period; ent Mass of production resin used in the past 12 months, M_R Ξ excluding any materials that are exempt, expressed in megagrams (Mg); Mass of pigmented gel coat used in the past 12 months, M_{PG} excluding any materials that are exempt, expressed in Mg; Mass of clear gel coat used in the past 12 months, M_{CG} excluding any materials that are exempt, expressed in Mg: M_{TR} Mass of tooling resin used in the past 12 months, excluding any materials that are exempt, expressed in Mg; Mass of tooling gel coat used in the past 12 months, M_{TG} excluding any materials that are exempt, expressed in Mg.

The numerical coefficients associated with each term on the right hand side of Equation 2 are the allowable monomer VOM emission rates for that particular material in units of kg VOM/Mg of material used.

At the end of the first 12-month averaging period, and at the end of each subsequent month, the owner or operator of a source subject to this subsection (c) shall use Equation 3 to calculate the monomer VOM emissions from the resin and gel coat operations included in the emissions average to determine whether the emissions exceed the limitation calculated using Equation 2.

Equation 3:

$$\frac{\text{Monomer}}{\text{VOM}} = \frac{(PV_R)(M_R) + (PV_{PG})(M_{PG}) + (PV_{CG})(M_{CG})}{(PV_{TR})(M_{TR}) + (PV_{TG})(M_{TG})}$$

where:

<u>Monomer = Monomer VOM emissions calculated using the</u>

<u>VOM</u> monomer VOM emission equations for each operation included in the average, expressed in kilograms;

<u>PV_R</u> = Weighted-average monomer VOM emission rate for production resin used in the past 12 months, expressed in kg/Mg, calculated in accordance with Equation 4 in subsection (c)(3);

 \underline{M}_{R} = $\underline{Mass of production resin used in the past 12 months, expressed in Mg;$

<u>PV_{PG}</u> = Weighted-average monomer VOM emission rate for pigmented gel coat used in the past 12 months, expressed in kg/Mg, calculated pursuant to Equation 4;

 \underline{M}_{PG} = \underline{M}_{ass} of pigmented gel coat used in the past 12 months, expressed in Mg;

<u>PV_{CG}</u> = Weighted-average monomer VOM emission rate for clear gel coat used in the past 12 months, expressed in kg/Mg, calculated pursuant to Equation 4;

 \underline{M}_{CG} = \underline{M}_{ass} of clear gel coat used in the past 12 months, expressed in Mg;

<u>PV_{TR}</u> = Weighted-average monomer VOM emission rate for tooling resin used in the past 12 months, expressed in kg/Mg, calculated pursuant to Equation 4;

 $\underline{M_{TR}}$ \equiv Mass of tooling resin used in the past 12 months, expressed in Mg;

<u>PV_{TG}</u> = Weighted-average monomer VOM emission rate for tooling gel coat used in the past 12 months, expressed in kg/Mg, calculated pursuant to Equation 4:

 $\underline{M}_{\underline{TG}}$ = $\underline{M}_{\underline{ASS}}$ of tooling gel coat used in the past 12 months, expressed in Mg.

3) For purposes of Equation 3, the owner or operator of a source subject to this subsection (c) shall use Equation 4 to calculate the weighted-average monomer VOM emission rate for the previous 12 months for each resin and gel coat operation included in the emissions average, except as provided in subsection (e) of this Section.

Equation 4:

$$PV_{OP} = \frac{\sum_{i=1}^{n} M_i PV_i}{\sum_{i=1}^{n} M_i}$$

where:

<u>PV_{OP}</u> = Weighted-average monomer VOM emission rate for each open molding operation (PV_R, PV_{PG}, PV_{CG}, PV_{TR}, and PV_{TG}) included in the average, expressed in kg of monomer VOM per Mg of material applied;

 $\underline{M_i}$ = $\underline{Mass of resin or gel coat (i) used within an operation in the past 12 months, expressed in Mg;$

<u>n</u> = Number of different open molding resins and gel coats used within an operation in the past 12 months;

PV_i = The monomer VOM emission rate for resin or gel coat (i) used within an operation in the past 12 months, expressed in kg of monomer VOM per Mg of material applied. The monomer VOM emission rate formulas in subsection (c)(4) of this Section shall be used to compute PV_i. If a source includes filled resins in the emissions average, the source shall use the value of PV_F, calculated using Equation 5 in subsection (e)(3) of this Section, as the value of PV_i for those resins;

<u>i</u> = <u>Subscript denoting a specific open molding resin or gel</u> <u>coat applied.</u>

- 4) For purposes of Equation 4 and subsection (e)(3) of this Section, the following monomer VOM emission rate formulas shall apply:
 - <u>A)</u> <u>Production resin, tooling resin:</u>
 - i) Atomized: 0.014 x (Resin VOM%)^{2.425}
 - ii) Atomized, plus vacuum bagging with roll-out: 0.01185 x (Resin VOM%)^{2.425}

- iii) Atomized, plus vacuum bagging without roll-out: 0.00945 x (Resin VOM%)^{2.425}
- iv) Nonatomized: 0.014 x (Resin VOM%)^{2.275}
- v) Nonatomized, plus vacuum bagging with roll-out: 0.0110 x (Resin VOM%)^{2.275}
- vi) Nonatomized, plus vacuum bagging without roll-out: 0.0076 x (Resin VOM%)^{2.275}
- B) Pigmented gel coat, clear gel coat, tooling gel coat: 0.445 x (Gel Coat VOM%)^{1.675}=
- d) Capture System and Control Device Requirements. No owner or operator of a source subject to the requirements of this Subpart that is utilizing a capture system and control device for a subject resin or gel coat operation shall conduct that operation unless the following requirements are satisfied:
 - An afterburner or carbon adsorber is installed and operated that meets the limitations set forth in this subsection (d). The owner or operator may use an emissions control system other than an afterburner or carbon adsorber if that device complies with all limitations in this subsection (d), the owner or operator submits a plan to the Agency detailing appropriate monitoring devices, test methods, recordkeeping requirements, and operating parameters for the control device, and the plan is approved by the Agency and USEPA within federally enforceable permit conditions;
 - The VOM emissions at the outlet of the control device meet an emissions limitation determined using Equation 2 in subsection (c)(1) of this Section. In Equation 2, however, instead of using the mass of each material used over the past 12 months to determine the emission limitation, the owner or operator shall use the mass of each material used during the applicable control device performance test;
 - 3) The owner or operator complies with all testing and monitoring requirements set forth in Section 218.892 of this Subpart.
- e) Filled Resins. For all filled production and tooling resins, the owner or operator of a source subject to this Subpart shall adjust the monomer VOM emission rates determined pursuant to subsections (b) and (c) of this Section Section 218.891(b) and (c) of this Subpart using Equation 5 in subsection (e)(3). If complying pursuant to subsection 218.891 (b), the emission rate determined using Equation 5 shall not exceed the limitations set forth in subsections (e)(1) and (e)(2) of this Section. If the non-monomer VOM content of a filled resin exceeds

<u>5 percent</u>, by weight, based on the unfilled resin, the excess non-monomer VOM shall be added to the monomer VOM content in accordance with the equation set forth in <u>subsection 218.891</u> (a).

- 1) Tooling Resin: 54 kg (119.1 lbs) monomer VOM/Mg filled resin applied;
- 2) Production Resin: 46 kg (101.4 lbs) monomer VOM/Mg filled resin applied;
- 3) Equation 5:

$$PV_F = PV_U \times \frac{100 - \% Filler}{100}$$

where:

<u>PV_F</u> = The as-applied monomer VOM emission rate for the filled production resin or tooling resin, expressed in kg monomer VOM per Mg of filled material;

<u>PV</u>_U = The monomer VOM emission rate for the unfilled resin, before filler is added, calculated using the formulas in Section 218.891(b)(4) of this Subpart;

<u>% Filler</u> = <u>The weight-percent of filler in the as-applied filled resin system.</u>

- f) The limitations in subsections (a) through (e) of this Section shall not apply to the following materials. These materials shall instead comply with the applicable requirements set forth in subsections (f)(1) through (f)(3).
 - Production resins, including skin coat resins, that must meet specifications for use in military vessels or must be approved by the United States Coast Guard for use in the construction of lifeboats, rescue boats, and other lifesaving appliances approved under 46 CFR Subchapter Q, incorporated by reference in Section 218.112 of this Part, or for use in the construction of small passenger vessels regulated by 40 CFR Subchapter T, incorporated by reference in Section 218.112 of this Part. The owner or operator of a source subject to this Subpart shall apply all such resins with nonatomizing resin application equipment;
 - 2) Production and tooling resins, and pigmented, clear, and tooling gel coats used for part or mold repair and touch ups. These materials shall not exceed 1 percent, by weight, of all resins and gel coats used at a subject source on a 12-month rolling average basis;

- <u>Pure, 100 percent vinylester resins used for skin coats. The owner or operator of a source subject to this Subpart shall apply these resins with non-atomizing resin application equipment, and the total amount of the resins shall not exceed 5 percent, by weight, of all resins used at the subject source on a 12-month rolling-average basis.</u>
- No owner or operator of a source subject to this Subpart shall use VOMcontaining cleaning solutions to remove cured resins and gel coats from fiberglass boat manufacturing application equipment. Additionally, no owner or operator shall use VOM-containing cleaning solutions for routine cleaning of application equipment unless:
 - 1) The VOM content of the cleaning solution is less than or equal to 5 percent, by weight; or
 - 2) The composite vapor pressure of the cleaning solution is less than or equal to 0.50 mmHg at 68°F.
- No owner or operator of a source subject to this Subpart shall use resin or gel coat mixing containers with a capacity equal to or greater than 208 liters (55 gallons), including those used for on-site mixing of putties and polyputties, unless such containers have covers with no visible gaps in place at all times, except when material is being manually added to or removed from a container or when mixing or pumping equipment is being placed in or removed from a container.

(Source:	Added at 34	Ill. Reg.	, effective	`

Section 218.892 Testing and Monitoring Requirements

- a) Testing to demonstrate compliance with the requirements of Section 218.891 of this Subpart shall be conducted by the owner or operator within 90 days after a request by the Agency, or as otherwise specified in this Subpart. The testing shall be conducted at the expense of the owner or operator and the owner or operator shall notify the Agency in writing 30 days in advance of conducting the testing to allow the Agency to be present during testing.
- b) Testing to demonstrate compliance with the monomer VOM content limitations for resin and gel coat materials in Section 218.891(b) of this Subpart shall be conducted upon request of the Agency, or as otherwise specified in this Subpart, in accordance with SCAQMD 312-91, incorporated by reference in Section 218.112 of this Part.
- <u>C)</u> The owner or operator of a source complying with this Subpart pursuant to Section 218.891(d) shall comply with the following:

- 1) By May 1, 20122011, or upon initial start-up, whichever is later, and upon start-up of a new control device, conduct an initial performance test of the control device in accordance with this subsection (c) that demonstrates compliance with the emission limitation determined pursuant to Section 218.891(d).
- Subsequent to the initial performance test described in subsection (c)(1) of this Section, conduct at least one performance test per calendar year.

 Performance tests used to demonstrate compliance with Section

 218.891(d) shall be conducted at least six months apart, unless the performance test is being conducted following an exceedance of operating parameters as described in subsection (c)(3) of this Section, or per a request by the Agency.
- Monitor and record relevant operating parameters, including the control efficiency of the control device and the amount of materials used in the fiberglass boat manufacturing process, during each control device performance test used to demonstrate compliance with Section 218.891(d). The owner or operator shall continue to operate the fiberglass boat manufacturing process within the parameters until another performance test is conducted that demonstrates compliance with Section 218.891(d). The owner or operator shall monitor the parameters at all times when the control device is in operation. If the fiberglass boat manufacturing process exceeds any operating parameter by more than 10 percent, the owner or operator shall conduct additional performance testing in accordance with this Section within 10 operating days after the exceedance.
- 4) The methods and procedures of Section 218.105(d) and (f) shall be used for testing to demonstrate compliance with the requirements of Section 218.891(d) of this Subpart, as follows:
 - A) To select the sampling sites, Method 1 or 1A, as appropriate, 40

 CFR 60, appendix Appendix A, incorporated by reference at

 Section 218.112 of this Part. The sampling sites for determining efficiency in reducing VOM from the dryer exhaust shall be located between the dryer exhaust and the control device inlet, and between the outlet of the control device and the exhaust to the atmosphere;
 - B) To determine the volumetric flow rate of the exhaust stream, Method 2, 2A, 2C, or 2D, as appropriate, 40 CFR 60, appendix A, incorporated by reference at Section 218.112 of this Part;

- C) To determine the VOM concentration of the exhaust stream entering and exiting the control device, Method 25 or 25A, as appropriate, 40 CFR 60, appendix Appendix A, incorporated by reference at Section 218.112 of this Part. For thermal and catalytic afterburners, Method 25 must be used except under the following circumstances, in which case Method 25A must be used:
 - i) The allowable outlet concentration of VOM from the control device is less than 50 ppmv, as carbon;
 - ii) The VOM concentration at the inlet of the control device and the required level of control result in exhaust concentrations of VOM of 50 ppmv, or less, as carbon; and
 - Due to the high efficiency of the control device, the iii) anticipated VOM concentration at the control device exhaust is 50 ppmv or less, as carbon, regardless of inlet concentration. If the source elects to use Method 25A under this option, the exhaust VOM concentration must be 50 ppmv or less, as carbon, and the required destruction efficiency must be met for the source to have demonstrated compliance. If the Method 25A test results show that the required destruction efficiency apparently has been met, but the exhaust concentration is above 50 ppmv, as carbon, a retest is required. The retest shall be conducted using either Method 25 or 25A. If the retest is conducted using Method 25A and the test results again show that the required destruction efficiency apparently has been met, but the exhaust concentration is above 50 ppmv, as carbon, the source must retest again using Method 25;
- D) Notwithstanding the criteria or requirements in Method 25, which specifies a minimum probe temperature of 129°C (265°F), the probe must be heated to at least the gas stream temperature of the dryer exhaust, typically close to 176.7°C (350°F); and
- E) During testing, the fiberglass boat manufacturing operation shall be operated at representative operating conditions and flow rates.
- 5) If an afterburner or carbon adsorber is used to demonstrate compliance, the owner or operator shall:
 - A) <u>Install, calibrate, operate, and maintain temperature monitoring devices with an accuracy of 3°C or 5°F on the emissions control system in accordance with Section 218.105(d)(2) of this Part and</u>

- in accordance with the manufacturer's specifications. Monitoring shall be performed at all times when the emissions control system is operating; and
- B) Install, calibrate, operate and maintain, in accordance with manufacturer's specifications, a continuous recorder on the temperature monitoring devices, such as a strip chart, recorder or computer, with at least the same accuracy as the temperature monitor.
- 6) If an emissions control system other than an afterburner or carbon adsorber is used to demonstrate compliance, the owner or operator shall install, maintain, calibrate, and operate the monitoring equipment as set forth in the owner's or operator's plan approved by the Agency and USEPA pursuant to Section 218.891(d).
- d) Testing to demonstrate compliance with the VOM content limitations for cleaning solutions in Section 218.891(g) of this Subpart, and with the non-monomer VOM content limitations for resin and gel coat materials in Section 218.891(a) of this Subpart, shall be conducted upon request of the Agency, or as otherwise specified in this Subpart, as follows:
 - 1) The applicable test methods and procedures specified in Section 218.105(a) of this Part shall be used; provided, however, Method 24, incorporated by reference at Section 218.112 of this Part, shall be used to demonstrate compliance; or
 - 2) For cleaning solvents, the manufacturer's specifications for VOM content may be used if the manufacturer's specifications are based on results of tests of the VOM content conducted in accordance with methods specified in Section 218.105(a) of this Part; provided, however, Method 24 shall be used to determine compliance.
- e) The owner or operator of a source subject to this Subpart and relying on the VOM content of the cleaning solution to comply with Section 218.891(g)(1) of this Subpart shall:
 - 1) For cleaning solutions that are prepared at the source with equipment that automatically mixes cleaning solvent and water (or other non-VOM):
 - A) Install, operate, maintain, and calibrate the automatic feed equipment in accordance with manufacturer's specifications to regulate the volume of each of the cleaning solvent and water (or other non-VOM), as mixed; and

- B) Pre-set the automatic feed equipment so that the consumption rates of the cleaning solvent and water (or other non-VOM), as applied, comply with Section 218.891(g)(1);
- 2) For cleaning solutions that are not prepared at the source with automatic feed equipment, keep records of the usage of cleaning solvent and water (or other non-VOM) as set forth in Section 218.894(g) of this Subpart.
- f) Testing to demonstrate compliance with the VOM composite partial vapor pressure limitation for cleaning solvents set forth in Section 218.891(g) of this Subpart shall be conducted in accordance with the applicable methods and procedures set forth in Section 218.110 of this Part.

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Section 218.894 Recordkeeping and Reporting Requirements

- a) The owner or operator of a source exempt from the limitations of this Subpart because of the criteria in Section 218.890(a) of this Subpart shall:
 - 1) By May 1, 20122011, or upon initial start-up, whichever is later, submit a certification to the Agency that includes the following:
 - A) A declaration that the source is exempt from the requirements in this Subpart because of the criteria in Section 218.890(a);
 - B) Calculations that demonstrate that combined emissions of VOM from all subject fiberglass boat manufacturing operations (including solvents used for cleanup operations associated with the fiberglass boat manufacturing operation) at the source never equal or exceed 6.8 kg/day (15 lbs/day), in the absence of air pollution control equipment. To calculate daily emissions of VOM, the owner or operator shall determine the monthly emissions of VOM from fiberglass boat manufacturing operations at the source (including solvents used for cleanup operations associated with the fiberglass boat manufacturing operations) and divide the amount by the number of days during that calendar month that the fiberglass boat manufacturing operations were in operation;
 - Notify the Agency of any record that shows that the combined emissions of VOM from subject fiberglass boat manufacturing operations at the source, including related cleaning activities, ever equal or exceed 6.8 kg/day (15 lbs/day), in the absence of air pollution control equipment, within 30 days after the event occurs, and provide copies of the record upon request by the Agency.

- <u>b)</u> All sources subject to the requirements of this Subpart shall:
 - 1) By May 1, 20122011, or upon initial start-up of the source, whichever is later, and upon start-up of a new fiberglass boat manufacturing operation at the source, submit a certification to the Agency that includes:
 - A) Identification of each subject fiberglass boat manufacturing operation as of the date of certification;
 - B) A declaration that all subject fiberglass boat manufacturing operations, including related cleaning operations, are in compliance with the requirements of this Subpart;
 - C) The limitation with which each subject fiberglass boat manufacturing operation will comply (i.e., the VOM content limitation, the emissions averaging alternative, or the emissions control system alternative);
 - D) Initial documentation that each subject fiberglass boat manufacturing operation will comply with the applicable limitation, including copies of manufacturer's specifications, test results (if any), formulation data, and calculations;
 - E) Identification of the methods that will be used to demonstrate continuing compliance with the applicable limitations;
 - F) A description of the practices and procedures that the source will follow to ensure compliance with the limitations in Section 218.891(h) of this Subpart:
 - <u>A description of each fiberglass boat manufacturing operation</u> exempt pursuant to Section 218.890(b) of this Subpart, if any;
 - H) A description of materials subject to Section 218.891(f) of this Subpart, if any, used in each fiberglass boat manufacturing operation;
 - At least 30 calendar days before changing the method of compliance in accordance with Section 218.891(b), (c), and (d), notify the Agency in writing of the change. The notification shall include a demonstration of compliance with the newly applicable subsection;

- 3) Notify the Agency in writing of any violation of the requirements of this Subpart within 30 days following the occurrence of the violation and provide records documenting the violation upon request by the Agency;
- 4) Retain all records required by this Section for at least three years and make those records available to the Agency upon request.
- <u>C)</u> The owner or operator of a fiberglass boat manufacturing operation subject to the limitations of Section 218.891 of this Subpart and complying by means of Section 218.891(b) shall comply with the following.
 - 1) By May 1, 2012 2014, or upon initial start-up, whichever is later, submit a certification to the Agency that includes the name, identification number, and VOM content of each subject resin and gel coat as applied each day by each subject fiberglass boat manufacturing operation;
 - 2) Collect and record the following information each day for each fiberglass boat manufacturing operation complying with Section 218.891(b):
 - A) The name, identification number, and VOM content of each subject resin and gel coat as applied each day by each fiberglass boat manufacturing operation; and
 - B) If complying with Section 218.891(b)(2), the daily weighted average VOM content of all subject resins and gel coats as applied by each subject fiberglass boat manufacturing operation.
- d) The owner or operator of a fiberglass boat manufacturing operation subject to the requirements of Section 218.891 of this Subpart and complying by means of Section 218.891(c) shall:
 - 1) On and after May 1, 20122011, collect and record the following information each month:
 - A) The amount of production resin, pigmented gel coat, clear gel coat, tooling resin, and tooling gel coat used in each subject fiberglass boat manufacturing operation;
 - B) The VOM content of each production resin, pigmented gel coat, clear gel coat, tooling resin, and tooling gel coat used in each subject fiberglass boat manufacturing operation;
 - <u>C)</u> Total monthly VOM emissions for all subject fiberglass boat manufacturing operations;

- 2) At the end of the first 12-month averaging period, and at the end of each subsequent month, collect and record the following information:
 - A) The monomer VOM mass emission limit for all subject fiberglass boat manufacturing operations for the applicable 12-month averaging period, with supporting calculations;
 - B) The total actual emissions of VOM from all subject fiberglass boat manufacturing operations for the applicable 12-month averaging period.
- e) The owner or operator of a fiberglass boat manufacturing operation subject to the requirements of Section 218.891 of this Subpart and complying by means of Section 218.891(d) shall:
 - 1) By May 1, 20122011, or upon initial start-up, whichever is later, and upon start-up of a new control device, submit a certification to the Agency that includes the following:
 - A) The type of control device used to comply with the requirements of Section 218.891(d);
 - B) The results of all tests and calculations necessary to demonstrate compliance with the requirements of Section 218.891(d); and
 - C) A declaration that the monitoring equipment required under Section 218.892 of this Subpart has been properly installed and calibrated according to manufacturer's specifications;
 - 2) Within 90 days after conducting testing pursuant to Section 218.892, submit to the Agency a copy of all test results, as well as a certification that includes the following:
 - A) A declaration that all tests and calculations necessary to demonstrate whether the fiberglass boat manufacturing operation is in compliance with Section 218.891(d) have been properly performed;
 - B) A statement whether the fiberglass boat manufacturing operations are or are not in compliance with Section 218.891(d);
 - C) The emissions limitation applicable during the control device performance test, with supporting calculations;

- D) The operating parameters of the fiberglass boat manufacturing process during testing, as monitored in accordance with Section 218.892;
- Collect and record daily the following information for each fiberglass boat manufacturing operation subject to the requirements of Section
 218.891(d), and submit that information to the Agency upon request:
 - A) Afterburner or other approved control device monitoring data in accordance with Section 218.892 of this Subpart;
 - B) A log of operating time for the control device and monitoring equipment;
 - C) A maintenance log for the control device and monitoring equipment detailing all routine and non-routine maintenance performed, including dates and duration of any outages;
 - <u>D)</u> <u>Information to substantiate that the fiberglass boat manufacturing operation is operating in compliance with the parameters determined pursuant to Section 218.892.</u>
- f) The owner or operator of a source subject to the requirements in Section 218.891(f) of this Subpart shall collect and record the following information for each fiberglass boat manufacturing operation:
 - The name and identification number of each material subject to Section 218.891(f) as applied each day by each subject fiberglass boat manufacturing operation;
 - 2) If subject to Section 218.891(f)(2), the amount of production and tooling resins, and pigmented, clear, and tooling gel coats used for part or mold repair and touch-ups, used each month at the subject source, and the total amount of all resins and gel coats used each month at the subject source;
 - 3) If subject to Section 218.891(f)(3), the amount of pure, 100 percent vinylester resins used for skin coats each month at the subject source, and the total amount of all resins used each month at the subject source.
- g) The owner or operator of a source subject to the requirements of Section 218.891 of this Subpart shall collect and record the following information for each cleaning solution used in each fiberglass boat manufacturing operation:

- 1) For each cleaning solution for which the owner or operator relies on the VOM content to demonstrate compliance with Section 218.891(g) of this Subpart and that is prepared at the source with automatic equipment:
 - A) The name and identification of each cleaning solution;
 - B) The VOM content of each cleaning solvent in the cleaning solution, as determined in accordance with Section 218.892(d) of this Subpart;
 - C) Each change to the setting of the automatic equipment, with date, time, description of changes in the cleaning solution constituents (e.g., cleaning solvents), and a description of changes to the proportion of cleaning solvent and water (or other non-VOM);
 - D) The proportion of each cleaning solvent and water (or other non-VOM) used to prepare the as-used cleaning solution;
 - E) The VOM content of the as-used cleaning solution, with supporting calculations; and
 - F) A calibration log for the automatic equipment, detailing periodic checks;
- 2) For each batch of cleaning solution for which the owner or operator relies on the VOM content to demonstrate compliance with Section 218.891(g), and that is not prepared at the source with automatic equipment:
 - A) The name and identification of each cleaning solution;
 - B) Date and time of preparation, and each subsequent modification, of the batch;
 - C) The VOM content of each cleaning solvent in the cleaning solution, as determined in accordance with Section 218.892(d);
 - D) The total amount of each cleaning solvent and water (or other non-VOM) used to prepare the as-used cleaning solution; and
 - E) The VOM content of the as-used cleaning solution, with supporting calculations;
- 3) For each batch of cleaning solution for which the owner or operator relies on the vapor pressure of the cleaning solution to demonstrate compliance with Section 218.891(g):

- <u>A)</u> The name and identification of each cleaning solution;
- <u>B)</u> Date and time of preparation, and each subsequent modification, of the batch;
- <u>C)</u> The molecular weight, density, and VOM composite partial vapor pressure of each cleaning solvent, as determined in accordance with Section 218.892(f) of this Subpart;
- D) The total amount of each cleaning solvent used to prepare the asused cleaning solution; and
- E) The VOM composite partial vapor pressure of each as-used cleaning solution, as determined in accordance with Section 218.110 of this Part.

(Source:	Added at 34 Ill. Reg.	. effective	

SUBPART JJ: MISCELLANEOUS INDUSTRIASL ADHESIVES

Section 218.900 Applicability

- a) Except as provided in subsection (b) of this Section, on and after May 1, 20122011, the requirements of this Subpart shall apply to miscellaneous industrial adhesive application operations at sources where the total actual VOM emissions from all such operations, including related cleaning activities, equal or exceed 6.8 kg/day (15 lbs/day), calculated in accordance with Section 218.904(a)(1)(B), in the absence of air pollution control equipment.
- b) Notwithstanding subsection (a) of this Section:
 - 1) The requirements of this Subpart shall not apply to miscellaneous industrial adhesive application operations associated with the following:
 - A) Aerospace coatings;
 - B) Metal furniture coatings;
 - C) Large appliance coatings;
 - D) Flat wood paneling coatings;
 - E) Paper, film, and foil coatings;

- F) <u>Lithographic printing</u>;
- <u>G)</u> <u>Letterpress printing;</u>
- H) Flexible package printing;
- <u>I)</u> Coil coating;
- J) Fabric coating;
- K) Rubber tire manufacturing.
- 2) The requirements of Section 218.901(b) through (e) of this Subpart shall not apply to the following:
 - A) Adhesives or adhesive primers being tested or evaluated in any research and development operation or quality assurance or analytical laboratory;
 - B) Adhesives or adhesive primers used in the assembly, repair, or manufacture of aerospace or undersea-based weapon systems;
 - <u>Adhesives or adhesive primers used in medical equipment manufacturing operations;</u>
 - D) Cyanoacrylate adhesive application operations;
 - E) Aerosol adhesive and aerosol adhesive primer application operations;
 - F) Operations using polyester bonding putties to assemble fiberglass parts at fiberglass boat manufacturing facilities and at other reinforced plastic composite manufacturing facilities;
 - G) Operations using adhesives and adhesive primers that are supplied to the manufacturer in containers with a net volume of 0.47 liters (16 oz) or less, or a net weight of 0.45 kg (1 lb) or less.
- c) If a miscellaneous industrial adhesive application operation at a source is or becomes subject to one or more of the limitations in this Subpart, the miscellaneous industrial adhesive application operation is always subject to the applicable provisions of this Subpart.

d) The owner or operator of a source exempt from the emission limitations and control requirements of this Subpart because of the criteria in subsection (a) of this Section is subject to the recordkeeping and reporting requirements specified in Section 218.904(a) of this Subpart.

(Source:	Added at 34 Ill. Reg.	, effective)

Section 218.901 Emission Limitations and Control Requirements

- a) The owner or operator of a source subject to the requirements of this Subpart shall comply with the limitations in subsection (b), (c), or (d) of this Section, as well as with the limitations in subsections (e) and (f) of this Section. Notwithstanding this requirement, sources subject to Section 218.900(b)(2) shall comply with the limitations in subsection (f) of this Section only.
- b) The owner or operator of adhesive application operations listed in this subsection
 (b) shall comply with the following VOM emission limitations. If an adhesive is
 used to bond dissimilar substrates together, the substrate category with the highest
 VOM emission limitation shall apply:

			kg VOM/l adhesive or adhesive primer applied	lb VOM/gal adhesive or adhesive primer applied
<u>1)</u>	Gene	eral adhesive application operations		
	<u>A)</u>	Reinforced plastic composite	0.200	<u>(1.7)</u>
	<u>B)</u>	Flexible vinyl	0.250	(2.1)
	<u>C)</u>	<u>Metal</u>	0.030	(0.3)
	<u>D)</u>	Porous material (except wood)	0.120	(1.0)
	<u>E)</u>	Rubber	0.250	(2.1)
	<u>F)</u>	Wood	0.030	(0.3)
	<u>G)</u>	Other substrates	0.250	(2.1)
<u>2)</u>	Spec	ialty adhesive application operations		
	<u>A)</u>	Ceramic tile installation	<u>0.130</u>	<u>(1.1)</u>

<u>B)</u>	Contact adhesive	0.250	(2.1)
<u>C)</u>	Cove base installation	<u>0.150</u>	(1.3)
<u>D)</u>	Indoor floor covering installation	0.150	(1.3)
<u>E)</u>	Outdoor floor covering installation	0.250	(2.1)
<u>F)</u>	Installation of perimeter bonded sheet flooring	<u>0.660</u>	(5.5)
<u>G)</u>	Metal to urethane/rubber molding or casting	<u>0.850</u>	<u>(7.1)</u>
<u>H)</u>	Motor vehicle adhesive	0.250	(2.1)
<u>I)</u>	Motor vehicle weatherstrip adhesive	<u>0.750</u>	<u>(6.3)</u>
<u>J)</u>	Multipurpose construction	0.200	(1.7)
<u>K)</u>	Plastic solvent welding (acrylonitrile butadiene styrene (ABS) welding)	0.400	(3.3)
<u>L)</u>	Plastic solvent welding (except ABS welding)	0.500	<u>(4.2)</u>
<u>M)</u>	Sheet rubber lining installation	0.850	(7.1)
<u>N)</u>	Single-ply roof membrane installation/repair (except ethylene propylenediene monomer (EPDM) roof membrane)	0.250	(2.1)
<u>O)</u>	Structural glazing	<u>0.100</u>	(0.8)
<u>P)</u>	Thin metal laminate	0.780	(6.5)
<u>Q)</u>	Tire repair	<u>0.100</u>	(0.8)
<u>R)</u>	Waterproof resorcinol glue	<u>0.170</u>	(1.4)
A 11	1		

3) Adhesive primer application operations

<u>A)</u>	Motor vehicle glass bonding primer	<u>0.900</u>	<u>(7.5)</u>
<u>B)</u>	Plastic solvent welding adhesive primer	0.650	(5.4)
<u>C)</u>	Single-ply roof membrane adhesive primer	0.250	(2.1)
<u>D)</u>	Other adhesive primer	0.250	(2.1)

- No owner or operator of a source subject to this Subpart shall operate a miscellaneous industrial adhesive application operation unless the daily-weighted average VOM content of subject adhesives as applied each day by the operation, calculated in accordance with subsection (c)(1) of this Section, is less than or equal to the emissions limitation calculated in accordance with subsection (c)(2) of this Section.
 - 1) Weighted Average of VOM Content of Adhesives Applied Each Day

$$VOM_{WA} = \frac{\sum_{i=1}^{n} M_{i} VOM_{i}}{\sum_{i=1}^{n} M_{1}}$$

where:

<u>VOM_{WA}</u> ≡ The weighted average VOM content in units of kg (lbs) <u>VOM per volume in l (gal) of all subject adhesives as applied each day;</u>

<u>i</u> = <u>Subscript denoting a specific adhesive as applied;</u>

<u>n</u> = The number of different adhesives as applied each day by each miscellaneous industrial adhesive application operation;

 $\underline{M_i}$ = $\underline{\text{The mass of each adhesive, as applied, in units of kg/l}}_{(lb/gal);}$

 $\underline{VOM_i}$ = $\underline{The VOM content in units of kg (lbs) VOM per volume in l (gal) of each adhesive as applied;$

2) Mass Weighted Average VOM Limit for an Averaging Operation

$$Limit_{WA} = \frac{\sum_{i=1}^{n} M_{i} Limit_{i}}{\sum_{i=1}^{n} M_{i}}$$

where:

 $\underline{\text{Limit}}_{WA} \equiv \underline{\text{The mass weighted average VOM limit in units of kg (lbs)}}$

VOM per volume in l (gal) of all subject adhesives as

applied each day in a single operation;

<u>i</u> <u>= Subscript denoting a specific adhesive as applied;</u>

 \underline{n} = The number of different adhesives as applied each day by

each miscellaneous industrial adhesive application

operation;

 \underline{M}_i = The mass of each adhesive, as applied, in units of kg/l

(lb/gal);

Limit_i = The VOM limit, taken from subsection (b) of this Section,

in units of kg (lbs) VOM per volume in l (gal) of each

adhesive as applied.

d) No owner or operator of a source subject to this Subpart shall operate a miscellaneous industrial adhesive application operation employing a capture system and control device unless either:

- An afterburner or carbon adsorption system is used that provides at least 85 percent reduction in the overall emissions of VOM from the application operation;
- An alternative capture and control system is used that provides at least 85 percent reduction in the overall emissions of VOM from the application operation and is approved by the Agency and USEPA within federally enforceable permit conditions. The owner or operator shall submit a plan to the Agency detailing appropriate monitoring devices, test methods, recordkeeping requirements, and operating parameters for the control device; or
- 3) The owner or operator complies with the applicable limitation set forth in subsection (b) of this Section by utilizing a combination of low-VOM adhesives and an afterburner or carbon adsorption system. The owner or

operator may use an alternative capture and control system if the owner or operator submits a plan to the Agency detailing appropriate monitoring devices, test methods, recordkeeping requirements, and operating parameters for the capture and control system and the system is approved by the Agency and USEPA within federally enforceable permit conditions.

- e) The owner or operator of a source subject to this Subpart shall apply all miscellaneous industrial adhesives using one or more of the following methods:
 - 1) Electrostatic spray;
 - 2) High volume low pressure (HVLP) spray;
 - 3) Flow coating. For the purposes of this Subpart, flow coating means a non-atomized technique of applying coating to a substrate with a fluid nozzle with no air supplied to the nozzle;
 - 4) Roll coating or hand application, including non-spray application methods similar to hand or mechanically powered caulking gun, brush, or direct hand application;
 - Dip coating, including electrodeposition. For purposes of this Subpart, "electrodeposition" means a water-borne dip coating process in which opposite electrical charges are applied to the substrate and the coating. The coating is attracted to the substrate due to the electrochemical potential difference that is created;
 - 6) Airless spray;
 - 7) Air-assisted airless spray; or
 - 8) Another adhesive application method capable of achieving a transfer efficiency equal to or better than that achieved by HVLP spraying, if the method is approved in writing by the Agency.
- f) The owner or operator of a source subject to this Subpart shall comply with the following work practices for each subject miscellaneous adhesive application operation at the source:
 - 1) Store all VOM-containing adhesives, adhesive primers, process-related waste materials, cleaning materials, and used shop towels in closed containers;
 - Ensure that mixing and storage containers used for VOM-containing adhesives, adhesive primers, process-related waste materials, and cleaning

- materials are kept closed at all times except when depositing or removing those materials;
- 3) Minimize spills of VOM-containing adhesives, adhesive primers, processrelated waste materials, and cleaning materials;
- 4) Convey VOM-containing adhesives, adhesive primers, process-related waste materials, and cleaning materials from one location to another in closed containers or pipes; and
- 5) Minimize VOM emissions from the cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.

(Source:	Added at 34	Ill. Reg.	, effective))
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Section 218.902 Testing Requirements

- a) Testing to demonstrate compliance with the requirements of this Subpart shall be conducted by the owner or operator within 90 days after a request by the Agency, or as otherwise provided in this Subpart. The testing shall be conducted at the expense of the owner or operator and the owner or operator shall notify the Agency in writing 30 days in advance of conducting the testing to allow the Agency to be present during testing.
- b) Testing to demonstrate compliance with the VOM content limitations in Section 218.901(b) of this Subpart shall be conducted as follows:
 - Method 24, incorporated by reference in Section 218.112 of this Part, shall be used for non-reactive adhesives. If it is demonstrated to the satisfaction of the Agency and the USEPA that plant adhesive formulation data are equivalent to Method 24 results, formulation data may be used. In the event of any inconsistency between a Method 24 test and a facility's formulation data, the Method 24 test will govern.;
 - 2) Appendix A of 40 CFR 63, Subpart PPPP, incorporated by reference in Section 218.112 of this Part, shall be used for reactive adhesives;
 - The manufacturer's specifications for VOM content for adhesives may be used if the specifications are based on results of tests of the VOM content conducted in accordance with methods specified in subsections (b)(1) and (b)(2) of this Section, as applicable.

- <u>For afterburners and carbon adsorbers, the methods and procedures of Section 218.105(d) through (f) of this Part shall be used for testing to demonstrate compliance with the requirements of Section 218.901(d) of this Subpart, as follows:</u>
 - 1) To select the sampling sites, Method 1 or 1A, as appropriate, 40 CFR 60, appendix Appendix A, incorporated by reference in Section 218.112 of this Part;
 - <u>2)</u> To determine the volumetric flow rate of the exhaust stream, Method 2, 2A, 2C, or 2D, as appropriate, 40 CFR 60, appendix Appendix A, incorporated by reference in Section 218.112 of this Part;
 - To determine the VOM concentration of the exhaust stream entering and exiting the emissions control system, Method 25 or 25A, as appropriate, 40 CFR 60, appendix Appendix A, incorporated by reference in Section 218.112 of this Part. For thermal and catalytic afterburners, Method 25 must be used, except under the following circumstances, in which case Method 25A must be used:
 - A) The allowable outlet concentration of VOM from the emissions control system is less than 50 ppmv, as carbon;
 - B) The VOM concentration at the inlet of the emissions control system and the required level of control result in exhaust concentrations of VOM of 50 ppmv, or less, as carbon;
 - C) Due to the high efficiency of the emissions control system, the anticipated VOM concentration at the emissions control system exhaust is 50 ppmv or less, as carbon, regardless of inlet concentration. If the source elects to use Method 25A under this option, the exhaust VOM concentration must be 50 ppmv or less, as carbon, and the required destruction efficiency must be met for the source to have demonstrated compliance. If the Method 25A test results show that the required destruction efficiency apparently has been met, but the exhaust concentration is above 50 ppmv, as carbon, a retest is required. The retest shall be conducted using either Method 25 or 25A. If the retest is conducted using Method 25A and the test results again show that the required destruction efficiency apparently has been met, but the exhaust concentration is above 50 ppmv, as carbon, the source must retest using Method 25;
 - D) During testing, the cleaning equipment shall be operated at representative operating conditions and flow rates.

	<u>d)</u>	or carb require	ner or operator using an emissions control system other than an afterburner on adsorber shall conduct testing to demonstrate compliance with the ments of Section 218.901(d) as set forth in the owner's or operator's planed by the Agency and USEPA pursuant to Section 218.901(d)(3).
	(Sourc	e: Adde	ed at 34 Ill. Reg, effective)
Section	n 218.9	03 Mor	nitoring Requirements
	<u>a)</u>		eterburner or carbon adsorber is used to demonstrate compliance, the owner eator of a source subject to Section 218.901(d) of this Subpart shall:
		1)	Install, calibrate, operate, and maintain temperature monitoring devices with an accuracy of 3°C or 5°F on the emissions control system in accordance with Section 218.105(d)(2) of this Part and in accordance with the manufacturer's specifications. Monitoring shall be performed at all times when the emissions control system is operating; and
		2)	Install, calibrate, operate and maintain, in accordance with manufacturer's specifications, a continuous recorder on the temperature monitoring devices, such as a strip chart, recorder or computer, with at least the same accuracy as the temperature monitor.
	<u>b)</u>	used to Section the mo	missions control system other than an afterburner or carbon adsorber is demonstrate compliance, the owner or operator of a source subject to a 218.901(d) of this Subpart shall install, maintain, calibrate, and operate nitoring equipment as set forth in the owner's or operator's plan approved Agency and USEPA pursuant to Section 218.901(d)(3).
	(Sourc	e: Adde	ed at 34 Ill. Reg, effective)

Section 218.904 Recordkeeping and Reporting Requirements

- a) The owner or operator of a source exempt from the limitations of this Subpart because of the criteria in Section 218.900(a) of this Subpart shall comply with the following:
 - 1) By May 1, 20122011, or upon initial start-up of the source, whichever is later, submit a certification to the Agency that includes:
 - A) A declaration that the source is exempt from the requirements of this Section because of the criteria in Section 218.900(a);

- B) Calculations that demonstrate that combined emissions of VOM from miscellaneous industrial adhesive application operations at the source, including related cleaning activities, never equal or exceed 6.8 kg/day (15 lbs/day), in the absence of air pollution control equipment. To calculate daily emissions of VOM, the owner or operator shall determine the monthly emissions of VOM from miscellaneous industrial adhesive application operations at the source (including related cleaning activities) and divide this amount by the number of days during that calendar month that miscellaneous industrial adhesive application operations at the source were in operation;
- 2) Collect and record the following information each month for each miscellaneous industrial adhesive application operation, maintain the information at the source for a period of three years, and provide the information to the Agency upon request:
 - <u>A)</u> The name and identification number of each adhesive as applied by each miscellaneous industrial adhesive application operation; and
 - B) The weight of VOM per volume and the volume of each adhesive (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each month by each miscellaneous industrial adhesive application operation;
- 32) Notify the Agency of any record that shows that the combined emissions of VOM from miscellaneous industrial adhesive application operations at the source, including related cleaning activities, ever equal or exceed 6.8 kg/day (15 lbs/day), in the absence of air pollution control equipment, within 30 days after the event occurs, and provide copies of those records upon request by the Agency.
- b) All sources subject to the requirements of this Subpart shall:
 - 1) By May 1, 20122011, or upon initial start-up of the source, whichever is later, submit a certification to the Agency that includes:
 - A) Identification of each subject adhesive application operation as of the date of certification;
 - B) A declaration that all subject adhesive application operations are in compliance with the requirements of this Subpart;
 - <u>C)</u> The limitation with which each subject adhesive application operation will comply (i.e., the VOM content limitation, the daily

- weighted averaging alternative, or the emissions control system alternative);
- D) Initial documentation that each subject adhesive application operation will comply with the applicable limitation, including copies of manufacturer's specifications, test results (if any), formulation data, and calculations;
- E) <u>Identification of the methods that will be used to demonstrate continuing compliance with the applicable limitations;</u>
- F) A description of the practices and procedures that the source will follow to ensure compliance with the limitations in Section 218.901(f) of this Subpart;
- G) A description of each adhesive application operation exempt pursuant to Section 218.900(b)(2) of this Subpart, if any; and
- <u>H)</u> The application methods used by each subject adhesive application operation;
- At least 30 calendar days before changing the method of compliance in accordance with Section 218.901(b), (c), and (d), notify the Agency in writing of the change. The notification shall include a demonstration of compliance with the newly applicable subsection;
- 3) Notify the Agency in writing of any violation of the requirements of this Subpart within 30 days following the occurrence of the violation and provide records documenting the violation upon request by the Agency;
- 4) Retain all records required by this Section for at least three years and make those records available to the Agency upon request.
- c) The owner or operator of an adhesive application operation subject to the limitations of Section 218.901 of this Subpart and complying by means of Section 218.901(b) shall comply with the following:
 - 1) By May 1, 20122011, or upon the initial start-up date, whichever is later, submit a certification to the Agency that includes the name, identification number, and VOM content of each adhesive as applied by each subject adhesive application operation;
 - 2) Collect and record the name, identification number, and VOM content of each adhesive as applied each day by each adhesive application operation complying with Section 218.901(b).

- d) The owner or operator of an adhesive application operation subject to the limitations of Section 218.901 of this Subpart and complying by means of Section 218.901(c) shall comply with the following:
 - 1) By May 1, 20122011, or upon initial start-up, whichever is later, submit a certification to the Agency that includes the name, identification number, and VOM content of each adhesive as applied by each subject adhesive application operation;
 - 2) Collect and record the following information each day for each adhesive application operation complying by means of Section 218.901(c):
 - A) The name, identification number, and VOM content of each adhesive as applied each day by each subject adhesive application operation;
 - B) The daily weighted average VOM content of all adhesives as applied by each subject adhesive application operation.
- e) The owner or operator of an adhesive application operation subject to the requirements of Section 218.901 of this Subpart and complying by means of Section 218.901(d) shall:
 - 1) By May 1, 20122011, or upon the initial start-up date, whichever is later, and upon initial start-up of a new control device, submit a certification to the Agency that includes the following:
 - A) The type of afterburner or other approved control device used to comply with the requirements of Section 218.901(d);
 - B) The results of all tests and calculations necessary to demonstrate compliance with the control requirements of Section 218.901(d); and
 - C) A declaration that the monitoring equipment required under Section 218.903 of this Subpart has been properly installed and calibrated according to manufacturer's specifications;
 - 2) Within 90 days after conducting testing pursuant to Section 218.902 of this Subpart, submit to the Agency a copy of all test results, as well as a certification that includes the following:
 - A) A declaration that all tests and calculations necessary to demonstrate whether the adhesive application operations are in

- compliance with Section 218.901(d) have been properly performed;
- B) A statement whether the adhesive application operations are or are not in compliance with Section 218.901(d); and
- C) The operating parameters of the afterburner or other approved control device during testing, as monitored in accordance with Section 218.903 of this Subpart;
- 3) Collect and record daily the following information for each adhesive application operation subject to the requirements of Section 218.901(d):
 - A) Afterburner or other approved control device monitoring data in accordance with Section 218.903 of this Subpart;
 - B) A log of operating time for the afterburner or other approved control device, monitoring equipment, and the associated application unit; and
 - C) A maintenance log for the afterburner or other approved control device and monitoring equipment detailing all routine and non-routine maintenance performed, including dates and duration of any outages.

(Source: Added at 34 Ill. Reg. _____, effective _____)

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SUBTITLE B: AIR POLLUTION
CHAPTER I: POLLUTION CONTROL BOARD
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219.762 219.764 219.766 219.768 219.770 Section 219.780 219.782 219.784 219.786 219.787 219.788 219.788	Control Requirements Compliance Certification Leaks Testing and Monitoring Recordkeeping and Reporting SUBPART HH: MOTOR VEHICLE REFINISHING Emission Limitations Alternative Control Requirements Equipment Specifications Surface Preparation Materials Work Practices Testing Monitoring and Recordkeeping for Control Devices
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	SUBPART II: FIBERGLASS BOAT MANUFACTURING MATERIALS
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AUTHORITY: Implementing Section 10 and authorized by Sections 27, 28 and 28.5 of the Environmental Protection Act [415 ILCS 5/10, 27, 28 and 28.5].

SOURCE: Adopted in R91-8 at 15 Ill. Reg. 12491, effective August 16, 1991; amended in R91-24 at 16 Ill. Reg. 13597, effective August 24, 1992; amended in R91-30 at 16 Ill. Reg. 13883, effective August 24, 1992; emergency amendment in R93-12 at 17 Ill. Reg. 8295, effective May 24, 1993, for a maximum of 150 days; amended in R93-9 at 17 Ill. Reg. 16918, effective September 27, 1993 and October 21, 1993; amended in R93-28 at 18 Ill. Reg. 4242, effective March 3, 1994; amended in R94-12 at 18 Ill. Reg. 14987, effective September 21, 1994; amended in R94-15 at 18 Ill. Reg. 16415, effective October 25, 1994; amended in R94-16 at 18 Ill. Reg. 16980, effective November 15, 1994; emergency amendment in R95-10 at 19 Ill. Reg. 3059, effective February 28, 1995, for a maximum of 150 days; amended in R94-21, R94-31 and

R94-32 at 19 III. Reg. 6958, effective May 9, 1995; amended in R94-33 at 19 III. Reg. 7385, effective May 22, 1995; amended in R96-2 at 20 III. Reg. 3848, effective February 15, 1996; amended in R96-13 at 20 III. Reg. 14462, effective October 28, 1996; amended in R97-24 at 21 III. Reg. 7721, effective June 9, 1997; amended in R97-31 at 22 III. Reg. 3517, effective February 2, 1998; amended in R04-12/20 at 30 III. Reg. 9799, effective May 15, 2006; amended in R06-21 at 31 III. Reg. 7110, effective April 30, 2007; amended in R10-10 at 34 III. Reg. 5392, effective March 23, 2010; amended in R10-8 at 34 III. Reg. 9253, effective June 25, 2010; amended in R10-20 at 34 III. Reg. ______, effective _______.

SUBPART A: GENERAL PROVISIONS

Section 219.105 Test Methods and Procedures

- Coatings, Inks and Fountain Solutions
 The following test methods and procedures shall be used to determine compliance of as applied coatings, inks, and fountain solutions with the limitations set forth in this Part.
 - Sampling: Samples collected for analyses shall be one-liter taken into a one-liter container at a location and time such that the sample will be representative of the coating as applied (i.e., the sample shall include any dilution solvent or other VOM added during the manufacturing process). The container must be tightly sealed immediately after the sample is taken. Any solvent or other VOM added after the sample is taken must be measured and accounted for in the calculations in subsection (a)(3) of this Section. For multiple package coatings, separate samples of each component shall be obtained. A mixed sample shall not be obtained as it will cure in the container. Sampling procedures shall follow the guidelines presented in:
 - A) ASTM D 3925-81 (1985) standard practice for sampling liquid paints and related pigment coating. This practice is incorporated by reference in Section 219.112 of this Part.
 - B) ASTM E 300-86 standard practice for sampling industrial chemicals. This practice is incorporated by reference in Section 219.112 of this Part.
 - 2) Analyses: The applicable analytical methods specified below shall be used to determine the composition of coatings, inks, or fountain solutions as applied.
 - A) Method 24 of 40 CFR 60, <u>appendix Appendix</u> A, incorporated by reference in Section 219.112 of this Part, shall be used to determine the VOM content and density of coatings. If it is

demonstrated to the satisfaction of the Agency and the USEPA that plant coating formulation data are equivalent to Method 24 results, formulation data may be used. In the event of any inconsistency between a Method 24 test and a facility's formulation data, the Method 24 test will govern.

- B) Method 24A of 40 CFR Part 60, appendix Appendix A, incorporated by reference in Section 219.112, shall be used to determine the VOM content and density of rotogravure printing inks and related coatings. If it is demonstrated to the satisfaction of the Agency and USEPA that the plant coating formulation data are equivalent to Method 24A results, formulation data may be used. In the event of any inconsistency between a Method 24A test and formulation data, the Method 24A test will govern.
- C) The following ASTM methods are the analytical procedures for determining VOM:
 - i) ASTM D 1475-85: Standard test method for density of paint, varnish, lacquer and related products. This test method is incorporated by reference in Section 219.112 of this Part.
 - ii) ASTM D 2369-87: Standard test method for volatile content of a coating. This test method is incorporated by reference in Section 219.112 of this Part.
 - iii) ASTM D 3792-86: Standard test method for water content of water-reducible paints by direct injection into a gas chromatograph. This test method is incorporated by reference in Section 219.112 of this Part.
 - iv) ASTM D 4017-81 (1987): Standard test method for water content in paints and paint materials by the Karl Fischer method. This test method is incorporated by reference in Section 219.112 of this Part.
 - v) ASTM D 4457-85: Standard test method for determination of dichloromethane and 1,1,1, trichloroethane in paints and coatings by direct injection into a gas chromatograph. (The procedure delineated above can be used to develop protocols for any compounds specifically exempted from the definition of VOM.) This test method is incorporated by reference in Section 219.112 of this Part.

- vi) ASTM D 2697-86: Standard test method for volume nonvolatile matter in clear or pigmented coatings. This test method is incorporated by reference in Section 219.112 of this Part.
- vii) ASTM D 3980-87: Standard practice for interlaboratory testing of paint and related materials. This practice is incorporated by reference in Section 219.112 of this Part.
- viii) ASTM E 180-85: Standard practice for determining the precision of ASTM methods for analysis of and testing of industrial chemicals. This practice is incorporated by reference in Section 219.112 of this Part.
- ix) ASTM D 2372-85: Standard method of separation of vehicle from solvent-reducible paints. This method is incorporated by reference in Section 219.112 of this Part.
- D) Use of an adaptation to any of the analytical methods specified in subsections (a)(2)(A), (B), and (C) of this Section may not be used unless approved by the Agency and USEPA. An owner or operator must submit sufficient documentation for the Agency and USEPA to find that the analytical methods specified in subsections (a)(2)(A), (B), and (C) of this Section will yield inaccurate results and that the proposed adaptation is appropriate.
- 3) Calculations: Calculations for determining the VOM content, water content and the content of any compounds which are specifically exempted from the definition of VOM of coatings, inks and fountain solutions as applied shall follow the guidance provided in the following documents:
 - A) "A Guide for Surface Coating Calculation", EPA-340/1-86-016, incorporated by reference in Section 219.112 of this Part.
 - B) "Procedures for Certifying Quantity of Volatile Organic Compounds Emitted by Paint, Ink and Other Coatings" (revised June 1986), EPA-450/3-84-019, incorporated by reference in Section 219.112 of this Part.
 - C) "A Guide for Graphic Arts Calculations", August 1988, EPA-340/1-88-003, incorporated by reference in Section 219.112 of this Part.
- b) Automobile or Light-Duty Truck Test Protocol

- 1) The protocol for testing, including determining the transfer efficiency, of coating applicators, at primer surfacer operations and topcoat operations at an automobile or light-duty truck assembly source shall follow the proceduresprocedure in the following:
 - A) Prior to May 1, 20122011: "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations" ("topcoat protocol"), December 1988, EPA-450/3-88-018, incorporated by reference in Section 219.112 of this Part.
 - B) On and after May 1, 2012 2011: "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Primer-Surfacer and Topcoat Operations" (topcoat protocol), September 2008, EPA-453/R-08-002, incorporated by reference in Section 219.112 of this Part.
- 2) Prior to testing pursuant to the applicable topcoat protocol, the owner or operator of a coating operation subject to the topcoat or primer surfacer limit in SectionSections 219.204(a)(1)(B),(2) or 219.204 (a)(1)(C), (a)(2)(B), (a)(2)(C), or (a)(2)(E)(3) shall submit a detailed testing proposal specifying the method by which testing will be conducted and how compliance will be demonstrated consistent with the applicable topcoat protocol. The proposal shall include, at a minimum, a comprehensive plan (including a rationale) for determining the transfer efficiency at each booth through the use of in-plant or pilot testing, the selection of coatings to be tested (for the purpose of determining transfer efficiency) including the rationale for coating groupings, the method for determining the analytic VOM content of as applied coatings and the formulation solvent content of as applied coatings, and a description of the records of coating VOM content as applied and coating's usage that which will be kept to demonstrate compliance. Upon approval of the proposal by the Agency and USEPA, the compliance demonstration for a coating line may proceed.

c) Capture System Efficiency Test Protocols

- 1) Applicability
 The requirements of subsection (c)(2) of this Section shall apply to all VOM emitting process emission units employing capture equipment (e.g., hoods, ducts), except those cases noted in this subsection (c)(1)below.
 - A) If an emission unit is equipped with (or uses) a permanent total enclosure (PTE) that meets Agency and USEPA specifications,

and which directs all VOM to a control device, then the emission unit is exempted from the requirements described in subsection (c)(2) of this Section. The Agency and USEPA specifications to determine whether a structure is considered a PTE are given in Method 204 of appendix-Appendix M of 40 CFR 51, incorporated by reference in Section 219.112 of this Part. In this instance, the capture efficiency is assumed to be 100 percent and the emission unit is still required to measure control efficiency using appropriate test methods as specified in subsection (d) of this Section.

- B) If an emission unit is equipped with (or uses) a control device designed to collect and recover VOM (e.g., carbon adsorber), an explicit measurement of capture efficiency is not necessary provided that the conditions given below are met. The overall control of the system can be determined by directly comparing the input liquid VOM to the recovered liquid VOM. The general procedure for use in this situation is given in 40 CFR 60.433, incorporated by reference in Section 219.112 of this Part, with the following additional restrictions:
 - i) The source owner or operator shall obtain data each operating day for the solvent usage and solvent recovery to permit the determination of the solvent recovery efficiency of the system each operating day using a 7-day rolling period. The recovery efficiency for each operating day is computed as the ratio of the total recovered solvent for that day and the most recent prior 6 operating days to the total solvent usage for the same 7-day period used for the recovered solvent, rather than a 30-day weighted average as given in 40 CFR 60.433 incorporated by reference in Section 219.112 of this Part. This ratio shall be expressed as a percentage. The ratio shall be computed within 72 hours following each 7-day period. A source that believes that the 7-day rolling period is not appropriate may use an alternative multi-day rolling period not to exceed 30 days, with the approval of the Agency and USEPA. In addition, the criteria in subsection (c)(1)(B)(ii) or subsection (c)(1)(B)(iii) below must be met.
 - ii) The solvent recovery system (i.e., capture and control system) must be dedicated to a single coating line, printing line, or other discrete activity that by itself is subject to an applicable VOM emission standard, or
 - iii) If the solvent recovery system controls more than one

coating line, printing line or other discrete activity that by itself is subject to an applicable VOM emission standard, the overall control (i.e., the total recovered VOM divided by the sum of liquid VOM input from all lines and other activities venting to the control system) must meet or exceed the most stringent standard applicable to any line or other discrete activity venting to the control system.

2) Capture Efficiency Protocols

The capture efficiency of an emission unit shall be measured using one of the protocols given below. Appropriate test methods to be utilized in each of the capture efficiency protocols are described in <a href="majorated-left-appendix-Ap

A) Gas/gas method using temporary total enclosure (TTE). The Agency and USEPA specifications to determine whether a temporary enclosure is considered a TTE are given in Method 204 of appendix Appendix M of 40 CFR 51, incorporated by reference in Section 219.112 of this Part. The capture efficiency equation to be used for this protocol is:

$$CE = \frac{G_w}{G_w + F_w}$$

where:

CE = capture efficiency, decimal fraction;

 G_w = mass of VOM captured and delivered to control device using a TTE;

 F_w = mass of uncaptured VOM that escapes from a TTE.

Method 204B or 204C contained in <u>appendix Appendix</u> M of 40 CFR Part 51, incorporated by reference in Section 219.112 of this Part is used to obtain G_w . Method 204D in <u>appendix Appendix</u> M of 40 CFR Part 51, incorporated by reference in Section 219.112 of this Part is used to obtain F_w .

B) Liquid/gas method using TTE. The Agency and USEPA

specifications to determine whether a temporary enclosure is considered a TTE are given in Method 204 of Appendix <a href="mailto:appendix-Appendix

$$CE = \frac{L - F_W}{L}$$

where:

CE = capture efficiency, decimal fraction;

L = mass of liquid VOM input to process emission unit;

 F_w = mass of uncaptured VOM that escapes from a TTE.

Method 204A or 204F contained in <u>appendix Appendix</u> M of 40 CFR Part 51, incorporated by reference in Section 219.112 of this Part is used to obtain L. Method 204 in <u>appendix Appendix</u> M of 40 CFR Part 51, incorporated by reference in Section 219.112 of this Part is used to obtain F_w.

C) Gas/gas method using the building or room (building or room enclosure), in which the affected coating line, printing line or other emission unit is located, as the enclosure, as determined <u>byin</u>
Method 204 of <u>appendix Appendix</u> M of 40 CFR 51, incorporated by reference in Section 219.112 of this Part and in which "F_B" and "G" are measured while operating only the affected line or emission unit. All fans and blowers in the building or room must be operated as they would under normal production. The capture efficiency equation to be used for this protocol is:

$$CE = \frac{G}{G + F_{\scriptscriptstyle B}}$$

where:

CE = capture efficiency, decimal fraction;

G = mass of VOM captured and delivered to control device;

 F_B = mass of uncaptured VOM that escapes from building enclosure.

Method 204B or 204C contained in <u>appendix Appendix</u> M of 40 CFR Part 51, incorporated by reference in Section 219.112 of this Part is used to obtain G. Method 204E in <u>appendix Appendix Appendix M</u> of 40 CFR Part 51, incorporated by reference in Section 219.112 of this Part is used to obtain F_B.

D) Liquid/gas method using the building or room (building or room enclosure), in which the affected coating line, printing line or other emission unit is located, as the enclosure as determined by Method 204 of appendix-Appendix M of 40 CFR 51, incorporated by reference in Section 219.112 of this Part and in which "F_B" and "L" are measured while operating only the affected line emission unit. All fans and blowers in the building or room must be operated as they would under normal production. The capture efficiency equation to be used for this protocol is:

$$CE = \frac{L - F_B}{L}$$

where:

CE = capture efficiency, decimal fraction;

L = mass of liquid VOM input to process emission unit;

 F_B = mass of uncaptured VOM that escapes from building enclosure.

Method 204A or 204F contained in <u>appendix Appendix</u> M of 40 CFR Part 51, incorporated by reference in Section 219.112 of this Part is used to obtain L. Method 204E in <u>appendix Appendix</u> M of 40 CFR Part 51, incorporated by reference in Section 219.112 of this Part is used to obtain F_B.

E) Mass balance using Data Quality Objective (DQO) or Lower Confidence Limit (LCL) protocol. For a liquid/gas input where an owner or operator is using the DQO/LCL protocol and not using an enclosure as described in Method 204 of <a href="majorage-appendix-Appendi

Section 219.112 of this Part. The results of capture efficiency calculations (G/L) must satisfy the DQO or LCL statistical analysis methodology as described in Section 3 of USEPA's "Guidelines for Determining Capture Efficiency," incorporated by reference at Section 219.112 of this Part. Where capture efficiency testing is done to determine emission reductions for the purpose of establishing emission credits for offsets, shutdowns, and trading, the LCL protocol cannot be used for these applications. In enforcement cases, the LCL protocol cannot confirm noncompliance; capture efficiency must be determined using a protocol under subsection (c)(2)(A), (B), (C) or (D) of this Section, the DQO protocol of this subsection (c)(2)(E), or an alternative protocol pursuant to Section 219.108(b) of this Part.

BOARD NOTE: Where LCL was used in testing emission units that are the subject of later requests for establishing emission credits for offsets, shutdowns, and trading, prior LCL results may not be relied upon to determine the appropriate amount of credits. Instead, to establish the appropriate amount of credits, additional testing may be required that would satisfy the protocol of Section 219.105(c)(2)(A), (B), (C) or (D), the DQO protocol of Section 219.105(c)(2)(E), or an alternative protocol pursuant to Section 219.108(b) of this Part.

- 3) Simultaneous testing of multiple lines or emission units with a common control device. If an owner or operator has multiple lines sharing a common control device, the capture efficiency of the lines may be tested simultaneously, subject to the following provisions:
 - A) Multiple line testing must meet the criteria of Section 4 of USEPA's "Guidelines for Determining Capture Efficiency," incorporated by reference at Section 219.112 of this Part;
 - B) The most stringent capture efficiency required for any individual line or unit must be met by the aggregate of lines or units; and
 - C) Testing of all the lines of emission units must be performed with the same capture efficiency test protocol.
- 4) Recordkeeping and Reporting
 - A) All owners or operators affected by this subsection must maintain a copy of the capture efficiency protocol submitted to the Agency and the USEPA on file. All results of the appropriate test methods and capture efficiency protocols must be reported to the Agency

- within sixty (60) days after of the test date. A copy of the results must be kept on file with the source for a period of three (3) years.
- B) If any changes are made to capture or control equipment, then the source is required to notify the Agency and the USEPA of these changes and a new test may be required by the Agency or the USEPA.
- C) The source must notify the Agency 30 days prior to performing any capture efficiency or control test. At that time, the source must notify the Agency which capture efficiency protocol and control device test methods will be used. Notification of the actual date and expected time of testing must be submitted a minimum of 5 working days prior to the actual date of the test. The Agency may at its discretion accept notification with shorter advance notice provided that such arrangements do not interfere with the Agency's ability to review the protocol and/or observe testing.
- D) Sources utilizing a PTE must demonstrate that this enclosure meets the requirement given in Method 204 in <u>appendix Appendix</u> M of 40 CFR Part-51, incorporated by reference in Section 219.112 of this Part, for a PTE during any testing of their control device.
- E) Sources utilizing a TTE must demonstrate that their TTE meets the requirements given in Method 204 in appendix-Appendix M or 40 CFR Part 51, incorporated by reference in Section 219.112 of this Part, for a TTE during any testing of their control device. The source must also provide documentation that the quality assurance criteria for a TTE have been achieved.
- F) Any source utilizing the DQO or LCL protocol must submit the following information to the Agency with each test report:
 - i) A copy of all test methods, Quality Assurance/Quality Control procedures, and calibration procedures to be used from those described in appendix Appendix M of 40 CFR Part 51, incorporated by reference in Section 219.112 of this Part;
 - ii) A table with information on each sample taken, including the sample identification and the VOM content of the sample;
 - iii) The quantity of material used for each test run;

- iv) The quantity of captured VOM for each test run;
- v) The capture efficiency calculations and results for each test run;
- vi) The DQO and/or LCL calculations and results; and
- vii) The Quality Assurance/Quality Control results, including how often the instruments were calibrated, the calibration results, and the calibration gases used.
- d) Control Device Efficiency Testing and Monitoring
 - 1) The control device efficiency shall be determined by simultaneously measuring the inlet and outlet gas phase VOM concentrations and gas volumetric flow rates in accordance with the gas phase test methods specified in subsection (f) of this Section.
 - 2) An owner or operator:
 - A) That uses an afterburner or carbon adsorber to comply with any Section of Part 219 shall use Agency and USEPA approved continuous monitoring equipment which is installed, calibrated, maintained, and operated according to vendor specifications at all times the control device is in use except as provided in subsection (d)(3) of this Section. The continuous monitoring equipment must monitor the following parameters:
 - i) For each afterburner which does not have a catalyst bed, the combustion chamber temperature of each afterburner.
 - ii) For each afterburner which has a catalyst bed, commonly known as a catalytic afterburner, the temperature rise across each catalytic afterburner bed or VOM concentration of exhaust.
 - iii) For each carbon adsorber, the VOM concentration of each carbon adsorption bed exhaust or the exhaust of the bed next in sequence to be desorbed.
 - B) Must install, calibrate, operate and maintain, in accordance with manufacturer's specifications, a continuous recorder on the temperature monitoring device, such as a strip chart, recorder or computer, having an accuracy of \pm 1 percent of the temperature

- measured, expressed in degrees Celsius or $\pm\,0.5^{\circ}$ C, whichever is greater.
- C) Of an automobile or light-duty truck primer surfacer operation or topcoat operation subject to subsection (d)(2)(A) above, shall keep a separate record of the following data for the control devices, unless alternative provisions are set forth in a permit pursuant to Title V of the Clean Air Act:
 - i) For thermal afterburners for which combustion chamber temperature is monitored, all 3-hour periods of operation in which the average combustion temperature was more than 28° C (50° F) below the average combustion temperature measured during the most recent performance test that demonstrated that the operation was in compliance.
 - ii) For catalytic afterburners for which temperature rise is monitored, all 3-hour periods of operation in which the average gas temperature before the catalyst bed is more than 28° C (50° F) below the average gas temperature immediately before the catalyst bed measured during the most recent performance test that demonstrated that the operation was in compliance.
 - iii) For catalytic afterburners and carbon adsorbers for which VOM concentration is monitored, all 3-hour periods of operation during which the average VOM concentration or the reading of organics in the exhaust gases is more than 20 percent greater than the average exhaust gas concentration or reading measured by the organic monitoring device during the most recent determination of the recovery efficiency of a carbon adsorber or performance test for a catalytic afterburner, which determination or test that demonstrated that the operation was in compliance.
- An owner or operator that uses a carbon adsorber to comply with Section 219.401 of this Part may operate the adsorber during periods of monitoring equipment malfunction, provided that:
 - A) The owner or operator notifies in writing the Agency and USEPA, within 10 days after the conclusion of any 72 hour period during which the adsorber is operated and the associated monitoring equipment is not operational, of such monitoring equipment failure and provides the duration of the malfunction, a description of the repairs made to the equipment, and the total to date of all hours in

- the calendar year during which the adsorber was operated and the associated monitoring equipment was not operational;
- B) During such period of malfunction the adsorber is operated using timed sequences as the basis for periodic regeneration of the adsorber;
- C) The period of such adsorber operation does not exceed 360 hours in any calendar year without the approval of the Agency and USEPA; and
- D) The total of all hours in the calendar year during which the adsorber was operated and the associated monitoring equipment was not operational shall be reported, in writing, to the Agency and USEPA by January 31st of the following calendar year.

e) Overall Efficiency

- The overall efficiency of the emission control system shall be determined as the product of the capture system efficiency and the control device efficiency or by the liquid/liquid test protocol as specified in 40 CFR 60.433, incorporated by reference in Section 219.112 of this Part, (and revised by subsection (c)(1)(B) of this Section) for each solvent recovery system. In those cases in which the overall efficiency is being determined for an entire line, the capture efficiency used to calculate the product of the capture and control efficiency is the total capture efficiency over the entire line.
- 2) For coating lines which are both chosen by the owner or operator to comply with Section 219.207(a), (d), (e), (f), or (g) of this Part by the alternative in Section 219.207(b)(2) of this Part and meet the criteria allowing them to comply with Section 219.207 instead of Section 219.204 of this Part, the overall efficiency of the capture system and control device, as determined by the test methods and procedures specified in subsections (c), (d) and (e)(1) of this Section, shall be no less than the equivalent overall efficiency which shall be calculated by the following equation:

$$E = \frac{VOM_a - VOM_l}{VOM_a} \times 100$$

where:

E = Equivalent overall efficiency of the capture system and control device as a percentage;

- VOM_a = Actual VOM content of a coating, or the dailyweighted average VOM content of two or more coatings (if more than one coating is used), as applied to the subject coating line as determined by the applicable test methods and procedures specified in subsection (a)(4)(i) of this Part in units of kg VOM/1 (lb VOM/gal) of coating solids as applied;
- VOM₁ = The VOM emission limit specified in Sections 219.204 or 219.205 of this Part in units of kg VOM/1 (lb VOM/gal) of coating solids as applied.
- f) Volatile Organic Material Gas Phase Source Test Methods
 The methods in 40 CFR 60, <u>appendix Appendix</u> A, incorporated by reference in
 Section 219.112 of this Part delineated below shall be used to determine control device efficiencies.
 - 1) 40 CFR Part 60, appendix Appendix A, Method 18, 25 or 25A, incorporated by reference in Section 219.112 of this Part as appropriate to the conditions at the site, shall be used to determine VOM concentration. Method selection shall be based on consideration of the diversity of organic species present and their total concentration and on consideration of the potential presence of interfering gases. Except as indicated in subsections (f)(1)(A) and (B) below, the test shall consist of three separate runs, each lasting a minimum of 60 min, unless the Agency and the USEPA determine that process variables dictate shorter sampling times.
 - A) When the method is to be used to determine the efficiency of a carbon adsorption system with a common exhaust stack for all the individual adsorber vessels, the test shall consist of three separate runs, each coinciding with one or more complete sequences through the adsorption cycles of all the individual adsorber vessels.
 - B) When the method is to be used to determine the efficiency of a carbon adsorption system with individual exhaust stacks for each adsorber vessel, each adsorber vessel shall be tested individually. The test for each adsorber vessel shall consist of three separate runs. Each run shall coincide with one or more complete adsorption cycles.
 - 2) 40 CFR Part 60, <u>appendix Appendix</u> A, Method 1 or 1A, incorporated by reference in Section 219.112 of this Part, shall be used for sample and velocity traverses.

- 3) 40 CFR Part 60, appendix Appendix A, Method 2, 2A, 2C or 2D, incorporated by reference in Section 219.112 of this Part, shall be used for velocity and volumetric flow rates.
- 4) 40 CFR Part 60, <u>appendix Appendix</u> A, Method 3, incorporated by reference in Section 219.112 of this Part, shall be used for gas analysis.
- 5) 40 CFR Part 60, <u>appendix Appendix</u> A, Method 4, incorporated by reference in Section 219.112 of this Part, shall be used for stack gas moisture.
- 6) 40 CFR Part 60, appendix Appendix A, Methods 2, 2A, 2C, 2D, 3 and 4, incorporated by reference in Section 219.112 of this Part, shall be performed, as applicable, at least twice during each test run.
- Use of an adaptation to any of the test methods specified in subsections (f)(1), (2), (3), (4), (5) and (6) of this Section may not be used unless approved by the Agency and the USEPA on a case by case basis. An owner or operator must submit sufficient documentation for the Agency and the USEPA to find that the test methods specified in subsections (f)(1), (2), (3), (4), (5) and (6) of this Section will yield inaccurate results and that the proposed adaptation is appropriate.
- g) Leak Detection Methods for Volatile Organic Material Owners or operators required by this Part to carry out a leak detection monitoring program shall comply with the following requirements:
 - 1) Leak Detection Monitoring
 - A) Monitoring shall comply with 40 CFR 60, <u>appendix Appendix A</u>, Method 21, incorporated by reference in Section 219.112 of this Part.
 - B) The detection instrument shall meet the performance criteria of Method 21.
 - C) The instrument shall be calibrated before use on each day of its use by the methods specified in Method 21.
 - D) Calibration gases shall be:
 - i) Zero air (less than 10 ppm of hydrocarbon in air); and
 - ii) A mixture of methane or n-hexane and air at a

- concentration of approximately, but no less than, 10,000 ppm methane or n-hexane.
- E) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21.
- 2) When equipment is tested for compliance with no detectable emissions as required, the test shall comply with the following requirements:
 - A) The requirements of subsections (g)(1)(A) through (g)(1)(E) of this Section above shall apply.
 - B) The background level shall be determined as set forth in Method 21.
- 3) Leak detection tests shall be performed consistent with:
 - A) "APTI Course SI 417 controlling Volatile Organic Compound Emissions from Leaking Process Equipment", EPA-450/2-82-015, incorporated by reference in Section 219.112 of this Part.
 - B) "Portable Instrument User's Manual for Monitoring VOM Sources", EPA-340/1-86-015, incorporated by reference in Section 219.112 of this Part.
 - C) "Protocols for Generating Unit-Specific Emission Estimates for Equipment Leaks of VOM and VHAP", EPA-450/3-88-010, incorporated by reference in Section 219.112 of this Part.
 - D) "Petroleum Refinery Enforcement Manual", EPA-340/1-80-008, incorporated by reference in Section 219.112 of this Part.
- h) Bulk Gasoline Delivery System Test Protocol
 - 1) The method for determining the emissions of gasoline from a vapor recovery system are delineated in 40 CFR 60, Subpart XX, <u>section</u> 60.503, incorporated by reference in Section 219.112 of this Part.
 - 2) Other tests shall be performed consistent with:
 - A) "Inspection Manual for Control of Volatile Organic Emissions from Gasoline Marketing Operations: Appendix D", EPA-340/1-80-012, incorporated by reference in Section 219.112 of this Part.

- B) "Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals: Appendix A", EPA-450/2-77-026, incorporated by reference in Section 219.112 of this Part.
- i) Notwithstanding other requirements of this Part, upon request of the Agency where it is necessary to demonstrate compliance, an owner or operator of an emission unit which is subject to this Part shall, at his own expense, conduct tests in accordance with the applicable test methods and procedures specific in this Part. Nothing in this Section shall limit the authority of the USEPA pursuant to the Clean Air Act, as amended, to require testing.
- j) Stage II Gasoline Vapor Recovery Test Methods The methods for determining the acceptable performance of Stage II Gasoline Vapor Recovery System are delineated in "Technical Guidance-Stage II Vapor Recovery Systems for Control of Vehicle Refueling Emissions at Gasoline Dispensing Facilities," found at EPA 450/3-91-022b and incorporated by reference in Section 219.112 of this Part. Specifically, the test methods are as follows:
 - 1) Dynamic Backpressure Test is a test procedure used to determine the pressure drop (flow resistance) through balance vapor collection and control systems (including nozzles, vapor hoses, swivels, dispenser piping and underground piping) at prescribed flow rates.
 - 2) Pressure Decay/Leak Test is a test procedure used to quantify the vapor tightness of a vapor collection and control system installed at gasoline dispensing facilities.
 - 3) Liquid Blockage Test is a test procedure used to detect low points in any vapor collection and control system where condensate may accumulate.

	(Source:	Amended at 34 Ill. Reg.	, effective)
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Section 219.106 Compliance Dates

- a) Except as provided in <u>subsections subsection</u> (b), (c), (d), or (e) or (e), compliance with the requirements of this Part is required by May 15, 1992, consistent with the provisions of Section 219.103 of this Part.
- b) As this Part is amended from time to time, compliance dates included in the specific Subparts supersede the requirements of this Section except as limited by Section 219.101(b) of this Subpart.
- c) Any owner or operator of a source subject to the requirements of Section 219.204(c)(2), 219.204(g)(2), or 219.204(h)(2) of this Part shall comply with the

- applicable requirements in the applicable subsection, as well as all applicable requirements in Sections 219.205 through 219.214 and 219.218, by May 1, 2011.
- d) Any owner or operator of a source subject to the requirements of Section 219.204(o) of this Part shall comply with the requirements in Section 219.204(o), as well as all applicable requirements in Section 219.205 through 219.211, 219.214, and 219.217, by August 1, 2010.
- Any owner or operator of a source subject to the requirements of Section 219.204(a)(2) or 219.204(q) of this Part shall comply with the applicable requirements in those Sections, as well as all applicable requirements in Sections 219.205 through 219.214 and 219.219, by May 1, 20122011.

(Source: Amended at 34 Ill. Reg. _____, effective _____)

Section 219.112 Incorporations by Reference

The following materials are incorporated by reference and do not contain any subsequent additions or amendments:

- a) American Society for Testing and Materials, <u>100 Barr Harbor Drive</u>, <u>West Conshohocken</u>, PA 19428-9555 <u>1916 Race Street</u>, <u>Phildelphia</u>, PA 19103
 - 1) ASTM D 2879-86
 - 2) ASTM D 323-82
 - 3) ASTM D 86-82
 - 4) ASTM D 369-69 (1971)
 - 5) ASTM D 396-69
 - 6) ASTM D 2880-71
 - 7) ASTM D 975-68
 - 8) ASTM D 3925-81 (1985)
 - 9) ASTM E 300-86
 - 10) ASTM D 1475-85
 - 11) ASTM D 2369-87

- 12) ASTM D 3792-86
- 13) ASTM D 4017-81 (1987)
- 14) ASTM D 4457-85
- 15) ASTM D 2697-86
- 16) ASTM D 3980-87
- 17) ASTM E 180-85
- 18) ASTM D 2372-85
- 19) ASTM D 97-66
- 20) ASTM E 168-87 (1977)
- 21) ASTM E 169-87
- 22) ASTM E 260-91
- 23) ASTM D 2504-83
- 24) ASTM D 2382-83
- 25) ASTM D 323-82 (approved 1982)
- b) Standard Industrial Classification Manual, published by Executive Office of the President, Office of Management and Budget, Washington, D.C., 1987.
- c) American Petroleum Institute Bulletin 2517, "Evaporation Loss From Floating Roof Tanks", Second ed., February 1980.
- d) 40 CFR 60 (July 1, 1991).
- e) 40 CFR 61 (July 1, 1991).
- f) 40 CFR 50 (July 1, 1991).
- g) 40 CFR 51 (July 1, 1991) and 40 CFR Part 51, appendix Appendix M, Methods 204-204F (July 1, 1999).
- h) 40 CFR Part 52 (July 1, 1991).

- i) 40 CFR Part 80 (July 1, 1991) and 40 CFR Part 80, appendixes Appendixes D, E, and F (July 1, 1993).
- j) "A Guide for Surface Coating Calculation", July 1986, United States Environmental Protection Agency, Washington, D.C., EPA-340/1-86-016.
- k) "Procedures for Certifying Quantity of Volatile Organic Compounds Emitted by Paint, Ink and Other Coating", (revised June 1986), United States Environmental Protection Agency, Washington D.C., EPA-450/3-84-019.
- l) "A Guide for Graphic Arts Calculations", August 1988, United States Environmental Protection Agency, Washington D.C., EPA-340/1-88-003.
- m) "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations", December 1988, United States Environmental Protection Agency, Washington D.C., EPA-450/3-88-018.
- n) "Control of Volatile Organic Emissions from Manufacturing of Synthesized Pharmaceutical Products", December 1978, United States Environmental Protection Agency, Washington, D.C., EPA-450/2-78-029.
- o) "Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems", December 1978, Appendix B, United States Environmental Protection Agency, Washington, D.C., EPA-450/2-78-051.
- p) "Control of Volatile Organic Compound Emissions from Large Petroleum Dry Cleaners", September 1982, United States Environmental Protection Agency, Washington, D.C., EPA-450/3-82-009.
- q) "APTI Course SI417 Controlling Volatile Organic Compound Emissions from Leaking Process Equipment", 1982, United States Environmental Protection Agency, Washington, D.C., EPA-450/2-82-015.
- r) "Portable Instrument User's Manual for Monitoring VOM Sources", June 1986, United States Environmental Protection Agency, Washington, D.C., EPA-340/1-86-015.
- s) "Protocols for Generating Unit-Specific Emission Estimates for Equipment Leaks of VOM and VHAP", October 1988, United States Environmental Protection Agency, Washington, D.C., EPA-450/3-88-010.
- t) "Petroleum Refinery Enforcement Manual", March 1980, United States Environmental Protection Agency, Washington, D.C., EPA-340/1-80-008.

- "Inspection Manual for Control of Volatile Organic Emissions from Gasoline Marketing Operations: Appendix D", 1980, United States Environmental Protection Agency, Washington, D.C., EPA-340/1-80-012.
- v) "Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals: Appendix A", December 1977, United States Environmental Protection Agency, Washington, D.C., EPA-450/2-77-026.
- w) "Technical Guidance-Stage II Vapor Recovery Systems for Control of Vehicle Refueling Emissions at Gasoline Dispensing Facilities", November 1991, United States Environmental Protection Agency, Washington, D.C., EPA-450/3-91-022b.
- x) California Air Resources Board, Compliance Division. Compliance Assistance Program: Gasoline Marketing and Distribution: Gasoline Facilities Phase I & II (October 1988, rev. November 1993) (CARB Manual).
- y) "Guidelines for Determining Capture Efficiency,", January 1995, Office of Air Quality Planning and Standards, United States Environmental Protection Agency, Research Triangle Park, NC.
- z) Memorandum "Revised Capture Efficiency Guidance for Control of Volatile Organic Compound Emissions,", February 1995, John S. Seitz, Director, Office of Air Quality Planning and Standards, United States Environmental Protection Agency.
- aa) "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Primer-Surfacer and Topcoat Operations", September 2008, United States Environmental Protection Agency, Washington, D.C., EPA-453/R-08-002.
- bb) 40 CFR 63 Subpart PPPP, appendix Appendix A (2008).
- cc) 46 CFR Subchapter Q (2007).
- dd) 46 CFR Subchapter T (2008).

(Source: Amended at 34 Ill. Reg. _____, effective _____)

SUBPART F: COATING OPERATIONS

Section 219.204 Emission Limitations

Except as provided in Sections 219.205, 219.207, 219.208, 219.212, 219.215 and 219.216 of this Subpart, no owner or operator of a coating line shall apply at any time any coating in which the VOM content exceeds the following emission limitations for the specified coating. Except as

otherwise provided in subsections (a), (c), (g), (h), (j), (l), (n), and (o), and (q) of this Section, compliance with the emission limitations marked with an asterisk in this Section is required on and after March 15, 1996, and compliance with emission limitations not marked with an asterisk is required until March 15, 1996. The following emission limitations are expressed in units of VOM per volume of coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied at each coating applicator, except where noted. Compounds which are specifically exempted from the definition of VOM should be treated as water for the purpose of calculating the "less water" part of the coating composition. Compliance with this Subpart must be demonstrated through the applicable coating analysis test methods and procedures specified in Section 219.105(a) of this Part and the recordkeeping and reporting requirements specified in Section 219.211(c) of this Subpart except where noted. (Note: The equation presented in Section 219.206 of this Part shall be used to calculate emission limitations for determining compliance by add-on controls, credits for transfer efficiency, emissions trades and cross-line averaging.) The emission limitations are as follows:

a)	Auto	omobile	or Light-Duty Truck Coating	kg/l	lb/gal
	<u>1)</u>	<u>Prior</u>	to May 1, 2012 2011 :		
		<u>A</u> 1)	Prime coat	0.14 0.14*	(1.2) (1.2)*
		<u>B</u> 2)	Primer surface coat	1.81 1.81*	(15.1) (15.1)*

BOARD NOTE: (Note: The primer surface coat limitation is in units of kg (lbs) of VOM per l (gal) of coating solids deposited. Compliance with the limitation shall be based on the daily-weighted average from an entire primer surface operation. Compliance shall be demonstrated in accordance with the topcoat protocol referenced in Section 219.105(b)(1)(A) and the recordkeeping and reporting requirements specified in Section 219.211(f). Testing to demonstrate compliance shall be performed in accordance with the topcoat protocol and a detailed testing proposal approved by the Agency and USEPA specifying the method of demonstrating compliance with the protocol. Section 219.205 does not apply to the primer surface limitation.)

<u>C</u> 3)	Topcoat	kg/l	lb/gal
		1.81	(15.1)
		1.81*	(15.1)*

BOARD NOTE: (Note: The topcoat limitation is in units of kg (lbs) of VOM per 1 (gal) of coating solids deposited. Compliance with the limitation shall be based on the daily-weighted average from an entire topcoat operation. Compliance shall be demonstrated in accordance with

the topcoat protocol referenced in Section 219.105(b)(1)(A) of this Part and the recordkeeping and reporting requirements specified in Section 219.211(f). Testing to demonstrate compliance shall be performed in accordance with the topcoat protocol and a detailed testing proposal approved by the Agency and USEPA specifying the method of demonstrating compliance with the protocol. Section 219.205 of this Part does not apply to the topcoat limitation.)

<u>D</u> 4)	Final repair coat	kg/l	lb/gal
		0.58	(4.8)
		0.58*	(4.8)*

- 2) On and after May 1, 20122011, subject automobile and light-duty truck coating lines shall comply with the following limitations. These limitations shall not apply to materials supplied in containers with a net volume of 0.47 liters (16 oz) or less, or a net weight of 0.45 kg (1 lb) or less:
 - A) Electrodeposition primer (EDP) operations. For purposes of this subsection (a)(2)(A), "electrodeposition" means a water-borne dip coating process in which opposite electrical charges are applied to the substrate and the coating. The coating is attracted to the substrate due to the electrochemical potential difference that is created.

			kg VOM/l coating solids applied	lb VOM/gal coating solids applied
	<u>i)</u>	$\frac{\text{When solids turnover ratio}}{(R_T) \text{ is greater than or equal to}}$ $\frac{0.160}{0.160}$	0.084	(0.7)
	<u>ii)</u>	When R _T is greater than or equal to 0.040 and less than 0.160	$\frac{0.084 \text{ x}}{350^{0.160-R}}$	$\frac{(0.084 \text{ x}}{350^{0.160-R}}$ $\underline{x 8.34)}$
<u>B)</u>	<u>Prin</u>	ner surfacer operations	kg VOM/l coating solids deposited	lb VOM/gal coating solids deposited
	<u>i)</u>	VOM content limitation	<u>1.44</u>	(12.0)

ii) Compliance with the limitation set forth in subsection
(a)(2)(B)(i) shall be based on the daily-weighted average from an entire primer surfacer operation. Compliance shall be demonstrated in accordance with the topcoat protocol referenced in Section 219.105(b)(1)(B) and the recordkeeping and reporting requirements specified in Section 219.211(f). Testing to demonstrate compliance shall be performed in accordance with the topcoat protocol and a detailed testing proposal approved by the Agency and USEPA specifying the method of demonstrating compliance with the protocol. Section 219.205 does not apply to the primer surfacer limitation.

<u>C)</u> Topcoat operations

kg VOM/l coating coating solids deposited lb VOM/gal coating solids deposited

i) VOM content limitation 1.44 (12.0)

ii) Compliance with the limitation set forth in subsection
(a)(2)(C)(i) shall be based on the daily-weighted average from an entire topcoat operation. Compliance shall be demonstrated in accordance with the topcoat protocol referenced in Section 219.105(b)(1)(B) and the recordkeeping and reporting requirements specified in Section 219.211(f). Testing to demonstrate compliance shall be performed in accordance with the topcoat protocol and a detailed testing proposal approved by the Agency and USEPA specifying the method of demonstrating compliance with the protocol. Section 219.205 does not apply to the topcoat limitation.

<u>D)</u> Combined primer surfacer and topcoat operations

kg VOM/Ilb VOM/galcoatingcoating solidssolidsdepositeddeposited

i) VOM content limitation 1.44 (12.0)

ii) Compliance with the limitation set forth in subsection (a)(2)(D)(i) shall be based on the daily-weighted average from

the combined primer surfacer and topcoat operations. Compliance shall be demonstrated in accordance with the topcoat protocol referenced in Section 219.105(b)(1)(B) and the recordkeeping and reporting requirements specified in Section 219.211(f). Testing to demonstrate compliance shall be performed in accordance with the topcoat protocol and a detailed testing proposal approved by the Agency and USEPA specifying the method of demonstrating compliance with the protocol. Section 219.205 does not apply to the combined primer surfacer and topcoat limitation.

<u>E)</u> <u>Final repair coat operations</u>

	<u>kg/l</u> coatings	<u>lb/gal</u> coatings
VOM content limitation	0.58	<u>(4.8)</u>

ii) Compliance with the final repair operations limitation set forth in subsection (a)(2)(E)(i) shall be on an occurrence-weighted average basis, calculated in accordance with the equation below, in which clear coatings shall have a weighting factor of 2 and all other coatings shall have a weighting factor of 1.

$$VOM_{tot} = \frac{2VOM_{cc} + \sum_{i=1}^{n} VOM_{i}}{n+2}$$

where:

<u>i)</u>

<u>VOM</u>_{to}= Total VOM content of all coatings, as applied, on an occurrence weighted average basis, and used to determine compliance with this subsection (a)(2)(E).

<u>i</u> = <u>Subscript denoting a specific coating applied.</u>

<u>n</u> = Total number of coatings applied in the final repair operation, other than clear coatings.

 $\underline{\text{VOM}_{cc}} = \underline{\text{The VOM content, as applied, of the clear coat used in}}$ the final repair operation.

 $\underline{VOM_i}$ = $\underline{The\ VOM\ content\ of\ each\ coating\ used\ in\ the\ final\ repair\ operation,\ as\ applied,\ other\ than\ clear\ coatings.}$

F) Miscellaneous Materials. For reactive adhesives subject to this subsection (a)(2)(F), compliance shall be demonstrated in accordance with the methods and procedures set forth in appendix. Appendix A to Subpart PPPP of 40 CFR 63, incorporated by reference in Section 219.112 of this Part.

			<u>i)</u>	Glass bonding primer	kg/l 0.90	<u>lb/gal</u> (7.51)
			<u>ii)</u>	Adhesive	<u>0.25</u>	(2.09)
			<u>iii)</u>	Cavity wax	<u>0.65</u>	(5.42)
			<u>iv)</u>	Trunk sealer	<u>0.65</u>	(5.42)
			<u>v)</u>	<u>Deadener</u>	<u>0.65</u>	(5.42)
			<u>vi)</u>	Gasket/gasket sealing material	0.20	(1.67)
			<u>vii)</u>	Underbody coating	<u>0.65</u>	(5.42)
			<u>viii)</u>	Trunk interior coating	<u>0.65</u>	(5.42)
			<u>ix)</u>	<u>Bedliner</u>	0.20	(1.67)
			<u>x)</u>	Weatherstrip adhesive	<u>0.75</u>	(6.26)
			<u>xi)</u>	Lubricating wax/compound	<u>0.70</u>	<u>(5.84)</u>
b)	Can C	Coating			kg/l	lb/gal
	1)	Sheet	t basec	coat and overvarnish		
		A)	Sheet	basecoat	0.34 0.26*	(2.8) (2.2)*
		B)	Overv	varnish	0.34 0.34	(2.8) (2.8)*
	2)	Exterio	r base	coat and overvarnish	0.34 0.25*	(2.8) (2.1)*
	3)	Interior	body	spray coat		

		A)	Two piece	0.51 0.44*	(4.2) (3.7)*
		B)	Three piece	0.51 0.51*	(4.2) (4.2)*
	4)	Exterio	or end coat	0.51 0.51*	(4.2) (4.2)*
	5)	Side se	eam spray coat	0.66 0.66*	(5.5) (5.5)*
	6)	End se	aling compound coat	0.44 0.44*	(3.7) (3.7)*
c)	Paper	Coating			
	1)	Prior t	o May 1, 2011	kg/l 0.28	lb/gal (2.3)
	2)	On and	d after May 1, 2011	kg VOM/kg (lb VOM/lb) solids applied	kg VOM/kg (lb VOM/lb) coatings applied
		A)	Pressure sensitive tape and label surface coatings	0.20	(0.067)
		B)	All other paper coatings	0.40	(0.08)

The paper coating limitation set forth in this subsection (c) shall not apply to any owner or operator of any paper coating line on which flexographic, rotogravure, lithographic, or letterpress printing is performed if the paper coating line complies with the applicable emissions limitations in Subpart H of this Part. In addition, screen printing on paper is not regulated as paper coating, but is regulated under Subpart TT of this Part. On and after May 1, 2011, the paper coatings limitation shall also not apply to coating performed on or in-line with any digital printing press, or to size presses and on-machine coaters on papermaking machines applying sizing or water-based clays.

d)	Coil Coating	kg/l	lb/gal
u)	Con Coaung	0.31 0.20*	(2.6) (1.7)*
e)	Fabric Coating	0.35	(2.9)

					0.28*	(2.3)*
f)	Vinyl	Coating	9		0.45 0.28*	(3.8) (2.3)*
g)	Metal	Furnitu	ıre Coa	ting		
	1)	Prior	to May	1, 2011:		
		A)	A	ir <u>dried</u> Dried	0.34	(2.8)
		B)	Ва	nked	0.28	(2.3)
	2) On and after May 1, 2011		kg/l (lb/gal)	kg/l (lb/gal) solids applied		
		A)	Gene	ral, One Component	0.275 (2.3)	0.40 (3.3)
	B) Ger		Gene	ral, Multi-Component		
			i)	Air <u>dried</u> Dried	0.340 (2.8)	0.55 (4.5)
			ii)	Baked	0.360 (3.0)	0.61 (5.1)
		C) Extreme H		eme High Gloss		
			i)	Air <u>dried</u> Dried	0.340 (2.8)	0.55 (4.5)
			ii)	Baked	0.360 (3.0)	0.61 (5.1)
	D) Ex		Extre	eme Performance		
			i)	Air <u>dried</u> Dried	0.420 (3.5)	0.80 (6.7)
			ii)	Baked	0.360 (3.0)	0.61 (5.1)
		E)	Heat	Resistant		
			i)	Air <u>dried</u> Đried	0.420	0.80

		(3.5)	(6.7)
	ii) Baked	0.360 (3.0)	0.61 (5.1)
F)	Metallic	0.420 (3.5)	0.80 (6.7)
G)	Pretreatment Coatings	0.420 (3.5)	0.80 (6.7)
H)	Solar Absorbent		
	i) Air <u>dried</u> Dried	0.420 (3.5)	0.80 (6.7)
	ii) Baked	0.360 (3.0)	0.61 (5.1)

On and after May 1, 2011, the limitations set forth in this subsection (g) shall not apply to stencil coatings, safety-indicating coatings, solid-film lubricants, electric-insulating and thermal-conducting coatings, touch-up and repair coatings, or coating applications utilizing hand-held aerosol cans.

h) Large Appliance Coating

1)	Prior	to May 1, 2011:	kg/l	lb/gal
	A)	Air <u>dried</u> Dried	0.34	(2.8)
	B)	Baked	0.28	(2.3)
2)	On a	and after May 1, 2011	kg/l (lb/gal)	kg/l (lb/gal) solids applied
	A)	General, One Component	0.275 (2.3)	0.40 (3.3)
	B)	General, Multi-Component		
		i) Air <u>dried</u> Dried	0.340 (2.8)	0.55 (4.5)
		ii) Baked	0.275	0.40

			(2.3)	(3.3)
C)	Extre	me High Gloss		
	i)	Air <u>dried</u> Dried	0.340 (2.8)	0.55 (4.5)
	ii)	Baked	0.360 (3.0)	0.61 (5.1)
D)	Extre	me Performance		
	i)	Air <u>dried</u> Dried	0.420 (3.5)	0.80 (6.7)
	ii)	Baked	0.360 (3.0)	0.61 (5.1)
E)	Heat I	Resistant		
	i)	Air <u>dried</u> Dried	0.420 (3.5)	0.80 (6.7)
	ii)	Baked	0.360 (3.0)	0.61 (5.1)
F)	Metal	lic	0.420 (3.5)	0.80 (6.7)
G)	Pretre	atment Coatings	0.420 (3.5)	0.80 (6.7)
H)	Solar	Absorbent		
	i)	Air <u>dried</u> Dried	0.420 (3.5)	0.80 (6.7)
	ii)	Baked	0.360	0.61

The limitation set forth in this subsection (h) shall not apply to the use of quick-drying lacquers for repair of scratches and nicks that occur during assembly, provided that the volume of coating does not exceed 0.95 1 (1 quart) in any one rolling eight-hour period. On and after May 1, 2011, these limitations shall also not apply to stencil coatings, safety-indicating coatings, solid-film lubricants, electric-insulating and thermal-conducting

coatings, touch-up and repair coatings, or coating applications utilizing hand-held aerosol cans.

i)	Мад	net Wire	Coating	kg/l	lb/gal
1)	Wagi	net Wire Coating		0.20 0.20*	(1.7) (1.7)*
j)		•	1, 2012 2011 : Miscellaneous nd Products Coating		
	1)	Clear c	oating	0.52 0.52*	(4.3) (4.3)*
	2)	Extreme performance coating			
		A)	Air dried	0.42 0.42*	(3.5) (3.5)*
		B)	Baked	0.42 0.40*	(3.5) (3.3)*
	3)	Steel pa	ail and drum interior coating	0.52 0.52*	(4.3) (4.3)*
	4)	All oth	er coatings		
		A)	Air dried	0.42 0.40*	(3.5) (3.3)*
		B)	Baked	0.36 0.34*	(3.0) (2.8)*
	5)	Metallio	c Coating		
		A)	Air dried	0.42 0.42*	(3.5) (3.5)*
		B)	Baked	0.36 0.36	(3.0) (3.0)*

6) For purposes of subsection 219.204(j)(5) of this Section, "metallic coating" means a coating which contains more than ½ lb/gal of metal particles, as applied.

BOARD NOTE: On and after May 1, 2012 2011, the limitations in Section 219.204(q) shall apply to this category of coating.

k)	Hea	vy Off-Highway Vehicle Products Coating	kg/l	lb/gal
	1)	Extreme performance prime coat	0.42 0.42*	(3.5)*
	2)	Extreme performance topcoat (air dried)	0.42 0.42*	(3.5)*
	3)	Final repair coat (air dried)	0.42 0.42*	(3.5)* (3.5)*

4) All other coatings are subject to the emission limitations for miscellaneous metal parts and products coatings in subsection (j).

1) Wood Furniture Coating

1)	Limita	tions before March 15, 1998:	kg/l	lb/gal
	A)	Clear topcoat	0.67	(5.6)
	B) Opaque stainC) Pigmented coat		0.56	(4.7)
			0.60	(5.0)
	D)	Repair coat	0.67	(5.6)
	E)	Sealer	0.67	(5.6)
	F)	Semi-transparent stain	0.79	(6.6)
	G)	Wash coat	0.73	(6.1)

BOARD NOTE: (Note: Prior to March 15, 1998, an owner or operator of a wood furniture coating operation subject to this Section shall apply all coatings, with the exception of no more than 37.8 1 (10 gal) of coating per day used for touch-up and repair operations, using one or more of the following application systems: airless spray application system, air-assisted airless spray application system, electrostatic spray application system, electrostatic bell or disc spray application system, heated airless spray application system, roller coating, brush or wipe coating application system, dip coating application system or high volume low pressure (HVLP) application system.)

2) On and after March 15, 1998, wood furniture sealers and topcoats must comply with one of the limitations specified in subsections (l)(2)(A) through (E):

			kg VOM/kg solids	lb VOM/lb solids
A)	Topcoa	at	0.8	(0.8)
B)		s and topcoats with the ing limits:		
	i)	Sealer other than acid- cured alkyd amino vinyl sealer	1.9	(1.9)
	ii)	Topcoat other than acid- cured alkyd amino conversion varnish topcoat	1.8	(1.8)
	iii)	•	2.3	(2.3)
	iv)	Acid-cured alkyd amino conversion varnish topcoat	2.0	(2.0)

- C) Meet the provisions of Section 219.215 of this Subpart for use of an averaging approach;
- D) Achieve a reduction in emissions equivalent to the requirements of Section 219.204(l)(2)(A) or (B) of this Section, as calculated using Section 219.216 of this Subpart; or
- E) Use a combination of the methods specified in subsections (1)(2)(A) through (D) of this Section.
- 3) Other wood furniture coating limitations on and after March 15, 1998:

A)	Opaque stain	kg/l 0.56	lb/gal (4.7)
B)	Non-topcoat pigmented coat	0.60	(5.0)
C)	Repair coat	0.67	(5.6)
D)	Semi-transparent stain	0.79	(6.6)
E)	Wash coat	0.73	(6.1)

4) Other wood furniture coating requirements on and after March 15, 1998:

- A) No source subject to the limitations of subsection (l)(2) or (3) of this Section and utilizing one or more wood furniture coating spray booths shall use strippable spray booth coatings containing more than 0.8 kg VOM/kg solids (0.8 lb VOM/lb solids), as applied.
- B) Any source subject to the limitations of subsection (l)(2) or (3) of this Section shall comply with the requirements of Section 219.217 of this Subpart.
- C) Any source subject to the limitations of subsection (l)(2)(A) or (B) of this Section and utilizing one or more continuous coaters, shall for each continuous coater, use an initial coating which complies with the limitations of subsection (l)(2)(A) or (B) of this Section. The viscosity of the coating in each reservoir shall always be greater than or equal to the viscosity of the initial coating in the reservoir. The owner or operator shall:
 - Monitor the viscosity of the coating in the reservoir with a viscosity meter or by testing the viscosity of the initial coating and retesting the coating in the reservoir each time solvent is added;
 - ii) Collect and record the reservoir viscosity and the amount and weight of VOM per weight of solids of coating and solvent each time coating or solvent is added; and
 - iii) Maintain these records at the source for a period of three years.

m) <u>Prior to May 1, 20122011:</u> Plastic Parts Coating: Automotive/Transportation

1)	Interi	ors		kg/l	lb/gal
	A) Baked				
		i)	Color coat	0.49*	(4.1)*
		ii)	Primer	0.46*	(3.8)*
	B) Air <u>dried</u> Dried				
		i)	Color coat	0.38*	(3.2)*
		ii)	Primer	0.42*	(3.5)*

	2)	Exteriors (flexible and non-flexible)				
		A)	Bake	d		
			i)	Primer	0.60*	(5.0)*
			ii)	Primer non-flexible	0.54*	(4.5)*
			iii)	Clear coat	0.52*	(4.3)*
			iv)	Color coat	0.55*	(4.6)*
		B)	Air <u>d</u>	<u>ried</u> Dried		
			i)	Primer	0.66*	(5.5)*
			ii)	Clear coat	0.54*	(4.5)*
			iii)	Color coat (red & black)	0.67*	(5.6)*
			iv)	Color coat (others)	0.61*	(5.1)*
	3)	Specia	ılty			
		A)	Vacu	um metallizing basecoats, texture oats	0.66*	(5.5)*
		B)		coatings, reflective argent ags, air bag cover coatings, and soft ags	0.71*	(5.9)*
		C)		reducers, vacuum metallizing ats, and texture topcoats	0.77*	(6.4)*
		D)	pad c	il coatings, adhesion primers, ink oatings, electrostatic prep coatings, esist coatings	0.82*	(6.8)*
		E)	Head	lamp lens coatings	0.89*	(7.4)*
				On and after May 1, 2012 2011 , the lipply to this category of coating.	mitations ir	Section
n)		to May		122011: Plastic Parts Coating:	kg/l	lb/gal
	1)	Primer	•		0.14*	(1.2)*
	2)	Color	coat (n	on-texture coat)	0.28*	(2.3)*

3)	Colo	r coat (texture coat)	0.28*	(2.3)*
4)		romagnetic interference/radio frequency ference (EMI/RFI) shielding coatings	(4.0)*	
5)	Speci	ialty Coatings		
	A)	Soft coat	0.52*	(4.3)*
	B)	Plating resist	0.71*	(5.9)*
	C)	Plating sensitizer	0.85*	(7.1)*

BOARD NOTE: On and after May 1, 20122011, the limitations in Section 219.204(q) shall apply to this category of coating.

- (o) Flat Wood Paneling Coatings. On and after August 1, 2010, flat wood paneling coatings shall comply with one of the following limitations:
 - 1) 0.25 kg VOM/l of coatings (2.1 lb VOM/gal coatings); or
 - 2) 0.35 kg VOM/l solids (2.9 lb VOM/gal solids).

BOARD NOTE: The Board has omitted subsection (p) and adopted a subsection (q) in order to preserve consistent labeling with similar requirements at 35 Ill. Adm. Code 218.

- Miscellaneous Metal Parts and Products Coatings and Plastic Parts and Products
 Coatings On and After May 1, 20122011. On and after May 1, 20122011, the
 owner or operator of a miscellaneous metal or plastic parts coating line shall
 comply with the limitations in this subsection (q). The limitations in this
 subsection (q) shall not apply to aerosol coating products, or
 primer sealants and ejection cartridge sealants used in ammunition manufacturing.
 Primer sealants and ejection cartridge sealants shall instead be regulated under
 Subpart TT of this Part.
 - Metal Parts and Products. For purposes of this subsection (q)(1),
 "corrosion resistant basecoat" means a water-borne epoxy coating applied
 via an electrodeposition process to a metal surface prior to spray coating,
 for the purpose of enhancing corrosion resistance. Also for purposes of
 this subsection (q)(1), "marine engine coating" means any extreme
 performance protective, decorative, or functional coating applied to an
 engine that is used to propel watercraft. The limitations in this subsection
 (q)(1) shall not apply to stencil coats, safety-indicating coatings, solid-film
 lubricants, electric-insulating and thermal-conducting coatings, magnetic
 data storage disk coatings, and plastic extruded onto metal parts to form a

coating. The limitations in Section 219.219, however, shall apply to these coatings unless specifically excluded in Section 219.219.

		kg VOM/l coating solids applied	lb VOM/gal coating solids applied
<u>A)</u>	General one component coating		
	i) Air dried	<u>0.34</u> (2.8)	<u>0.54</u> (4.52)
	ii) Baked	<u>0.28</u> (2.3)	<u>0.40</u> (3.35)
<u>B)</u>	General multi-component coating		
	i) Air dried	<u>0.34</u> (2.8)	<u>0.54</u> (4.52)
	ii) Baked	<u>0.28</u> (2.3)	<u>0.40</u> (3.35)
<u>C)</u>	Camouflage coating	<u>0.42</u> (3.5)	<u>0.80</u> (6.67)
<u>D)</u>	Electric-insulating varnish	<u>0.42</u> (3.5)	0.80 (6.67)
<u>E)</u>	Etching filler	<u>0.42</u> (3.5)	0.80 (6.67)
<u>F)</u>	Extreme high-gloss coating		
	i) Air dried	<u>0.42</u> (3.5)	0.80 (6.67)
	ii) Baked	0.36 (3.0)	<u>0.61</u> (5.06)
<u>G)</u>	Extreme performance coating		
	i) Air dried	<u>0.42</u> (3.5)	0.80 (6.67)

	<u>ii)</u> <u>Baked</u>	0.36 (3.0)	<u>0.61</u> (5.06)				
<u>H)</u>	Heat-resistant coating						
	i) Air dried	<u>0.42</u> (3.5)	<u>0.80</u> (6.67)				
	<u>ii)</u> <u>Baked</u>	<u>0.36</u> (3.0)	<u>0.61</u> (5.06)				
Ū	High performance architectural coating	<u>0.74</u> (6.2)	<u>4.56</u> (38.0)				
<u>J)</u>	High temperature coating	<u>0.42</u> (3.5)	<u>0.80</u> (6.67)				
<u>K)</u>	Metallic coating						
	<u>i)</u> Air dried	<u>0.42</u> (3.5)	<u>0.80</u> (6.67)				
	<u>ii)</u> <u>Baked</u>	<u>0.36</u> (3.0)	<u>0.61</u> (5.06)				
<u>L)</u>	Military specification coating						
	<u>i)</u> Air dried	<u>0.34</u> (2.8)	<u>0.54</u> (4.52)				
	<u>ii)</u> <u>Baked</u>	<u>0.28</u> (2.3)	<u>0.40</u> (3.35)				
<u>M)</u>	Mold-seal coating	<u>0.42</u> (3.5)	0.80 (6.67)				
<u>N)</u>	Pan backing coating	<u>0.42</u> (3.5)	0.80 (6.67)				
<u>O)</u>	Prefabricated architectural coating: multi-component						
	i) Air dried	<u>0.42</u> (3.5)	0.80 (6.67)				

	<u>ii)</u>	<u>Baked</u>	<u>0.28</u> (2.3)	<u>0.40</u> (3.35)
<u>P)</u>		Fabricated architectural ing: one-component		
	<u>i)</u>	Air dried	<u>0.42</u> (3.5)	0.80 (6.67)
	<u>ii)</u>	Baked	<u>0.28</u> (2.3)	<u>0.40</u> (3.35)
<u>Q)</u>	Pret	reatment coating	<u>0.42</u> (3.5)	<u>0.80</u> (6.67)
<u>R)</u>	Rep	air coats and touch-up coatings		
	<u>i)</u>	Air dried	<u>0.42</u> (3.5)	
	<u>ii)</u>	Baked	<u>0.36</u> (3.01)	
<u>S)</u>	Sili	cone release coating	<u>0.42</u> (3.5)	0.80 (6.67)
<u>T)</u>	Sola	ar-absorbent coating		
	<u>i)</u>	Air dried	<u>0.42</u> (3.5)	0.80 (6.67)
	<u>ii)</u>	<u>Baked</u>	<u>0.36</u> (3.0)	<u>0.61</u> (5.06)
<u>U)</u>	Vac	nuum-metalizing coating	<u>0.42</u> (3.5)	0.80 (6.67)
<u>V)</u>	<u>Dru</u>	m coating, new, exterior	<u>0.34</u> (2.8)	<u>0.54</u> (4.52)
<u>W)</u>	<u>Dru</u>	m coating, new, interior	<u>0.42</u> (3.5)	0.80 (6.67)
<u>X)</u>	<u>Dru</u>	m coating, reconditioned,	0.42	<u>0.80</u>

	exterior	(3.5)	(6.67)
<u>Y)</u>	Drum coating, reconditioned, interior	$\frac{0.50}{(4.2)}$	1.17 (9.78)
<u>Z)</u>	Steel pail and drum interior	0.52	<u>1.24</u>
	coating	<u>(4.3)</u>	(10.34)
<u>AA)</u>	Marine engine coating		
	i) Air dried	<u>0.42</u> (3.5)	<u>0.80</u> (6.67)
	ii) Baked: primer/topcoat	<u>0.42</u> (3.5)	<u>0.80</u> (6.67)
	iii) Baked: corrosion resistant basecoat	<u>0.28</u> (2.3)	0.40 (3.35)
	iv) Clear coating	<u>0.52</u> (4.3)	1.24 (10.34)
<u>BB)</u>	Ammunition sealants		
	<u>i)</u> <u>Air dried</u>	<u>0.42</u>	<u>0.80</u>
		<u>(3.5)</u>	<u>(6.67)</u>
	<u>ii)</u> <u>Baked:</u>	<u>0.36</u> (3.0)	<u>0.61</u> (5.06)
<u>CC)</u>	Electrical switchgear compartm coatings	<u>ent</u>	
	1) Air dried:	<u>0.42</u> (3.5)	<u>0.80</u> (6.67)
	<u>ii)</u> <u>Baked</u>	<u>0.36</u> (3.0)	<u>0.61</u> (5.06)
<u>DD)</u>	All other coatings		
	i) Air Dried:	<u>0.40</u> (3.3)	<u>.73</u> (5.98)

<u>ii)</u>	Baked:	<u>0.34</u>	<u>0.54</u>
		(2.8)	(4.52)

<u>2)</u> Plastic Parts and Products: Miscellaneous. For purposes of this subsection (q)(2), miscellaneous plastic parts and products are plastic parts and products that are not subject to subsection (q)(3), (q)(4), (q)(5), or (q)(6)of this Section. The limitations in subsection (q)(2) shall not apply to touch-up and repair coatings; stencil coats applied on clear or transparent substrates; clear or translucent coatings; coatings applied at a paint manufacturing facility while conducting performance tests on the coatings; any individual coating category used in volumes less than 189.2 liters (50 gallons) in any one calendar year, if the total usage of all such coatings does not exceed 756.9 liters (200 gallons) per calendar year per source and substitute compliant coatings are not available; reflective coatings applied to highway cones; mask coatings that are less than 0.5 mm thick (dried) if the area coated is less than 25 square inches; electromagnetic interference/radio frequency interference (EMI/RFI) shielding coatings; and heparin-benzalkonium chloride (HBAC)-containing coatings applied to medical devices if the total usage of all such coatings does not exceed 378.4 liters (100 gallons) per calendar year per source. The limitations in Section 219.219, however, shall apply to such coatings unless specifically excluded in Section 219.219.)

		kg/l (lb/gal) coatings	kg/l (lb/gal) solids
<u>A)</u>	General one component coating	<u>0.28</u> (2.3)	<u>0.40</u> (3.35)
<u>B)</u>	General multi-component	<u>0.42</u> (3.5)	<u>0.80</u> (6.67)
<u>C)</u>	Electric dissipating coatings and shock-free coatings	0.80 (6.7)	8.96 (74.7)
<u>D)</u>	Extreme performance (2-pack coatings)	<u>0.42</u> (3.5)	<u>0.80</u> (6.67)
<u>E)</u>	Metallic coating	<u>0.42</u> (3.5)	<u>0.80</u> (6.67)
<u>F)</u>	Military specification coating		
	i) 1-pack coatings	0.28	0.54

				(2.3)	(4.52)
		ii) 2-pack c	<u>oatings</u>	<u>0.42</u> (3.5)	0.80 (6.67)
	<u>G)</u>	Mold-seal coa	ating	<u>0.76</u> (6.3)	<u>5.24</u> (43.7)
	<u>H)</u>	Multi-colored	coating	<u>0.68</u> (5.7)	3.04 (25.3)
	<u>I)</u>	Optical coating	<u>ng</u>	<u>0.80</u> (6.7)	8.96 (74.7)
	<u>J)</u>	Vacuum-meta	alizing coating	<u>0.80</u> (6.7)	8.96 (74.7)
<u>3)</u>		Parts and Productive/Transport			
				kg/l (lb/gal) coatings	kg/l (lb/gal) solids
	<u>A)</u>	High bake coa exterior parts	atings – interior and		
		<u>i)</u> <u>Flexible</u>	<u>primer</u>	<u>0.54</u> (4.5)	1.39 (11.58)
		ii) Non-flex	<u>kible primer</u>	<u>0.42</u> (3.5)	<u>0.80</u> (6.67)
		iii) Basecoat	<u>ts</u>	<u>0.52</u> (4.3)	1.24 (10.34)
		iv) Clear coa	<u>at</u>	<u>0.48</u> (4.0)	1.05 (8.76)
		v) Non-base	ecoat/clear coat	<u>0.52</u> (4.3)	1.24 (10.34)
	<u>B)</u>	Low bake/air exterior parts	<u>dried coatings –</u>		

	<u>i)</u>	<u>Primers</u>	<u>0.58</u> (4.8)	1.66 (13.80)
	<u>ii)</u>	Basecoat	<u>0.60</u> (5.0)	1.87 (15.59)
	<u>iii)</u>	<u>Clear coats</u>	<u>0.54</u> (4.5)	1.39 (11.58)
	<u>iv)</u>	Non-basecoat/clear coat	<u>0.60</u> (5.0)	1.87 (15.59)
<u>C)</u>		bake/air dried coatings — rior parts		
	<u>i)</u>	Color coat	<u>0.38</u> (3.2)	0.67 (5.66)
	<u>ii)</u>	<u>Primer</u>	<u>0.42</u> (3.5)	0.80 (6.67)
<u>D)</u>	Touc	chup and repair coatings	<u>0.62</u> (5.2)	2.13 (17.72)
<u>E)</u>	Spec	cialty		
	<u>i)</u>	Vacuum metallizing basecoats, texture basecoats	<u>0.66</u> (5.5)	2.62 (21.8)
	<u>ii)</u>	Reflective argent coatings, air bag cover coatings, and soft coatings	<u>0.71</u> (5.9)	3.64 (29.7)
	<u>iii)</u>	Gloss reducers, vacuum metallizing topcoats, and texture topcoats	<u>0.77</u> (6.4)	6.06 (49.1)
	<u>iv)</u>	Stencil coats, adhesion primers, ink pad coatings, electrostatic prep coats, and resist coats	<u>0.82</u> (6.8)	(11.67) (89.4)
	<u>v)</u>	Head lamp lens coating	<u>0.89</u> (7.4)	

- F) Red, yellow, and black coatings Subject coating lines shall comply with a limit determined by multiplying the appropriate limit in subsections (q)(3)(A) through (q)(3)(E) of this Section by 1.15.
- 4) Plastic Parts and Products: Business Machine. The limitations of this subsection (q)(4) shall not apply to vacuum metallizing coatings, gloss reducers, texture topcoats, adhesion primers, electrostatic preparation coatings, stencil coats, and resist coats other than plating resist coats. The limitations in Section 219.219, however, shall apply to such coatings unless specifically excluded in Section 219.219.

		kg/l (lb/gal) coatings	kg/l (lb/gal) solids
<u>A)</u>	<u>Primers</u>	<u>0.14</u> (1.2)	<u>0.17</u> (1.4)
<u>B)</u>	Topcoat	<u>0.35</u> (2.9)	<u>0.57</u> (4.80)
<u>C)</u>	Color coat (texture coat)	<u>0.28</u> (2.3)	<u>0.40</u> (4.80)
<u>D)</u>	Color coat (non-texture coat)	<u>0.28</u> (2.3)	<u>0.40</u> (4.80)
<u>E)</u>	Texture coats other than color texture coats	<u>0.35</u> (2.9)	<u>0.57</u> (4.80)
<u>F)</u>	EMI/RFI shielding coatings	<u>0.48</u> (4.0)	1.05 (8.76)
<u>G)</u>	Fog coat	<u>0.26</u> (2.2)	0.38 (3.14)
<u>H)</u>	Touchup and repair	<u>0.35</u> (2.9)	<u>0.57</u> (4.80)
<u>I)</u>	Specialty coatings		
	i) Soft coat	<u>0.52</u> (4.3)	1.24 (10.34)
	ii) Plating resist	<u>0.71</u>	3.64

			<u>(5.9)</u>	<u>(29.7)</u>
		iii) Plating sensitizer	<u>0.85</u> (7.1)	(23.4) (201.0)
<u>5)</u>	Pleas	ure Craft Surface Coatings		
			kg/l (lb/gal) coatings	kg/l (lb/gal) solids
	<u>A)</u>	Extreme high gloss coating – topcoat	<u>0.49</u> (4.1)	1.10 (9.2)
	<u>B)</u>	<u>High gloss coating – topcoat</u>	<u>0.42</u> (3.5)	0.80 (6.7)
	<u>C)</u>	Pretreatment wash primer	<u>0.78</u> (6.5)	6.67 (55.6)
	<u>D)</u>	Finish primer surfacer	<u>0.42</u> (3.5)	<u>0.80</u> (6.7)
	<u>E)</u>	High build primer/surfacer	<u>0.34</u> (2.8)	<u>0.55</u> (4.6)
	<u>F)</u>	Aluminum substrate antifoulant coating	<u>0.56</u> (4.7)	1.53 (12.8)
	<u>G)</u>	Other substrate antifoulant coating	<u>0.33</u> (2.8)	<u>0.53</u> (4.4)
	<u>H)</u>	All other pleasure craft surface coatings for metal or plastic	<u>0.42</u> (3.5)	<u>0.80</u> (6.7)
<u>6)</u>	Moto	r Vehicle Materials		
			kg/l (lb/gal) coatings	
	<u>A)</u>	Cavity wax	<u>0.65</u> (5.42)	
	<u>B)</u>	<u>Sealer</u>	<u>0.65</u> (5.42)	

	<u>C)</u>	<u>Deadener</u>	<u>0.65</u> (5.42)
	<u>D)</u>	Gasket/gasket sealing material	<u>0.20</u> (1.67)
	<u>E)</u>	<u>Underbody coating</u>	<u>0.65</u> (5.42)
	<u>F)</u>	Trunk interior coating	<u>0.65</u> (5.42)
	<u>G)</u>	<u>Bedliner</u>	<u>0.20</u> (1.67)
	<u>H)</u>	Lubricating wax/compound	<u>0.70</u> (5.84)
(Source:	Amended a	nt 34 Ill. Reg, effective)

Section 219.205 Daily-Weighted Average Limitations

No owner or operator of a coating line subject to the limitations of Section 219.204 of this Subpart and complying by means of this Section shall operate the subject coating line unless the owner or operator has demonstrated compliance with subsection (a), (b), (c), (d), (e), (f), (g), (h), (f), or (j) of this Section (depending upon the category of coating) through the applicable coating analysis test methods and procedures specified in Section 219.105(a) of this Part and the recordkeeping and reporting requirements specified in Section 219.211(d) of this Subpart:

- a) No owner or operator of a coating line subject to only one of the limitations from among Section 219.204(a)(1)(A), (a)(1)(D)(4), (a)(2)(A), (a)(2)(E), (a)(2)(F), (c)(1), (d), (e), (f), (i), or (o), or, prior to May 1, 2011, (e) of this Subpart shall apply coatings on any such coating line, during any day, whose daily-weighted average VOM content exceeds the emission limitation to which the coatings are subject.
- b) Prior to May 1, 20122011, no No owner or operator of a miscellaneous metal parts and products coating line subject to the limitations of Section 219.204(j) of this Subpart shall apply coatings to miscellaneous metal parts or products on the subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this Section are met.
 - 1) For each coating line which applies multiple coatings, all of which are subject to the same numerical emission limitation within Section

219.204(j) of this Subpart during the same day (e.g., all coatings used on the line are subject to 0.42 kg/l (3.5 lbs/gal)), the daily-weighted average VOM content shall not exceed the coating VOM content limit corresponding to the category of coating used; or

- Por each coating line which applies coatings subject to more than one numerical emission limitation in Section 219.204(j) of this Subpart, during the same day, the owner or operator shall have a site-specific proposal approved by the Agency and approved by the USEPA as a SIP revision. To receive approval, the requirements of USEPA's Emissions Trading Policy Statement (and related policy) 51 Fed. Reg. 43814 (December 4, 1986), must be satisfied.
- c) No owner or operator of a can coating line subject to the limitations of Section 219.204(b) of this Subpart shall operate the subject coating line using a coating with a VOM content in excess of the limitations specified in Section 219.204(b) of this Subpart unless all of the following requirements are met:
 - An alternative daily emission limitation for the can coating operation, i.e., for all of the can coating lines at the source, shall be determined according to subsection (c)(2) of this Section. Actual daily emissions shall never exceed the alternative daily emission limitation and shall be calculated by use of the following equation.

$$E_d = \sum_{i=1}^n V_i C_i$$

where:

 E_d = Actual VOM emissions for the day in units of kg/day (lbs/day);

i = Subscript denoting a specific coating applied;

n = Total number of coatings applied in the can coating operation, i.e. all can coating lines at the source;

V_i = Volume of each coating applied for the day in units of 1/day (gal/day) of coating (minus water and any compounds which are specifically exempted from the definition of VOM);

 C_i = The VOM content of each coating as applied in units of kg VOM/l (lbs VOM/gal) of coating (minus water and any compounds which are specifically exempted from the definition of VOM).

2) The alternative daily emission limitation (A_d) shall be determined for the

can coating operation, i.e., for all of the can coating lines at the source, on a daily basis as follows:

$$A_d = \sum_{i=1}^n V_i L_i \frac{D_i - C_i}{D_i - L_i}$$

where:

 A_d = The VOM emissions allowed for the day in units of kg/day (lbs/day);

i = Subscript denoting a specific coating applied;

n = Total number of surface coatings applied in the can coating operation;

C_i = The VOM content of each surface coating as applied in units of kg VOM/l (lbs VOM/gal) of coating (minus water and any compounds which are specifically exempted from the definition of VOM);

D_i = The density of VOM in each coating applied. For the purposes of calculating A_d, the density is 0.882kg VOM/l VOM (7.36 lbs VOM/gal VOM);

 V_i = Volume of each surface coating applied for the day in units of l (gal) of coating (minus water and any compounds which are specifically exempted from the definition of VOM);

L_i = The VOM emission limitation for each surface coating applied as specified in Section 219.204(b) of this Subpart in units of kg VOM/l (lbs VOM/gal) of coating (minus water and any compounds which are specifically exempted from the definition of VOM).

- d) No owner or operator of a heavy off-highway vehicle products coating line subject to the limitations of Section 219.204(k) of this Subpart shall apply coatings to heavy off-highway vehicle products on the subject coating line unless the requirements of subsection (d)(1) or (d)(2) of this Section are met.
 - For each coating line which applies multiple coatings, all of which are subject to the same numerical emission limitation within Section 219.204(k) of this Subpart, during the same day (e.g., all coatings used on the line are subject to 0.42 kg/l (3.5 lbs/gal)), the daily-weighted average

- VOM content shall not exceed the coating VOM content limit corresponding to the category of coating used; or
- 2) For each coating line which applies coatings subject to more than one numerical emission limitation in Section 219.204(k) of this Subpart, during the same day, the owner or operator shall have a site specific proposal approved by the Agency and approved by the USEPA as a SIP revision. To receive approval, the requirements of USEPA's Emissions Trading Policy Statement (and related policy) 51 Fed. Reg. 43814 (December 4, 1986), must be satisfied.
- e) No owner or operator of a wood furniture coating line subject to the limitations of Section 219.204(l)(1) or (l)(3) of this Subpart shall apply coatings to wood furniture on the subject coating line unless the requirements of subsection (e)(1) or (e)(2) of this Section, in addition to the requirements specified in the note to Section 219.204(l)(1) of this Subpart, are met.
 - 1) For each coating line which applies multiple coatings, all of which are subject to the same numerical emission limitation within Section 219.204(l)(1) or (l)(3) of this Subpart, during the same day (e.g., all coatings used on the line are subject to 0.67 kg/l (5.6 lbs/gal)), the daily-weighted average VOM content shall not exceed the coating VOM content limit corresponding to the category of coating used; or
 - Por each coating line which applies coatings subject to more than one numerical emission limitation in Section 219.204(l)(1) or (l)(3) of this Subpart, during the same day, the owner or operator shall have a site specific proposal approved by the Agency and approved by the USEPA as a SIP revision. To receive approval, the requirements of USEPA's Emissions Trading Policy Statement (and related policy) 51 Fed. Reg. 43814 (December 4, 1986), must be satisfied.
- f) Prior to May 1, 20122011, noNo owner or operator of a plastic parts coating line subject to the limitations of Section 219.204(m) or (n) of this Subpart shall apply coatings to business machine or automotive/transportation plastic parts on the subject coating line unless the requirements of subsection (f)(1) or (f)(2) of this Section are met.
 - For each coating line which applies multiple coatings, all of which are subject to the same numerical emission limitation within Section 219.204(m) or (n) of this Subpart, during the same day (e.g., all coatings used on the line are subject to 0.42 kg/l (3.5 lbs/gal)), the daily-weighted average VOM content shall not exceed the coating VOM content limit corresponding to the category of coating used; or

- Policy Statement (and related policy) must be subject to more than one numerical emission limitation in Section 219.204(m) or (n) of this Subpart, during the same day, the owner or operator shall have a site specific proposal approved by the Agency and USEPA as a SIP revision. To receive approval, the requirements of USEPA's Emissions Trading Policy Statement (and related policy) must be satisfied.
- g) No owner or operator of a metal furniture coating line subject to the limitations of Section 219.204(g) of this Subpart shall apply coatings on the subject coating line unless the requirements of subsection (g)(1) or (g)(2) of this Section are met:
 - 1) For each coating line which applies multiple coatings, all of which are subject to the same numerical emission limitation within Section 219.204(g) of this Subpart, during the same day (e.g., all coatings used on the line are subject to 0.34 kg/l (2.8 lbs/gal)), the daily-weighted average VOM content shall not exceed the coating VOM content limit corresponding to the category of coating used; or
 - 2) For each coating line which applies coatings subject to more than one numerical emission limitation in Section 219.204(g) of this Subpart, during the same day, the owner or operator shall have a site specific proposal approved by the Agency and USEPA as a SIP revision. To receive approval, the requirements of USEPA's Emissions Trading Policy Statement (and related policy) must be satisfied.
- h) No owner or operator of a large appliance coating line subject to the limitations of Section 219.204(h) of this Subpart shall apply coatings on the subject coating line unless the requirements of subsection (h)(1) or (h)(2) of this Section are met.
 - 1) For each coating line which applies multiple coatings, all of which are subject to the same numerical emission limitation within Section 219.204(h) of this Subpart, during the same day (e.g., all coatings used on the line are subject to 0.34 kg/l (2.8 lbs/gal)), the daily-weighted average VOM content shall not exceed the coating VOM content limit corresponding to the category of coating used; or
 - 2) For each coating line which applies coatings subject to more than one numerical emission limitation in Section 219.204(h) of this Subpart, during the same day, the owner or operator shall have a site specific proposal approved by the Agency and USEPA as a SIP revision. To receive approval, the requirements of USEPA's Emissions Trading Policy Statement (and related policy) must be satisfied.
- i) On and after May 1, 2011, no owner or operator of a paper coating line subject to the limitations of Section 219.204(c) of this Subpart shall apply coatings on the

subject coating line unless the requirements in subsection (i)(1) or (i)(2) of this Section are met:

- 1) For each coating line the applies multiple coatings, all of which are subject to the same numerical emission limitation within Section 219.204(c) during the same day (e.g, all coatings used on the line are subject to 0.40 kg/kg solids (0.08 kg/kg coatings)), the daily-weighted average VOM content shall not exceed the coating VOM content limit corresponding to the category of coating being used; or
- 2) For each coating line that applies coatings subject to more than one numerical emission limitation in Section 219.204(c) during the same day, the owner or operator shall have a site-specific proposal approved by the Agency and approved by USEPA as a SIP revisions. To receive approval, the requirements of USEPA's Emissions Trading Policy Statement (and related policy), 51 Fed. Reg. 43814 (December 4, 1986), must be satisfied.
- On and after May 1, 20122011, no owner or operator of a miscellaneous metal parts and products coating line, plastic parts or products coating line, pleasure craft surface coating line, or motor vehicle materials coating line subject to the limitations of Section 219.204(q) of this Subpart shall apply coatings on the subject coating line unless the requirements of subsection (jɨ)(1) or (jɨ)(2) of this Section are met:
 - 1) For each coating line that applies multiple coatings, all of which are subject to the same numerical emission limitation within Section 219.204(q) of this Subpart, during the same day (e.g., all coatings used on the line are subject to 0.42 kg/l (3.5 lbs/gal)), the daily-weighted average VOM content shall not exceed the coating VOM content limit corresponding to the category of coating used; or
 - 2) For each coating line that applies coatings subject to more than one numerical emission limitation in Section 219.204(q) of this Subpart, during the same day, the owner or operator shall have a site specific proposal approved by the Agency and approved by USEPA as a SIP revision. To receive approval, the requirements of USEPA's Emissions Trading Policy Statement (and related policy) must be satisfied.

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Section 219.207 Alternative Emission Limitations

a) Any owner or operator of a coating line subject to Section 219.204 of this Subpart, except coating lines subject to Section 219.204(q)(6), may comply with this Section, rather than with Section 219.204 of this Subpart, if a capture system

and control device are operated at all times the coating line is in operation and the owner or operator demonstrates compliance with subsection (c), (d), (e), (f), (g), (h), (i), (j), (k), or (1), or (m) of this Section (depending upon the source category) through the applicable coating analysis and capture system and control device efficiency test methods and procedures specified in Section 219.105 of this Part and the recordkeeping and reporting requirements specified in Section 219.211(e) of this Subpart; and the control device is equipped with the applicable monitoring equipment specified in Section 219.105(d) of this Part and the monitoring equipment is installed, calibrated, operated and maintained according to vendor specifications at all times the control device is in use. A capture system and control device, which does not demonstrate compliance with subsection (c), (d), (e), (f), (g), (h), (i), (j), (k), $\frac{\text{or}}{\text{or}}$ (l), or (m) of this Section may be used as an alternative to compliance with Section 219.204 of this Subpart only if the alternative is approved by the Agency and approved by the USEPA as a SIP revision. The owner or operator of a pleasure craft surface coating operation subject to Section 219.205(q)(5)(A) through (G) of this Subpart may also comply with subsection (n) of this Section, rather than with Section 219.204 of this Subpart.

b) Alternative Add-On Control Methodologies

- 1) The coating line is equipped with a capture system and control device that provides 81 percent reduction in the overall emissions of VOM from the coating line and the control device has a 90 percent efficiency; or
- 2) The system used to control VOM from the coating line is demonstrated to have an overall efficiency sufficient to limit VOM emissions to no more than what is allowed under Section 219.204 of this Subpart. Use of any control system other than an afterburner, carbon adsorption, condensation, or absorption scrubber system can be allowed only if approved by the Agency and approved by the USEPA as a SIP revision. The use of transfer efficiency credits can be allowed only if approved by the Agency and approved by the USEPA as a SIP revision. Baseline transfer efficiencies and transfer efficiency test methods must be approved by the Agency and the USEPA. Such overall efficiency is to be determined as follows:
 - A) Obtain the emission limitation from the appropriate subsection in Section 219.204 of this Subpart;
 - B) <u>Unless complying with an emission limitation in Section 219.204</u> that is already expressed in terms of weight of VOM per volume of solids, calculate Calculate "S" according to the equation in Section 219.206 of this Subpart;
 - C) Calculate the overall efficiency required according to Section

219.105(e) of this Part. For the purposes of calculating this value, according to the equation in Section 219.105(e)(2) of this Part, VOM₁ is equal to the value of "S" as determined above in subsection (b)(2)(B) of this Section. If the coating line is complying with an emission limitation in Section 219.204 of this Subpart that is already expressed in terms of weight of VOM per volume of solids, VOM₁ is equal to that emission limitation.

- No owner or operator of a coating line subject to only one of the emission limitations from among Section 219.204(a)(1)(A), (a)(1)(D)(4), (a)(2)(A), (a)(2)(E), (a)(2)(F), (c)(1), (d), (e), (f) or (i), or, prior to May 1, 2011, (e) of this Subpart and equipped with a capture system and control device shall operate the subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this Section are met. No owner or operator of a coating line subject to Section 219.204(a)(1)(B),(2) or (a)(1)(C), (a)(2)(B), (a)(2)(C), or (a)(2)(D)(3) of this Part and equipped with a capture system and control device shall operate the coating line unless the owner or operator demonstrates compliance with such limitation in accordance with the topcoat protocol referenced in Section 219.105(b)(1)(A) or (b)(1)(B)of this Part, as applicable.
- d) No owner or operator of a miscellaneous metal parts and products coating line that applies one or more coatings during the same day, all of which are subject to the same numerical emission limitation within Section 219.204(j) of this Subpart (e.g., all coatings used on the line are subject to 0.42 kg/l (3.5 lbs/gal)), and that is equipped with a capture system and control device shall operate the subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this Section are met.
- e) No owner or operator of a heavy off-highway vehicle products coating line that applies one or more coatings during the same day, all of which are subject to the same numerical emission limitation within Section 219.204(k) of this Subpart (e.g., all coatings used on the line are subject to 0.42 kg/1 (3.5 lbs/gal)), and that is equipped with a capture system and control device shall operate the subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this Section are met.
- No owner or operator of a wood furniture coating line that applies one or more coatings during the same day, all of which are subject to the same numerical emission limitation within Section 219.204(l) of this Subpart (e.g., all coatings used on the line are subject to 0.67 kg/l (5.6 lbs/gal)), and that is equipped with a capture system and control device shall operate the subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this Section are met. If compliance is achieved by meeting the requirements in subsection (b)(2) of this Section, then the provisions in the note to Section 219.204(l) of this Subpart must also be met.

- No owner or operator of a can coating line equipped with a capture system and control device shall operate the subject coating line unless the requirements in subsection (g)(1) or (g)(2) of this Section are met.
 - An alternative daily emission limitation for the can coating operation, i.e., for all of the can coating lines at the source, shall be determined according to Section 219.205(c)(2) of this Subpart. Actual daily emissions shall never exceed the alternative daily emission limitation and shall be calculated by use of the following equation:

$$E_d = \sum_{i=1}^n V_i C_i (1 - F_i)$$

where:

 E_d = Actual VOM emissions for the day in units of kg/day (lbs/day);

i = Subscript denoting the specific coating applied;

n = Total number of surface coatings as applied in the can coating operation;

V_i = Volume of each coating as applied for the day in units of 1/day (gal/day) of coating (minus water and any compounds which are specifically exempted from the definition of VOM);

C_i = The VOM content of each coating as applied in units of kg VOM/l (lbs VOM/gal) of coating (minus water and any compounds which are specifically exempted from the definition of VOM); and

F_i = Fraction, by weight, of VOM emissions from the surface coating, reduced or prevented from being emitted to the ambient air. This is the overall efficiency of the capture system and control device.

- 2) The coating line is equipped with a capture system and control device that provide 75 percent reduction in the overall emissions of VOM from the coating line and the control device has a 90 percent efficiency.
- h) No owner or operator of a plastic parts coating line that which applies one or more coatings during the same day, all of which are subject to the same numerical emission limitation within Section 219.204(m) or (n) of this Subpart (e.g., all coatings used on the line are subject to 0.42 kg/l ([3.5 lbs/gal)]), and that which is equipped with a capture system and control device shall operate the subject

- coating line unless the requirements in subsection (b)(1) or (b)(2) of this Section are met.
- i) No owner or operator of a metal furniture coating line that applies one or more coatings during the same day, all of which are subject to the same numerical emission limitation within Section 219.204(g) of this Subpart (e.g., all coatings used on the line are subject to 0.34 kg/l (2.8 lbs/gal)), and that is equipped with a capture system and control device shall operate the subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this Section are met.
- j) No owner or operator of a large appliance coating line that applies one or more coatings during the same day, all of which are subject to the same numerical emission limitation within Section 219.204(h) of this Subpart (e.g., all coatings used on the line are subject to 0.34 kg/l (2.8 lbs/gal)), and that is equipped with a capture system and control device shall operate the subject coating line unless the requirements in subsection (b)(1) or (b)(2) of this Section are met.
- k) On and after May 1, 2011, no owner or operator of a paper coating line, metal furniture coating line, or large appliance coating line that is equipped with a capture system and control device shall operate the subject coating line unless either:
 - 1) The capture system and control device provide at least 90 percent reduction in the overall emissions of VOM from the coating line; or
 - 2) The owner or operator complies with the applicable limitations set forth in Section 291.204 of this Subpart by utilizing a combination of low-VOM coatings and a capture system and control device.
- 1) No owner or operator of a flat wood paneling coating line that is equipped with a capture system and control device shall operate the subject coating line unless either:
 - 1) The capture system and control device provide at least 90 percent reduction in the overall emissions of VOM from the coating line; or
 - 2) The owner or operator of the flat wood paneling coating line complies with all requirements set forth in subsection (b)(2) of this Section.
- <u>mk</u>) On and after May 1, 20122011, no owner or operator of a miscellaneous metal parts and products coating line, plastic parts and products coating line, or pleasure craft surface coating line that is equipped with a capture system and control device shall operate the subject coating line unless:

- 1) The capture system and control device provide at least 90 percent reduction in the overall emissions of VOM from the coating line; or
- 2) The owner or operator of the coating line complies with all requirements set forth in subsection (b)(2) of this Section.
- missions Averaging Alternative for Pleasure Craft Surface Coating Operations. The owner or operator of a source with coating operations subject to the requirements of Section 219.204(q)(5)(A) through (G) may elect to include such operations in the emissions averaging alternative. Coating operations utilizing this alternative shall comply with a source-specific VOM emission limit on a 12-month rolling average basis, calculated at the end of each calendar month. Subject coating operations that do not utilize the emissions averaging alternative, and coating operations subject to Section 219.204(q)(5)(H), shall comply with the requirements in Section 219.204(q)(5) or 219.205, or subsection (m) of this Section, as applicable, as well as with all other applicable requirements in this Subpart.
 - The total actual VOM emissions determined by Equation 2 shall be equal to or less than the total allowable VOM emissions determined by Equation 1. The owner or operator of a source subject to this subsection (n) shall use Equation 1 to determine the total allowable source-specific VOM mass emission limit for pleasure craft coatings included in the emissions average:

Equation 1:

$$VOM_{Allowable} \ = \sum_{i=A}^{G} LIM_{i}V_{i}$$

where:

<u>VOM</u>_{Allowable} = <u>Total allowable mass of VOM that can be emitted</u>

from the pleasure craft coating operations included in the average, expressed in kilograms per 12-month

period.

 $\underline{LIM_i}$ \equiv The applicable VOM content limit for a specified

pleasure craft coating category from Section 219.204(q)(5)(A) through (G), expressed in

kilograms per liter.

 $\underline{\underline{V_i}}$ $\underline{\underline{\underline{Volume of specified pleasure craft coating category}}$

from Section 219.204(q)(5)(A) through (G) used in

the past 12 months, excluding water and any compounds that are exempt, expressed in liters.

<u>Subscript denoting a specific pleasure craft coating category from Section 219.204(q)(5)(A) through (G).</u>

At the end of the first 12-month averaging period, and at the end of each subsequent month, the owner or operator of a source subject to this subsection (n) shall use Equation 2 to calculate the total actual VOM emissions from the pleasure craft coating operations included in the emissions average.

Equation 2:

 $VOM_{Actual} = \sum_{i=A}^{G} VOM_i V_i$

where:

VOM_{Actual} = VOM emissions calculated using the VOM content for all coatings from Section 219.204(q)(5)(A) through (G) that are included in the average and the volume of those coatings used, expressed in kilograms.

 $\frac{VOM_i}{s} = \frac{\text{Weighted average of actual VOM content for a}}{\text{specified pleasure craft coating category from}} \\ \frac{Section \ 219.204(q)(5)(A) \ through \ (G), \ expressed \ in}{kilograms \ per \ liter.}$

i <u>Subscript denoting a specific pleasure craft coating category from Section 219.204(q)(5)(A) through (G).</u>

3) For purposes of Equation 2, the owner or operator of a source subject to this subsection (n) shall use Equation 3 to calculate the weighted average VOM content for each coating included in the emissions average for the previous 12 months.

Equation 3:

$$VOM_i = \frac{\sum_{j=1}^{n} VOM_j V_j}{\sum_{j=1}^{n} V_j}$$

where:

$\underline{\text{VOM}_{i}}$	≣	Weighted average of actual VOM content for a		
		specified pleasure craft coating category from		
		Section 219.204(q)(5)(A) through (G), expressed in		

kilograms per liter.

 $\underline{VOM_i}$ \equiv \underline{VOM} content of each pleasure craft coating used

over the previous 12 months within a specific

pleasure craft coating category, i.

 $\underline{\underline{V}}_{\underline{i}}$ $\underline{\underline{v}}$ Volume of each pleasure craft coating used in the

previous 12 months, excluding water and any compounds that are exempt, within a specific

pleasure craft coating category, i.

<u>i</u> <u>Subscript denoting a specific pleasure craft coating</u>

category from Section 219.204(q)(5)(A) through

<u>(G).</u>

j <u>Subscript denoting a specific pleasure craft coating</u>

within a specified coating category, i.

n = Number of coatings applied within a specific

coating category, i.

(Source: Amended at 34 Ill. Reg. _____, effective _____)

Section 219.208 Exemptions From Emission Limitations

a) Exemptions for all coating categories except wood furniture coating. The limitations of this Subpart shall not apply to coating lines within a source, that otherwise would be subject to the same subsection of Section 219.204 (because they belong to the same coating category, e.g., can coating), provided that combined actual emissions of VOM from all lines at the source subject to that subsection never exceed 6.8 kg/day (15 lbs/day) before the application of capture systems and control devices. (For example, can coating lines within a source would not be subject to the limitations of Section 219.204(b) of this Subpart if the combined actual emissions of VOM from the can coating lines never exceed 6.8

kg/day (15 lbs/day) before the application of capture systems and control devices.) Prior to May 1, 20122011, volatile Volatile organic material emissions from heavy off-highway vehicle products coating lines must be combined with VOM emissions from miscellaneous metal parts and products coating lines to determine applicability. On and after May 1, 20122011, VOM emissions from heavy off-highway vehicle products coating lines shall be combined with VOM emissions from miscellaneous metal parts and products coating lines and plastic parts and products coating lines to determine applicability. Any owner or operator of a coating source shall comply with the applicable coating analysis test methods and procedures specified in Section 219.105(a) of this Part and the recordkeeping and reporting requirements specified in Section 219.211(a) of this Subpart if total VOM emissions from the subject coating lines are always less than or equal to 6.8 kg/day (15 lbs/day) before the application of capture systems and control devices and, therefore, are not subject to the limitations of Section 219.204 of this Subpart. Once a category of coating lines at a source is subject to the limitations in Section 219.204 of this Part the coating lines are always subject to the limitations in Section 219.204 of this Subpart.

b) Applicability for wood furniture coating

- The limitations of this Subpart shall apply to a source's wood furniture coating lines if the source contains process emission units, not regulated by Subparts B, E, F (excluding Section 219.204(l) of this Subpart), H (excluding Section 219.405 of this Part), Q, R, S, T (excluding Section 219.486 of this Part), V, X, Y, Z or BB of this Part, which as a group both:
 - A) Have a maximum theoretical emissions of 91 Mg (100 tons) or more per calendar year of VOM if no air pollution control equipment were used, and
 - B) Are not limited to less than 91 Mg (100 tons) of VOM per calendar year if no air pollution control equipment were used, through production or capacity limitations contained in a federally enforceable permit or SIP revision.
- The limitations of this Subpart shall apply to a source's wood furniture coating lines, on and after March 15, 1996, if the source contains process emission units, which as a group, have a potential to emit 22.7 Mg (25 tons) or more of VOM per calendar year and have not limited emissions to less than 22.7 Mg (25 tons) of VOM per calendar year through production or capacity limitations contained in a federally enforceable operating permit or SIP revision, and that which:
 - A) Are not regulated by Subparts B, E, F (excluding Section 219.204(l) of this Subpart), H, Q, R, S, T (excluding Section

- 219.486 of this Part), V, X, Y, Z or BB of this Part; and
- B) Are not included in any of the following categories: synthetic organic chemical manufacturing industry (SOCMI) distillation, SOCMI reactors, plastic parts coating (business machines), plastic parts coating (other), offset lithography, industrial wastewater, autobody refinishing, SOCMI batch processing, volatile organic liquid storage tanks and clean-up solvents operations.
- 3) If a source ceases to fulfill the criteria of subsection (b)(1) or (b)(2) of this Section, the limitations of Section 219.204(l) of this Subpart shall continue to apply to any wood furniture coating line which was ever subject to the limitations of Section 219.204(l) of this Subpart.
- 4) For the purposes of subsection (b) of this Section, an emission unit shall be considered to be regulated by a Subpart if it is subject to the limitations of that Subpart. An emission unit is not considered regulated by a Subpart if it is not subject to the limits of that Subpart, e.g., the emission unit is covered by an exemption in the Subpart or the applicability criteria of the Subpart are not met.
- Any owner or operator of a wood furniture coating line to which the limitations of this Subpart are not applicable due to the criteria in subsection (b) of this Section shall, upon request by the Agency or the USEPA, submit records to the Agency and the USEPA within 30 calendar days from the date of the request that document that the coating line is exempt from the limitations of this Subpart.
- c) On and after March 15, 1996, the limitations of this Subpart shall not apply to touch-up and repair coatings used by a coating source described by <u>Sectionsubsections</u> 219.204(b), (d), (f), (g), and (i), (j), (m), and (n) of this Subpart; provided that the source-wide volume of such coatings used does not exceed 0.95 1 (1 quart) per eight-hour period or exceed 209 1/yr (55 gal/yr) for any rolling 12twelve month period. Recordkeeping and reporting for touch-up and repair coatings shall be consistent with subsection (d) of this Section.
- d) Prior to May 1, 20122011, the limitations of this Subpart shall not apply to touch-up and repair coatings used by a coating source described by Sectionsubsections 219.204(j), (m), and (n) of this Subpart, provided that the source-wide volume of the coatings used does not exceed 0.951(1 quart) per eight-hour period or exceed 209 l/yr (55 gal/yr) for any rolling twelve month period. Recordkeeping and reporting for touch-up and repair coatings shall be consistent with subsection (e) of this Section.
- ed) On and after March 15, 1996, the owner or operator of a coating line or a group of

coating lines using touch-up and repair coatings that are exempted from the limitations of Section 219.204(b), (d), (f), (g), (i), (j), (m) and (n) of this Subpart because of the provisions of <a href="mailto:subsection-

- 1) Collect and record the name, identification number, and volume used of each touch-up and repair coating, as applied on each coating line, per eight-hour period and per month;
- 2) Perform calculations on a daily basis, and maintain at the source records of such calculations of the combined volume of touch-up and repair coatings used source-wide for each eight-hour period;
- 3) Perform calculations on a monthly basis, and maintain at the source records of such calculations of the combined volume of touch-up and repair coatings used source-wide for the month and the rolling 12 twelve month period;
- 4) Prepare and maintain at the source an annual summary of the information required to be compiled pursuant to subsections (e)(1) and (e)(2) of this Section on or before January 31 of the following year;
- 5) Maintain at the source for a minimum period of three years all records required to be kept under this subsection (e) and make such records available to the Agency upon request;
- Notify the Agency in writing if the use of touch-up and repair coatings at the source ever exceeds a volume of 0.95 l (1 quart) per eight-hour period or exceeds 209 l/yr (55 gal/yr) for any rolling 12 twelve month period within 30 days after any such exceedance. Such notification shall include a copy of any records of such exceedance; and
- 7) "Touch-up and repair coatings" means, for purposes of 35 Ill. Adm. Code 219.208, any coating used to cover minor scratches and nicks that occur during manufacturing and assembly processes.

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Section 219.210 Compliance Schedule

Every owner or operator of a coating line (of a type included within Section 219.204 of this Subpart) shall comply with the requirements of Section 219.204, 219.205, 219.207 or 219.208 and Section 219.211 or Sections 219.212 and 219.213 of this Subpart in accordance with the appropriate compliance schedule as specified in subsection (a), (b), (c), (d), (e), (f), (g), or (i) of this Section:

- a) No owner or operator of a coating line that is exempt from the limitations of Section 219.204 of this Subpart because of the criteria in Section 219.208(a) or (b) of this Subpart shall operate said coating line on or after a date consistent with Section 219.106 of this Part, unless the owner or operator has complied with, and continues to comply with, Section 219.211(b) of this Subpart.
- b) No owner or operator of a coating line complying by means of Section 219.204 of this Subpart shall operate said coating line on or after a date consistent with Section 219.106 of this Part, unless the owner or operator has complied with, and continues to comply with, Sections 219.204 and 219.211(c) of this Subpart.
- c) No owner or operator of a coating line complying by means of Section 219.205 of this Subpart shall operate said coating line on or after a date consistent with Section 219.106 of this Part, unless the owner or operator has complied with, and continues to comply with, Sections 219.205 and 219.211(d) of this Subpart.
- d) No owner or operator of a coating line complying by means of Section 219.207 of this Subpart shall operate said coating line on or after a date consistent with Section 219.106 of this Part, unless the owner or operator has complied with, and continues to comply with, Sections 219.207 and 219.211(e) of this Subpart.
- e) No owner or operator of a coating line subject to one or more of the emission limitations contained in Section 219.204 of this Subpart on or after March 15, 1996, choosing to comply by means of Section 219.204, 219.205 or 219.207 of this Subpart, shall operate said coating line on or after March 15, 1996, unless the owner or operator complies with and continues to comply with, respectively, the applicable requirements in Section 219.204, or the alternative control options in Sections 219.205 or 219.207 and the requirements of Section 219.211.
- f) No owner or operator of a coating line subject to one or more of the emission limitations contained in Section 219.204 of this Subpart on or after March 15, 1996, choosing to comply by means of Section 219.212 of this Subpart, shall operate said coating line on or after March 15, 1996, unless the owner or operator complies with and continues to comply with the requirements of Sections 219.212 and 219.213 of this Subpart.
- No owner or operator of a coating line subject to the emission limitations in Section 219.204(c)(2), (g)(2), or (h)(2) of this Subpart shall operate that coating line on or after a date consistent with Section 219.106(c) of this Part, unless the owner or operator has complied with, and continues to comply with, Section 219.204(c)(2), (g)(2), or (h)(2), as applicable, or the alternative control options in Section 219.205 or 219.207, and all applicable requirements in Sections 219.211 and 219.218 of this Subpart.

- h) No owner or operator of a coating line subject to the emission limitations contained in Section 219.204(o) of this Subpart shall operate that coating line on or after a date consistent with Section 219.106(c) of this Part, unless the owner or operator has complied with, and continues to comply with, Section 219.204(o) or the alternative control options in Section 219.205 or 219.207, and the requirements of Sections 219.211 and 219.217 of this Subpart, as applicable.
- No owner or operator of a coating line subject to the emission limitations in Section 219.204(a)(2) or (q) of this Subpart, or subject to the limitations in Section 219.219 of this Subpart, shall operate the coating line on or after a date consistent with Section 219.106(ee) of this Part, unless the owner or operator has complied with, and continues to comply with, Section 219.204(a)(2) or (q), if applicable, or the alternative control options in Section 219.205 or 219.207, and all applicable requirements in Sections 219.211 and 219.219 of this Subpart.

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Section 219.211 Recordkeeping and Reporting

- a) The VOM content of each coating and the efficiency of each capture system and control device shall be determined by the applicable test methods and procedures specified in Section 219.105 of this Part to establish the records required under this Section.
- b) Any owner or operator of a coating line that is exempted from the limitations of Section 219.204 of this Subpart because of Section 219.208(a) or (b) of this Subpart shall comply with the following:
 - For sources exempt from Section 219.208(a) of this Subpart, by a date consistent with Section 219.106 of this Part, the owner or operator of a coating line or group of coating lines referenced in subsection (b) of this Section shall certify to the Agency that the coating line or group of coating lines is exempt under the provisions of Section 219.208(a) of this Subpart. Such certification shall include:
 - A) A declaration that the coating line is exempt from the limitations of Section 219.204 of this Subpart because of Section 219.208(a) of this Subpart; and
 - B) Calculations that demonstrate that the combined VOM emissions from the coating line and all other coating lines in the same category never exceed 6.8 kg (15 lbs) per day before the application of capture systems and control devices. The following equation shall be used to calculate total VOM emissions:

$$T_e = \sum_{j=1}^m \sum_{i=1}^n (A_i B_i)_j$$

where:

T_e = Total VOM emissions from coating lines each day before the application of capture systems and control devices in units of kg/day (lbs/day);

m = Number of coating lines at the source that otherwise would be subject to the same subsection of Section 219.104 of this Part (because they belong to the same category, e.g., can coating);

j = Subscript denoting an individual coating line;

n = Number of different coatings as applied each day on each coating line;

i = Subscript denoting an individual coating;

 $\begin{array}{lll} A_i &=& Weight \ of \ VOM \ per \ volume \ of \ each \ coating \ (minus \ water \ and \ any \ compounds \ that \ are \ specifically \ exempted \ from \ the \ definition \ of \ VOM) \ as \ applied \ each \ day \ on \ each \ coating \ line \ in \ units \ of \ kg \ VOM/l \ (lbs \ VOM/gal); \ \underline{and} \end{array}$

 $B_i = Volume \ of each \ coating \ (minus \ water \ and \ any \ compounds \ that \ are \ specifically \ exempted \ from \ the \ definition \ of \ VOM) \ as \ applied \ each \ day \ on \ each \ coating \ line \ in \ units \ of \ l/day \ (gal/day). \ The \ instrument \ or \ method \ by \ which \ the \ owner \ or \ operator \ accurately \ measured \ or \ calculated \ the \ volume \ of \ each \ coating \ as \ applied \ on \ each \ coating \ line \ each \ day \ shall \ be \ described \ in \ the \ certification \ to \ the \ Agency.$

- 2) For sources exempt under Section 219.208(b) of this Subpart, by March 15, 1998, or upon initial start-up, the owner or operator of a coating line or a group of coating lines referenced in subsection (b) of this Section shall certify to the Agency that the source is exempt under the provisions of Section 219.208(b) of this Subpart. Such certification shall include:
 - A) A declaration that the source is exempt from the limitations of Section 219.204(l) of this Subpart because of Section 219.208(b) of this Subpart; and

- B) Calculations that which demonstrate that the source meets the criteria of exemption because of Section 219.208(b) of this Subpart.
- 3) For sources exempt under Section 219.208(a) of this Subpart, on and after a date consistent with Section 219.106 of this Part, the owner or operator of a coating line or group of lines referenced in this subsection (b) shall collect and record all of the following information each day for each coating line and maintain the information at the source for a period of three years:
 - A) The name and identification number of each coating as applied on each coating line; and
 - B) The weight of VOM per volume and the volume of each coating (minus water and any compounds that which are specifically exempted from the definition of VOM) as applied each day on each coating line.
- 4) For sources exempt under Section 219.208(b) of this Subpart, on and after March 15, 1998, the owner or operator of a coating line or group of coating lines referenced in this subsection (b) shall collect and record all of the following information for each coating line and maintain the information at the source for a period of three years:
 - A) The name and identification number of each coating as applied on each coating line; and
 - B) The weight of VOM per volume and the volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied on each coating line on a monthly basis.
- On and after a date consistent with Section 219.106 of this Part, the owner or operator of a coating line or group of coating lines exempted from the limitations of Section 219.204 of this Subpart because of Section 219.208(a) of this Subpart shall notify the Agency of any record showing that total VOM emissions from the coating line or group of coating lines exceed 6.8 kg (15 lbs) in any day before the application of capture systems and control devices by sending a copy of such record to the Agency within 30 days after the exceedance occurs.
- On and after March 15, 1998, any owner or operator of a source exempt from the limitations of Section 219.204(1) of this Subpart because of

Section 219.208(b) of this Subpart shall notify the Agency if the source's VOM emissions exceed the limitations of Section 219.208(b) of this Subpart by sending a copy of calculations showing such an exceedance within 30 days after the change occurs.

- c) Any owner or operator of a coating line subject to the limitations of Section 219.204 of this Subpart other than Section 219.204(a)(1)(B),(2) and (a)(1)(C), (a)(2)(B), (a)(2)(C), or (a)(2)(D)(3) of this Subpart and complying by means of Section 219.204 of this Subpart shall comply with the following:
 - By a date consistent with Section 219.106 of this Part, or upon initial startup of a new coating line, or upon changing the method of compliance from an existing subject coating line from Section 219.205, Section 219.207, Section 219.215, or Section 219.216 of this Subpart to Section 219.204 of this Subpart; the owner or operator of a subject coating line shall certify to the Agency that the coating line will be in compliance with Section 219.204 of this Subpart on and after a date consistent with Section 219.106 of this Part, or on and after the initial start-up date. The certification shall include:
 - A) The name and identification number of each coating as applied on each coating line;
 - B) The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating line;
 - C) On and after March 15, 1998, for coating lines subject to the limitations of Section 219.204(l)(2)(A) or (B) of this Subpart, the weight of VOM per weight of solids in each coating as applied each day on each coating line;
 - D) For coating lines subject to the limitations of Section 219.204(c)(2) of this Subpart, the weight of VOM per weight of solids (or the weight of VOM per weight of coatings, as applicable) in each coating as applied each day on each coating line;
 - E) For coating lines subject to the limitations of Section 219.204(g)(2) or (h)(2) of this Subpart, the application methods used to apply coatings on the subject coating line and the weight of VOM per volume of each coating (or the weight of VOM per volume of solids in each coating, as applicable) as applied each day on each coating line; and

- F) For coating lines subject to the limitations of Section 219.204(o) of this Subpart, the weight of VOM per volume of coatings or solids, as applicable, as applied each day in each coating line:
- For coating lines subject to the limitations of Section

 219.204(a)(2)(A) of this Subpart, the weight of VOM per volume
 of solids in each coating as applied each day on each coating line,
 and the solids turnover ratio of the EDP operation, with supporting
 calculations;
- For coating lines subject to the limitations of Section
 219.204(a)(2)(E), the weight of VOM per volume of each coating
 as applied each day on each coating line, calculated on an
 occurrence weighted average basis;
- For coating lines subject to the limitations of Section 219.204(q) of this Subpart, the weight of VOM per volume of each coating, or the weight of VOM per volume of solids in each coating, as applicable, as applied each day on each coating line.
- On and after a date consistent with Section 219.106 of this Part, or on and after the initial start-up date, the owner or operator of a subject coating line shall collect and record all of the following information each day, unless otherwise specified, for each coating line and maintain the information at the source for a period of three years:
 - A) The name and identification number of each coating as applied on each coating line;
 - B) The weight of VOM per volume of each coating (minus water and any compounds that which are specifically exempted from the definition of VOM) as applied each day on each coating line;
 - C) On and after March 15, 1998, for coating lines subject to the limitations of Section 219.204(l)(2)(A) or (B) of this Subpart, the weight of VOM per weight of solids in each coating as applied each day on each coating line and certified product data sheets for each coating;
 - D) On and after March 15, 1998, for wood furniture coating spray booths subject to the limitation of Section 219.204(l)(4)(A) of this Subpart, the weight of VOM per weight of solids in each strippable spray booth coating as applied each day on each spray booth and certified product data sheets for each coating;

- E) For coating lines subject to the limitations of Section 219.204(c)(2) of this Subpart, the weight of VOM per weight of solids (or the weight of VOM per weight of coatings, as applicable) in each coating as applied each day on each coating line, and certified product data sheets for each coating;
- F) For coating lines subject to the limitations of Section 219.204(g)(2) or (h)(2) of this Subpart, the weight of VOM per volume of each coating (or the weight of VOM per volume of solids in each coating, as applicable) as applied each day on each coating line, and certified product data sheets for each coating; and
- G) For coating lines subject to the limitations of Section 219.204(o) of this Subpart, the weight of VOM per volume of coatings or solids, as applicable, as applied each day in each coating line;
- For coating lines subject to the limitations of Section
 219.204(a)(2)(A) of this Subpart, the weight of VOM per volume
 of solids in each coating as applied each day on each coating line,
 certified product data sheets for each coating, and the solid
 turnover ratio for the EDP operation, calculated on a calendar
 monthly basis, with supporting calculations;
- For coating lines subject to the limitations of Section
 219.204(a)(2)(E), the weight of VOM per volume of each coating
 as applied each day on each coating line, calculated on an
 occurrence weighted average basis, and certified product data
 sheets for each coating; and
- For coating lines subject to the limitations of Section 219.204(q) of this Subpart, the weight of VOM per volume of each coating, or the weight of VOM per volume of solids in each coating, as applicable, as applied each day on each coating line, and certified product data sheets for each coating.
- 3) On and after a date consistent with Section 219.106 of this Part, the owner or operator of a subject coating line shall notify the Agency in the following instances:
 - A) Any record showing violation of Section 219.204 of this Subpart shall be reported by sending a copy of such record to the Agency within 30 days following the occurrence of the violation.

- B) At least 30 calendar days before changing the method of compliance from Section 219.204 to Section 219.205 or Section 219.207 of this Subpart, the owner or operator shall comply with all requirements of subsection (d)(1)₂-OF (e)(1), or (i)(1) below, as applicable respectively. Upon changing the method of compliance from Section 219.204 to Section 219.205 or Section 219.207 of this Subpart, the owner or operator shall comply with all requirements of subsection (d)₂-OF (e), or (i) of this Section, as applicable respectively.
- d) Any owner or operator of a coating line subject to the limitations of Section 219.204 of this Subpart and complying by means of Section 219.205 of this Subpart shall comply with the following:
 - By a date consistent with Section 219.106 of this Part, or upon initial startup of a new coating line, or upon changing the method of compliance for an existing subject coating line from Section 219.204 or Section 219.207 to Section 219.205 of this Subpart; the owner or operator of the subject coating line shall certify to the Agency that the coating line will be in compliance with Section 219.205 on and after a date consistent with Section 219.106 of this Part, or on and after the initial start-up date. The certification shall include:
 - A) The name and identification number of each coating line which will comply by means of Section 219.205 of this Subpart.
 - B) The name and identification number of each coating as applied on each coating line.
 - C) The weight of VOM per volume and the volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating line.
 - D) On and after March 15, 1998, for coating lines subject to the limitations of Section 219.204(l)(2)(A) or (B) of this Subpart, the weight of VOM per weight of solids in each coating as applied each day on each coating line.
 - E) For coating lines subject to the limitations of Section 219.204(a)(2)(A) of this Subpart, the weight of VOM per volume of solids in each coating as applied each day on each coating line.
 - FE) For coating lines subject to the limitations of Section 219.204(c)(2) of this Subpart, the weight of VOM per weight of solids (or the

- weight of VOM per weight of coatings, as applicable) in each coating as applied each day on each coating line.
- <u>G</u>F) For coating lines subject to the limitations of Section 219.204(g)(2) or (h)(2) of this Subpart, the weight of VOM per volume of each coating (or the weight of VOM per volume of solids in each coating, as applicable) as applied each day on each coating line.
- **HG**) For coating lines subject to the limitations of Section 219.204(o) of this Subpart, the weight of VOM per volume of coatings or solids, as applicable, as applied each day in each coating line.
- For coating lines subject to the limitations of Section 219.204(q) of this Subpart, the weight of VOM per volume of each coating, or the weight of VOM per volume of solids in each coating, as applicable, as applied each day on each coating line.
- <u>J</u>E) The instrument or method by which the owner or operator will accurately measure or calculate the volume of each coating as applied each day on each coating line.
- **K**F) The method by which the owner or operator will create and maintain records each day as required in subsection (d)(2) of this Section.
- $\underline{\underline{LG}}$) An example of the format in which the records required in subsection (d)(2) of this Section will be kept.
- On and after a date consistent with Section 219.106 of this Part, or on and after the initial start-up date, the owner or operator of a subject coating line shall collect and record all of the following information each day for each coating line and maintain the information at the source for a period of three years:
 - A) The name and identification number of each coating as applied on each coating line.
 - B) The weight of VOM per volume and the volume of each coating (minus water and any compounds <u>that which</u> are specifically exempted from the definition of VOM) as applied each day on each coating line.
 - C) On and after March 15, 1998, for coating lines subject to the limitations of Section 219.204(l)(2)(A) or (B) of this Subpart, the

- weight of VOM per weight of solids in each coating as applied each day on each coating line.
- <u>D)</u> For coating lines subject to the limitations of Section
 219.204(a)(2)(A) of this Subpart, the weight of VOM per volume of solids in each coating as applied each day on each coating line.
- For coating lines subject to the limitations of Section 219.204(c)(2) of this Subpart, the weight of VOM per weight of solids (or the weight of VOM per weight of coatings, as applicable) in each coating as applied each day on each coating line.
- FE) For coating lines subject to the limitations of Section 219.204(g)(2) or (h)(2) of this Subpart, the weight of VOM per volume of each coating (or the weight of VOM per volume of solids in each coating, as applicable) as applied each day on each coating line.
- <u>G</u>**F**) For coating lines subject to the limitations of Section 219.204(o) of this Subpart, the weight of VOM per volume of coatings or solids, as applicable, as applied each day in each coating line.
- H) For coating lines subject to the limitations of Section 219.204(q) of this Subpart, the weight of VOM per volume of each coating, or the weight of VOM per volume of solids in each coating, as applicable, as applied each day on each coating line.
- The daily-weighted average VOM content of all coatings as applied on each coating line as defined in Section 219.104 of this Part.
- On and after a date consistent with Section 219.106 of this Part, the owner or operator of a subject coating line shall notify the Agency in the following instances:
 - A) Any record showing violation of Section 219.205 of this Subpart shall be reported by sending a copy of such record to the Agency within 30 days following the occurrence of the violation.
 - B) At least 30 calendar days before changing the method of compliance with this Subpart from Section 219.205 to Section 219.204 or Section 219.207 of this Subpart, the owner or operator shall comply with all requirements of subsection (c)(1) or (i)(1) of this Section, as applicable respectively. Upon changing the method of compliance with this Subpart from Section 219.205 to Section 219.204 or Section 219.207 of this Subpart, the owner

or operator shall comply with all requirements of subsection (c), or (i) of this Section, as applicable respectively.

- e) Any owner or operator of a coating line subject to the limitations of Section 219.207 and complying by means of Section 219.207(c), (d), (e), (f), (g), (h), (k), or (l), or (n) of this Subpart shall comply with the following:
 - By a date consistent with Section 219.106 of this Part, or upon initial start-up of a new coating line, or upon changing the method of compliance for an existing coating line from Section 219.204 or Section 219.205 to Section 219.207 of this Subpart, the owner or operator of the subject coating line shall perform all tests and submit to the Agency the results of all tests and calculations necessary to demonstrate that the subject coating line will be in compliance with Section 219.207 of this Subpart on and after a date consistent with Section 219.106 of this Part, or on and after the initial start-up date.
 - 2) On and after a date consistent with Section 219.106 of this Part, or on and after the initial start-up date, the owner or operator of a subject coating line shall collect and record all of the following information each day for each coating line and maintain the information at the source for a period of three years:
 - A) The weight of VOM per volume of coating solids as applied each day on each coating line, if complying pursuant to Section 219.207(b)(2) of this Subpart.
 - B) Control device monitoring data.
 - C) A log of operating time for the capture system, control device, monitoring equipment and the associated coating line.
 - D) A maintenance log for the capture system, control device and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.
 - 3) On and after a date consistent with Section 219.106 of this Part, the owner or operator of a subject coating line shall notify the Agency in the following instances:
 - A) Any record showing violation of Section 219.207 of this Subpart shall be reported by sending a copy of such record to the Agency within 30 days following the occurrence of the violation.

- B) At least 30 calendar days before changing the method of compliance with this Subpart from Section 219.207 to Section 219.204 or Section 219.205 of this Subpart, the owner or operator shall comply with all requirements of subsection (c)(1) or (d)(1) of this Section, respectively. Upon changing the method of compliance with this Subpart from Section 219.207 to Section 219.204 or Section 219.205 of this Subpart, the owner or operator shall comply with all requirements of subsection (c) or (d) of this Section, respectively.
- f) Any owner or operator of a primer surfacer operation or topcoat operation, or combined primer surfacer and topcoat operation, subject to the limitations of Section 219.204(a)(1)(B),(2) or (a)(1)(C), (a)(2)(B), (a)(2)(C), or (a)(2)(D)(3) of this Subpart shall comply with the following:
 - By a date consistent with Section 219.106 of this Part, or upon initial startup of a new coating operation, the owner or operator of a subject coating operation shall certify to the Agency that the operation will be in compliance with Section 219.204 of this Subpart on and after a date consistent with Section 219.106 of this Part, or on and after the initial start-up date. TheSuch certification shall include:
 - A) The name and identification number of each coating operation that which will comply by means of Section 219.204(a)(1)(B),(2) and (a)(1)(C), (a)(2)(B), (a)(2)(C), or (a)(2)(D)(3) of this Subpart and the name and identification number of each coating line in each coating operation.
 - B) The name and identification number of each coating as applied on each coating line in the coating operation.
 - C) The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating line.
 - D) The transfer efficiency and control efficiency measured for each coating line.
 - E) Test reports, including raw data and calculations documenting the testing performed to measure transfer efficiency and control efficiency.
 - F) The instrument or method by which the owner or operator will accurately measure or calculate the volume of each coating as applied each day on each coating line.

- G) The method by which the owner or operator will create and maintain records each day as required in subsection (f)(2) of this Section.
- H) An example format for presenting the records required in subsection (f)(2) of this Section.
- 2) On and after a date consistent with Section 219.106 of this Part, or on and after the initial start-up date, the owner or operator of a subject coating operation shall collect and record all of the following information each day for each topcoat or primer surfacer coating operation and maintain the information at the source for a period of three years:
 - All information necessary to calculate the daily-weighted average VOM emissions from the coating operations in kg (lbs) per 1 (gal) of coating solids deposited in accordance with the proposal submitted, and approved pursuant to Section 219.204(a)(1)(B),(2) or (a)(1)(C), (a)(2)(B), (a)(2)(C), or (a)(2)(D)(3) of this Subpart including:
 - i) The name and identification number of each coating as applied on each coating operation.
 - ii) The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating operation.
 - B) If a control device or devices are used to control VOM emissions, control device monitoring data; a log of operating time for the capture system, control device, monitoring equipment and the associated coating operation; and a maintenance log for the capture system, control device and monitoring equipment, detailing all routine and non-routine maintenance performed including dates and duration of any outages.
- On and after a date consistent with Section 219.106 of this Part or on and after the initial start-up date, the owner or operator of a subject coating operation shall determine and record the daily VOM emissions in kg/1 (lbs/gal) of coating solids deposited in accordance with the proposal submitted and approved pursuant to Section 219.204(a)(1)(B), (a)(1)(C), (a)(2)(B), (a)(2)(C), or (a)(2)(D)(a)(2) or (a)(3) of this Subpart within 10 days from the end of the month and maintain this information at the source for a period of three years.

- 4) On and after a date consistent with Section 219.106 of this Part, the owner or operator of a subject coating operation shall notify the Agency in the following instances:
 - A) Any record showing a violation of Section 219.204(a)(1)(B), (a)(1)(C), (a)(2)(B), (a)(2)(C), or (a)(2)(D)(a)(2) or (a)(3) of this Subpart shall be reported by sending a copy of such record to the Agency within 15 days from the end of the month in which the violation occurred.
 - B) The owner or operator shall notify the Agency of any change to the operation at least 30 days before the change is effected. The Agency shall determine whether or not compliance testing is required. If the Agency determines that compliance testing is required, then the owner or operator shall submit a testing proposal to the Agency within 30 days and test within 30 days of the approval of the proposal by the Agency and USEPA.
- g) On and after a date consistent with Section 219.106(c) of this Part, or on and after the initial start-up date, whichever is later, the owner or operator of a coating line subject to the requirements of Section 219.218 of this Subpart shall comply with the following:
 - 1) By May 1, 2011, or upon initial start-up, whichever is later, submit a certification to the Agency that includes a description of the practices and procedures that the source will follow to ensure compliance with the applicable requirements in Section 219.218 of this Subpart;
 - 2) Notify the Agency of any violation of Section 219.218 of this Subpart by providing a description of the violation and copies of records documenting the violation to the Agency within 30 days following the occurrence of the violation; and
 - 3) Maintain at the source all records required by this subsection (g) for a minimum of three years from the date the document was created and make those records available to the Agency upon request.
- he) On and after a date consistent with Section 219.106 of this Part, or on and after the initial start-up date, whichever is later, the owner or operator of a coating line subject to the requirements of Section 219.219218 of this Subpart shall comply with the following:
 - 1) By May 1, <u>2012</u>2011, or upon initial start-up, whichever is later, submit a certification to the Agency that includes:

- <u>A</u>) <u>A</u> description of the practices and procedures that the source will follow to ensure compliance with the applicable requirements in Section 219.219219.218 of this Subpart;
- B) For sources subject to Section 219.219(a)(6), the work practices plan specified in that Section;
- C) For sources subject to Section 219.219(b)(6), the application methods used to apply coatings on the subject coating line;
- 2) Notify the Agency of any violation of Section 219.219 of this Subpart by providing a description of the violation and copies of records documenting the violation to the Agency within 30 days following the occurrence of the violation; and
- 3) Maintain at the source all records required by this subsection (he) for a minimum of three years from the date the document was created and make those records available to the Agency upon request.
- On and after a date consistent with Section 219.106(de) of this Part, or on and after the initial start-up date, whichever is later, the owner or operator of a flat wood paneling coating line subject to the requirements in Section 219.217 of this Subpart shall comply with the following:
 - 1) By August 1, 2010, or upon initial start-up, whichever is later, submit a certification to the Agency that includes a description of the practices and procedures that the source will follow to ensure compliance with the applicable requirements in Section 219.217(c) and (d) of this Subpart; and
 - 2) Notify the Agency of any violation of Section 219.217 of this Subpart by providing a description of the violation and copies of records documenting such violation to the Agency within 30 days following the occurrence of the violation.
- j) Each owner or operator of a pleasure craft surface coating operation subject to the limitations in Section 219.204(q)(5)(A) through (G) of this Subpart and complying by means of Section 219.207(m) of this Subpart shall comply with the following:
 - By a date consistent with Section 219.106 of this Part, or upon initial startup of a new pleasure craft surface coating operation, whichever is later, or upon changing the method of compliance for an existing subject coating operation from Section 219.204, 219.205, or 219.207(m) of this Subpart to Section 219.207(n) of this Subpart, the owner or operator of a subject

- coating operation shall perform all tests and calculations necessary to demonstrate that the subject coating line will be in compliance with Section 219.207(n) on and after a date consistent with Section 219.106 of this Part, or on and after the initial start-up date.
- 2) On and after a date consistent with Section 219.106 of this Part, or on and after the initial start-up date, whichever is later, the owner or operator of a subject pleasure craft coating operation shall:
 - <u>A)</u> Collect and record the following information each month:
 - <u>i)</u> The amount of each pleasure craft surface coating used in each subject coating operation;
 - <u>ii)</u> The VOM content of each pleasure craft surface coating used in each subject coating operation;
 - <u>iii)</u> Total monthly VOM emissions for all subject pleasure craft surface coating operations;
 - <u>At the end of the first 12-month averaging period, and at the end of each subsequent month, collect and record the following information:</u>
 - i) The VOM mass emission limit for all subject pleasure craft surface coating operations for the applicable 12-month averaging period, with supporting calculations;
 - <u>ii)</u> The total actual emissions of VOM from all subject pleasure craft surface coating operations for the applicable 12-month averaging period;
 - C) Notify the Agency in writing of any violation of the requirements of Section 219.207(n) within 30 days following the occurrence of the violation and provide records documenting the violation upon request by the Agency;
 - <u>Notify the Agency in writing at least 30 calendar days before changing the method of compliance with this Subpart from Section 219.207(n) to Section 219.204, 219.205, or 219.207(m). Upon changing the method of compliance, the owner or operator shall comply with all requirements set forth in subsection (c), (d), or (e) of this Section, as applicable.</u>

E) Maintain at the source all records required by this subsection (h) for a minimum of three years from the date the document was created, and provide such records to the agency upon request.

Source:	Amended at 34 Ill. Reg.	, effective

Section 219.212 Cross-Line Averaging to Establish Compliance for Coating Lines

- a) On and after March 15, 1996, any owner or operator of a coating line subject to the limitations set forth in Section 219.204 of this Subpart, except coating lines subject to the limitations in Section 219.204(a)(2), (c)(2), (g)(2), (h)(2), of (o), or (q) of this Subpart, and with coating lines in operation prior to January 1, 1991 ("pre-existing coating lines"), may, for pre-existing coating lines only, elect to comply with the requirements of this Section, rather than complying with the applicable emission limitations set forth in Section 219.204, if an operational change of the type described below has been made after January 1, 1991, to one or more pre-existing coating lines at the source. An operational change occurs when a pre-existing coating line is replaced with a line using lower VOM coating for the same purpose as the replaced line ("replacement line"). A source electing to rely on this Section to demonstrate compliance with the requirements of this Subpart shall operate pursuant to federally enforceable permit conditions approved by the Agency and USEPA.
- b) An owner or operator of pre-existing coating lines subject to a VOM content limitation in Section 219.204 of this Subpart and electing to rely on this Section to demonstrate compliance with this Subpart must establish, by use of the equations in subsection (d) of this Section, that the calculated actual daily VOM emissions from all participating coating lines, as defined in this subsection below, are less than the calculated daily allowable VOM emissions from the same group of coating lines. For any pre-existing coating line to be aggregated for the purposes of Section 219.212, 219.213, or 219.214 of this Subpart ("participating coating lines"), the source must establish that:
 - 1) All coatings applied on the participating coating line shall, at all times, have a VOM content less than or equal to the applicable VOM content limitation for such coating listed in Appendix H of this Part; and
 - On the date the source elects to rely on this Section to demonstrate compliance with this Subpart, all coatings applied on the participating coating line are not already in compliance with the VOM content limitation for such coating effective on or after March 15, 1996; or the participating coating line is a replacement line, as defined in subsection (a) of this Section with an operational change occurring on or after January 1, 1991.

- c) Notwithstanding subsection (a) of this Section, any owner or operator of a coating line subject to the limitations set forth in Section 219.204 of this Subpart and electing to rely on this Section to demonstrate compliance with this Subpart, may also include as a participating coating line, until December 31, 1999, only, any replacement line that satisfies all of the following conditions:
 - 1) The replacement line is operated as a powder coating line;
 - 2) The replacement line was added after July 1, 1988; and
 - 3) The owner or operator also includes as a participating coating line one or more coating lines that satisfy the criteria of a replacement line, as described in subsection (a) of this Section.
- d) To demonstrate compliance with this Section, a source shall establish the following:
 - 1) An alternative daily emission limitation shall be determined for all participating coating lines at the source according to subsection (d)(2) of this Section. All participating coating lines shall be factored in each day to demonstrate compliance. Provided compliance is established pursuant to the requirements in this subsection, nothing in this Section requires daily operation of each participating line. Actual daily emissions from all participating coating lines (E_d) shall never exceed the alternative daily emission limitation (A_d) and shall be calculated by use of the following equation:

$$E_d = \sum_{i=1}^n V_i C_i$$

where:

 E_d = Actual daily VOM emissions from participating coating lines in units of kg/day (lbs/day);

i = Subscript denoting a specific coating applied;

n = Total number of coatings applied by all participating coating lines at the source;

 V_i = Volume of each coating applied for the day in units of 1/day (gal/day) of coating (minus water and any compounds which are specifically exempted from the definition of VOM); and

 C_i = The VOM content of each coating as applied in units of kg

VOM/1 (lbs VOM/gal) of coating (minus water and any compounds which are specifically exempted from the definition of VOM).

2) The alternative daily emission limitation (A_d) shall be determined for all participating coating lines at the source on a daily basis as follows:

$$A_d = A_l + A_n$$

where:

 A_1 and A_p are defined in subsections (d)(2)(A) and (d)(2)(B) of this Section.

A) The portion of the alternative daily emissions limitation for coating operations at a source using non-powder coating (A_l) shall be determined for all such participating non-powder coating lines on a daily basis as follows:

$$A_{l} = \sum_{i=1}^{n} V_{i} L_{i} \frac{D_{i} - C_{i}}{D_{i} - L_{i}}$$

where:

 A_1 = The VOM emissions allowed for the day in units of kg/day (lbs/day);

i = Subscript denoting a specific coating applied;

n = Total number of coatings applied by all participating coating lines at the source;

 C_i = The VOM content of each coating as applied in units of kg VOM/1 (lbs VOM/gal) of coating (minus water and any compounds which are specifically exempted from the definition of VOM);

 D_i = The density of VOM in each coating applied. For the purposes of calculating A_i , the density is 0.882 kg VOM/1 VOM (7.36 lbs VOM/gal VOM);

V_i = Volume of each coating applied for the day in units of 1 (gal) of coating (minus water and any compounds which

are specifically exempted from the definition of VOM); and

- L_i = The VOM emission limitation for each coating applied, as specified in Section 219.204 of this Subpart, in units of kg VOM/1 (lbs VOM/gal) of coating (minus water and any compounds which are specifically exempted from the definition of VOM).
- B) The portion of the alternative daily emissions limitation for coating operations at a source using powdered coating (A_p) shall be determined for all such participating powder coating lines on a daily basis as follows:

$$A_{p} = \sum_{h=1}^{m} \sum_{j=1}^{n} \frac{V_{j} L_{j} D_{j} K_{h}}{D_{j} - L_{j}}$$

where:

A_p = The VOM emissions allowed for the day in units of kg/day (lbs/day);

h = Subscript denoting a specific powder coating line;

j = Subscript denoting a specific powder coating applied;

m = Total number of participating powder coating lines;

Total number of powder coatings applied in the participating coating lines;

 D_j = The assumed density of VOM in liquid coating, 0.882 kg VOM/1 VOM (7.36 lbs VOM/gal VOM);

 V_j = Volume of each powder coating consumed for the day in units of 1 (gal) of coating;

L_j = The VOM emission limitation for each coating applied, as specified in Section 219.204 of this Subpart, in units of kg VOM/1 (lbs VOM/gal) of coating (minus water and any compounds which are specifically exempted from the definition of VOM); and

K = A constant for each individual coating line representing the ratio of the volume of coating solids consumed on the liquid coating system which has been replaced to the volume of powder coating consumed on the replacement line to accomplish the same coating job. This value shall be determined by the source based on tests conducted and records maintained pursuant to the requirements of Section 219.213 of this Subpart demonstrating the amount of coating solids consumed as both liquid and powder. Tests methods and recordkeeping requirements shall be approved by the Agency and USEPA and contained in the source's operating permit as federally enforceable permit conditions, subject to the following restrictions:

- K cannot exceed 0.9 for non-recycled powder coating systems; or
- K cannot exceed 2.0 for recycled powder coating systems.

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Section 219.219 Work Practice Standards for Automobile and Light-Duty Truck Assembly Coatings and Miscellaneous Metal and Plastic Parts Coatings

- <u>a)</u> Every owner or operator of a coating line subject to the requirements of Section 219.204(a)(2) of this Subpart shall:
 - 1) Store all VOM-containing coatings, thinners, coating-related waste materials, cleaning materials, and used shop towels in closed containers;
 - <u>Ensure that mixing and storage containers used for VOM-containing coatings, thinners, and coating-related waste materials are kept closed at all times except when depositing or removing those materials;</u>
 - 3) Minimize spills of VOM-containing coatings, thinners, and coating-related waste materials;
 - 4) Convey VOM-containing coatings, thinners, and coating-related waste materials from one location to another in closed containers or pipes;
 - 5) Minimize VOM emissions from cleaning of storage, mixing, and conveying equipment;
 - 6) Develop and implement a work practice plan to minimize VOM emissions from cleaning and from purging of equipment associated with coating lines subject to the limitations in Section 219.204(a)(2). The plan shall

specify practices and procedures that the source will follow to ensure that VOM emissions from the operations listed in this subsection (a)(6) are minimized. If the owner or operator of the subject coating line has already implemented a work practice plan for the coating line pursuant to Subpart IIII of 40 CFR 63, incorporated by reference in Section 219.112 of this Part, the owner or operator may revise the plan as necessary to comply with this Section.

- A) Vehicle body wiping;
- B) Coating line purging;
- <u>C)</u> Flushing of coating systems;
- D) Cleaning of spray booth grates, walls, and equipment; and
- F) Cleaning of external spray booth areas.
- <u>b)</u> Except as provided in subsection (c) of this Section, every owner or operator of a coating line described in Section 219.204(q) of this Subpart shall:
 - 1) Store all VOM-containing coatings, thinners, coating-related waste materials, cleaning materials, and used shop towels in closed containers;
 - 2) Ensure that mixing and storage containers used for VOM-containing coatings, thinners, coating-related waste materials, and cleaning materials are kept closed at all times except when depositing or removing these materials;
 - 3) Minimize spills of VOM-containing coatings, thinners, coating-related waste materials, and cleaning materials;
 - 4) Convey VOM-containing coatings, thinners, coating-related waste materials, and cleaning materials from one location to another in closed containers or pipes;
 - 5) Minimize VOC emissions from cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers; and
 - <u>Apply all coatings using one or more of the following application methods:</u>
 - A) Electrostatic spray;

B) High volume low pressure (HVLP) spra

- C) Flow coating. For the purposes of this subsection (b)(6)(C), flow coating means a non-atomized technique of applying coating to a substrate with a fluid nozzle with no air supplied to the nozzle;
- D) Roll coating;
- E) Dip coating, including electrodeposition. For purposes of this subsection (b)(6)(E), electrodeposition means a water-borne dip coating process in which opposite electrical charges are applied to the substrate and the coating. The coating is attracted to the substrate due to the electrochemical potential difference that is created;
- F) Airless spray;
- <u>G</u>) <u>Air-assisted airless spray; or</u>
- <u>Another coating application method capable of achieving a transfer efficiency equal to or better than that achieved by HVLP spraying, if the method is approved in writing by the Agency.</u>
- <u>Notwithstanding subsection (b) of this Section, the application method limitations in subsection (b)(6) shall not apply to the following:</u>
 - 1) Coating lines complying with Section 219.207(k)(1);
 - <u>For metal parts and products coating operations: touch-up coatings, repair coatings, textured finishes, stencil coatings, safety-indicating coatings, solid-film lubricants, electric-insulating and thermal-conducting coatings, magnetic data storage disk coatings, and plastic extruded onto metal parts to form a coating;</u>
 - 3) For pleasure craft surface coating operations: extreme high gloss coatings;
 - 4) For plastic parts and products coating operations: airbrush operations using 18.9 liters (5 gallons) or less of coating per year.
 - <u>5)</u> <u>For ammunition sealant operations: cap sealants and mouth waterproofing sealants.</u>

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SUBPART II: FIBERGLASS BOAT MANUFACTURING MATERIALS

Section 219.890 Applicability

- a) Except as provided in subsection (b) of this Section, on and after May 1, 20122011, the requirements of this Subpart shall apply to the owners or operators of sources that manufacture hulls or decks of boats from fiberglass, or that build molds to make hulls or decks of boats from fiberglass, and that emit 6.8 kg/day (15 lbs/day) or more of VOM, calculated in accordance with Section 219.894(a)(1)(B), from open molding resin and gel coat operations, resin and gel coat mixing operations, and resin and gel coat application equipment cleaning operations, in the absence of air pollution control equipment. If a source is subject to this Subpart based upon such criteria, the limitations of this Subpart shall apply to the manufacture of all fiberglass boat parts at the source.
- b) Notwithstanding subsection (a) of this Section, the requirements of this Subpart shall not apply to the following:
 - 1) Surface coatings applied to fiberglass boats;
 - 2) Industrial adhesives used in the assembly of fiberglass boats. Polyester resin putties used to assemble fiberglass parts shall not be considered industrial adhesives for purposes of this exclusion;
 - 3) Closed molding operations.
- c) If a source is or becomes subject to one or more of the limitations in this Subpart, the source is always subject to the applicable provisions of this Subpart.
- d) The owner or operator of a source exempt from the limitations of this Subpart because of the criteria in this Section is subject to the recordkeeping and reporting requirements specified in Section 219.894(a) of this Subpart.

(Source:	Added at 34	III. Reg.	, effective	

Section 219.891 Emission Limitations and Control Requirements

a) Except as provided in subsection (f) of this Section, no owner or operator of a source subject to the requirements of this Subpart shall use a subject resin or gel coat at the source unless the resin and gel coat comply with subsection (b)(1) or (b)(2), (c), or (d) of this Section, as well as with subsections (e), (g), and (h) of this Section. For sources complying pursuant to subsection (b) or (c) of this Section, if the non-monomer VOM content of a resin or gel coat exceeds 5 percent, by weight, the excess non-monomer VOM shall be added to the

monomer VOM content of the resin or gel coat in accordance with the equation below:

$$\frac{\frac{\text{Weighted Average}}{\text{Monomer VOM}}}{\frac{\text{Content}}{\text{Content}}} \equiv \frac{\sum_{i=1}^{n} M_{i} VOM_{i}}{\sum_{i=1}^{n} M_{i}} + \frac{\sum_{i=1}^{n} M_{i} VOM_{nm} - \sum_{i=1}^{n} 0.05 * M_{i}}{\sum_{i=1}^{n} M_{i}}$$

where:

 $\underline{M_i}$ \equiv Mass of open molding resin or gel coat (i) used in the past

12 months in an operation, in megagrams.

<u>VOM</u>_i = <u>Monomer VOM content, by weight percent, of open</u>

molding resin or gel coat (i) used in the past 12 months in

an operation.

<u>i</u> = Subscript denoting a specific open molding resin or gel

coat applied.

<u>n</u> = Number of different open molding resins or gel coats used

in the past 12 months in an operation.

 $VOM_{nm} \equiv Non-monomer VOM content, by weight percent, of open$

molding resin or gel coat (i) used in the past 12 months in

an operation.

b) VOM Content Limitations

1) Except as provided in subsection (e) of this Section, the monomer VOM content of a subject resin or gel coat shall not exceed the following limitations:

Weighted average monomer VOM content (weight percent)

A) Production resin

i) Atomized spray

	<u>ii) Non-atomized</u>	<u>35</u>
<u>B)</u>	Pigmented gel coat	<u>33</u>
<u>C)</u>	Clear gel coat	<u>48</u>
<u>D)</u>	<u>Tooling resin</u>	
	i) Atomized	<u>30</u>
	ii) Non-atomized	<u>39</u>
<u>E)</u>	Tooling gel coat	<u>40</u>

2) Except as provided in subsection (e) of this Section, the weighted average monomer VOM content of a subject resin or gel coat shall not exceed the applicable limitation set forth in subsection (b)(1) of this Section on a 12-month rolling average basis. Equation 1 shall be used to determine the weighted average monomer VOM content for resin and gel coat materials.

Equation 1:

$$\frac{\text{Weighted Average}}{\text{Monomer VOM}} \equiv \frac{\sum_{i=1}^{n} M_{i} VOM_{i}}{\sum_{i=1}^{n} M_{i}}$$

where:

 $\underline{M_i}$ = Mass of open molding resin or gel coat (i) used in the past 12 months in an operation, in megagrams;

 $\frac{VOM_i}{M_i} = \frac{Monomer\ VOM\ content,\ by\ weight\ percent,\ of\ open}{Monomer\ VOM\ content,\ by\ weight\ percent,\ of\ open}{Monomer\ VOM\ content,\ by\ weight\ percent,\ of\ open}{Monomer\ vom\ percent,\ of\ open}$

<u>n</u> = Number of different open molding resins or gel coats used in the past 12 months in an operation.

<u>c)</u> Emissions Averaging Alternative. The owner or operator of a source subject to the requirements of this Subpart may elect to include some or all of the subject

resin and gel coat operations at the source in the emissions averaging alternative.

Resin and gel coat operations utilizing the emissions averaging alternative shall comply with a source-specific monomer VOM mass emission limit on a 12-month rolling average basis, calculated at the end of each calendar month. All subject resin and gel coat operations that do not utilize the emissions averaging alternative shall comply with the requirements in subsection (b) or (d) of this Section, as well as with all other applicable requirements in this Section.

1) The owner or operator of a source subject to this subsection (c) shall use Equation 2 to determine the source-specific monomer VOM mass emission limit for resin and gel coats included in the emissions average:

Equation 2:

$$\frac{\text{Monomer}}{\text{VOM Limit}} \equiv \frac{46(M_R) + 159(M_{PG}) + 291(M_{CG}) + 54(M_{TR}) + 214(M_{TG})}{46(M_R) + 159(M_{PG}) + 291(M_{CG}) + 54(M_{TR}) + 214(M_{TG})}$$

where:

 $\frac{M_{PG}}{M_{PG}} = \frac{Mass \text{ of pigmented gel coat used in the past } 12 \text{ months,}}{M_{PG}}$

Mass of pigmented gel coat used in the past 12 months. excluding any materials that are exempt, expressed in Mg;

 $\underline{\underline{M}_{CG}}$ \equiv $\underline{\underline{Mass of clear gel coat used in the past 12 months,}}$ $\underline{\underline{excluding any materials that are exempt, expressed in}}$ $\underline{\underline{Mg;}}$

The numerical coefficients associated with each term on the right hand side of Equation 2 are the allowable monomer VOM emission rates for that particular material in units of kg VOM/Mg of material used.

At the end of the first 12-month averaging period, and at the end of each subsequent month, the owner or operator of a source subject to this subsection (c) shall use Equation 3 to calculate the monomer VOM emissions from the resin and gel coat operations included in the emissions average to determine whether the emissions exceed the limitation calculated using Equation 2.

Equation 3:

$$\frac{\underline{\text{Monomer}}}{\underline{\text{VOM}}} \equiv \frac{(PV_R)(M_R) + (PV_{PG})(M_{PG}) + (PV_{CG})(M_{CG}) +}{(PV_{TR})(M_{TR}) + (PV_{TG})(M_{TG})}$$

where:

Monomer =
VOMMonomer VOM emissions calculated using the
monomer VOM emission equations for each operationEmissionsincluded in the average, expressed in kg;

<u>PV_R</u> = Weighted-average monomer VOM emission rate for production resin used in the past 12 months, expressed in kg/Mg, calculated in accordance with Equation 4 in subsection (c)(3);

 \underline{M}_{R} \equiv Mass of production resin used in the past 12 months, expressed in Mg;

<u>PV_{PG}</u> = Weighted-average monomer VOM emission rate for pigmented gel coat used in the past 12 months, expressed in kg/Mg, calculated pursuant to Equation 4;

 \underline{M}_{PG} = Mass of pigmented gel coat used in the past 12 months, expressed in Mg;

<u>PV_{CG}</u> = Weighted-average monomer VOM emission rate for clear gel coat used in the past 12 months, expressed in kg/Mg, calculated pursuant to Equation 4;

 $\underline{\underline{M}_{CG}}$ = $\underline{\underline{Mass of clear gel coat used in the past 12 months,}}$ expressed in $\underline{\underline{Mg}}$; PV_{TR} Weighted-average monomer VOM emission rate for tooling resin used in the past 12 months, expressed in

kg/Mg, calculated pursuant to Equation 4;

 M_{TR} Mass of tooling resin used in the past 12 months, Ξ expressed in Mg;

 \underline{PV}_{TG} Weighted-average monomer VOM emission rate for tooling gel coat used in the past 12 months, expressed in kg/Mg, calculated pursuant to Equation 4;

 $\underline{\mathbf{M}}_{\mathrm{TG}}$ Mass of tooling gel coat used in the past 12 months, expressed in Mg.

For purposes of Equation 3, the owner or operator of a source subject to <u>3)</u> this subsection (c) shall use Equation 4 below to calculate the weightedaverage monomer VOM emission rate for the previous 12 months for each resin and gel coat operation included in the emissions average, except as provided in subsection (e) of this Section.

Equation 4:

$$PV_{OP} = \frac{\sum_{i=1}^{n} M_{i} PV_{i}}{\sum_{i=1}^{n} M_{i}}$$

where:

PV_{OP} = Weighted-average monomer VOM emission rate for each open molding operation (PV_R, PV_{PG}, PV_{CG}, PV_{TR}, and PV_{TG}) included in the average, expressed in kg of monomer VOM per Mg of material applied;

 M_i = Mass of resin or gel coat (i) used within an operation in the past 12 months, expressed in Mg;

= Number of different open molding resins and gel coats used <u>n</u> within an operation in the past 12 months;

 $\underline{PV}_i = \underline{The monomer VOM emission}$ rate for resin or gel coat (i) used within an operation in the past 12 months, expressed in kg of monomer VOM per Mg of material applied. The monomer VOM emission rate formulas in subsection (c)(4)

of this Section shall be used to compute PV_i. If a source includes filled resins in the emissions average, the source shall use the value of PV_F, calculated using Equation 5 in subsection (e)(3) of this Section, as the value of PV_i for those resins;

- <u>i</u> = <u>Subscript denoting a specific open molding resin or gel coat applied.</u>
- 4) For purposes of Equation 4 and subsection (e)(3) of this Section, the following monomer VOM emission rate formulas shall apply:
 - A) Production resin, tooling resin:
 - i) Atomized: $0.014 \text{ x (Resin VOM\%)}^{2.425}$
 - ii) Atomized, plus vacuum bagging with roll-out: 0.01185 x (Resin VOM%)^{2.425}
 - iii) Atomized, plus vacuum bagging without roll-out: 0.00945 x (Resin VOM%)^{2.425}
 - iv) Nonatomized: 0.014 x (Resin VOM%)^{2.275}
 - v) Nonatomized, plus vacuum bagging with roll-out: 0.0110 x (Resin VOM%)^{2.275}
 - vi) Nonatomized, plus vacuum bagging without roll-out: 0.0076 x (Resin VOM%)^{2.275}
 - B) Pigmented gel coat, clear gel coat, tooling gel coat: 0.445 x (Gel Coat VOM%)^{1.675}
- d) Capture System and Control Device Requirements. No owner or operator of a source subject to the requirements of this Subpart that is utilizing a capture system and control device for a subject resin or gel coat operation shall conduct that operation unless the following requirements are satisfied:
 - An afterburner or carbon adsorber is installed and operated that meets the limitations set forth in this subsection (d). The owner or operator may use an emissions control system other than an afterburner or carbon adsorber if that device complies with all limitations in this subsection (d), the owner or operator submits a plan to the Agency detailing appropriate monitoring devices, test methods, recordkeeping requirements, and operating

- parameters for the control device, and the plan is approved by the Agency and USEPA within federally enforceable permit conditions;
- The VOM emissions at the outlet of the control device meet an emissions limitation determined using Equation 2 in subsection (c)(1) of this Section. In Equation 2, however, instead of using the mass of each material used over the past 12 months to determine the emission limitation, the owner or operator shall use the mass of each material used during the applicable control device performance test;
- 3) The owner or operator complies with all testing and monitoring requirements set forth in Section 219.892 of this Subpart.
- e) Filled Resins. For all filled production and tooling resins, the owner or operator of a source subject to this Subpart shall adjust the monomer VOM emission rates determined pursuant to subsections (b) and (c) of this SectionSection 219.891(b) and (e) of this Subpart using Equation 5 in subsection (e)(3). If complying pursuant to subsectionSection 219.891(b), the emission rate determined using Equation 5 shall not exceed the limitations set forth in subsections (e)(1) and (e)(2) of this Section. If the non-monomer VOM content of a filled resin exceeds 5 percent, by weight, based on the unfilled resin, the excess non-monomer VOM shall be added to the monomer VOM content in accordance with the equation set forth in subsectionSection 219.891(a).
 - 1) Tooling Resin: 54 kg (119.1 lbs) monomer VOM/Mg filled resin applied;
 - <u>Production Resin: 46 kg (101.4 lbs) monomer VOM/Mg filled resin</u> applied;
 - <u>3)</u> Equation 5:

$$PV_F = PV_U \times \frac{(100 - \% Filler)}{100}$$

where:

<u>PV_F</u> = The as-applied monomer VOM emission rate for the filled production resin or tooling resin, expressed in kg monomer VOM per Mg of filled material;

<u>PV_U</u> = The monomer VOM emission rate for the unfilled resin, before filler is added, calculated using the formulas in Section 219.891(b)(4) of this Subpart;

<u>% Filler</u> = <u>The weight-percent of filler in the as-applied filled resin</u>

system.

- f) The limitations in subsections (a) through (e) of this Section shall not apply to the following materials. These materials shall instead comply with the applicable requirements set forth in subsections (f)(1) through (f)(3).
 - Production resins, including skin coat resins, that must meet specifications for use in military vessels or must be approved by the United States Coast Guard for use in the construction of lifeboats, rescue boats, and other lifesaving appliances approved under 46 CFR Subchapter Q, incorporated by reference in Section 219.112 of this Part, or for use in the construction of small passenger vessels regulated by 40 CFR Subchapter T, incorporated by reference in Section 219.112 of this Part. The owner or operator of a source subject to this Subpart shall apply all such resins with nonatomizing resin application equipment;
 - 2) Production and tooling resins, and pigmented, clear, and tooling gel coats used for part or mold repair and touch ups. These materials shall not exceed 1 percent, by weight, of all resins and gel coats used at a subject source on a 12-month rolling average basis;
 - <u>Pure, 100 percent vinylester resins used for skin coats. The owner or operator of a source subject to this Subpart shall apply these resins with non-atomizing resin application equipment, and the total amount of the resins shall not exceed 5 percent, by weight, of all resins used at the subject source on a 12-month rolling-average basis.</u>
- No owner or operator of a source subject to this Subpart shall use VOMcontaining cleaning solutions to remove cured resins and gel coats from fiberglass boat manufacturing application equipment. Additionally, no owner or operator shall use VOM-containing cleaning solutions for routine cleaning of application equipment unless:
 - 1) The VOM content of the cleaning solution is less than or equal to 5 percent, by weight; or
 - 2) The composite vapor pressure of the cleaning solution is less than or equal to 0.50 mmHg at 68°F.
- No owner or operator of a source subject to this Subpart shall use resin or gel coat mixing containers with a capacity equal to or greater than 208 liters (55 gallons), including those used for on-site mixing of putties and polyputties, unless such containers have covers with no visible gaps in place at all times, except when material is being manually added to or removed from a container or when mixing or pumping equipment is being placed in or removed from a container.

(Source: Added at 34 Ill. Reg	, effective))
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Section 219.892 Testing and Monitoring Requirements

- a) Testing to demonstrate compliance with the requirements of Section 219.891 of this Subpart shall be conducted by the owner or operator within 90 days after a request by the Agency, or as otherwise specified in this Subpart. The testing shall be conducted at the expense of the owner or operator and the owner or operator shall notify the Agency in writing 30 days in advance of conducting the testing to allow the Agency to be present during testing.
- b) Testing to demonstrate compliance with the monomer VOM content limitations for resin and gel coat materials in Section 219.891(b) of this Subpart shall be conducted upon request of the Agency, or as otherwise specified in this Subpart, in accordance with SCAQMD 312-91, incorporated by reference in Section 219.112 of this Part.
- <u>C)</u> The owner or operator of a source complying with this Subpart pursuant to Section 219.891(d) shall comply with the following:
 - 1) By May 1, 20122011, or upon initial start-up, whichever is later, and upon start-up of a new control device, conduct an initial performance test of the control device in accordance with this subsection (c) that demonstrates compliance with the emission limitation determined pursuant to Section 219.891(d).
 - Subsequent to the initial performance test described in subsection (c)(1) of this Section, conduct at least one performance test per calendar year.

 Performance tests used to demonstrate compliance with Section
 219.891(d) shall be conducted at least six months apart, unless the performance test is being conducted following an exceedance of operating parameters as described in subsection (c)(3) of this Section, or per a request by the Agency.
 - Monitor and record relevant operating parameters, including the control efficiency of the control device and the amount of materials used in the fiberglass boat manufacturing process, during each control device performance test used to demonstrate compliance with Section 219.891(d). The owner or operator shall continue to operate the fiberglass boat manufacturing process within the parameters until another performance test is conducted that demonstrates compliance with Section 219.891(d). The owner or operator shall monitor the parameters at all times when the control device is in operation. If the fiberglass boat manufacturing process exceeds any operating parameter by more than 10 percent, the owner or

- operator shall conduct additional performance testing in accordance with this Section within 10 operating days after the exceedance;
- 4) The methods and procedures of Section 219.105(d) and (f) shall be used for testing to demonstrate compliance with the requirements of Section 219.891(d) of this Subpart, as follows:
 - A) To select the sampling sites, Method 1 or 1A, as appropriate, 40 CFR 60, appendix Appendix A, incorporated by reference at Section 219.112 of this Part. The sampling sites for determining efficiency in reducing VOM from the dryer exhaust shall be located between the dryer exhaust and the control device inlet, and between the outlet of the control device and the exhaust to the atmosphere;
 - B) To determine the volumetric flow rate of the exhaust stream, Method 2, 2A, 2C, or 2D, as appropriate, 40 CFR 60, appendix A, incorporated by reference at Section 219.112 of this Part;
 - <u>C)</u> To determine the VOM concentration of the exhaust stream entering and exiting the control device, Method 25 or 25A, as appropriate, 40 CFR 60, appendix Appendix A, incorporated by reference at Section 219.112 of this Part. For thermal and catalytic afterburners, Method 25 must be used except under the following circumstances, in which case Method 25A must be used:
 - i) The allowable outlet concentration of VOM from the control device is less than 50 ppmv, as carbon;
 - ii) The VOM concentration at the inlet of the control device and the required level of control result in exhaust concentrations of VOM of 50 ppmv, or less, as carbon; and
 - Due to the high efficiency of the control device, the anticipated VOM concentration at the control device exhaust is 50 ppmv or less, as carbon, regardless of inlet concentration. If the source elects to use Method 25A under this option, the exhaust VOM concentration must be 50 ppmv or less, as carbon, and the required destruction efficiency must be met for the source to have demonstrated compliance. If the Method 25A test results show that the required destruction efficiency apparently has been met, but the exhaust concentration is above 50 ppmv, as carbon, a retest is required. The retest shall be conducted using

either Method 25 or 25A. If the retest is conducted using Method 25A and the test results again show that the required destruction efficiency apparently has been met, but the exhaust concentration is above 50 ppmv, as carbon, the source must retest again using Method 25.

- D) Notwithstanding the criteria or requirements in Method 25, which specifies a minimum probe temperature of 129°C (265°F), the probe must be heated to at least the gas stream temperature of the dryer exhaust, typically close to 176.7°C (350°F); and
- E) During testing, the fiberglass boat manufacturing operation shall be operated at representative operating conditions and flow rates.
- 5) If an afterburner or carbon adsorber is used to demonstrate compliance, the owner or operator shall:
 - A) Install, calibrate, operate, and maintain temperature monitoring devices with an accuracy of 3°C or 5°F on the emissions control system in accordance with Section 219.105(d)(2) of this Part and in accordance with the manufacturer's specifications. Monitoring shall be performed at all times when the emissions control system is operating; and
 - B) Install, calibrate, operate and maintain, in accordance with manufacturer's specifications, a continuous recorder on the temperature monitoring devices, such as a strip chart, recorder or computer, with at least the same accuracy as the temperature monitor.
- 6) If an emissions control system other than an afterburner or carbon adsorber is used to demonstrate compliance, the owner or operator shall install, maintain, calibrate, and operate the monitoring equipment as set forth in the owner's or operator's plan approved by the Agency and USEPA pursuant to Section 219.891(d).
- d) Testing to demonstrate compliance with the VOM content limitations for cleaning solutions in Section 219.891(g) of this Subpart, and with the non-monomer VOM content limitations for resin and gel coat materials in Section 219.891(a) of this Subpart, shall be conducted upon request of the Agency, or as otherwise specified in this Subpart, as follows:
 - 1) The applicable test methods and procedures specified in Section 219.105(a) of this Part shall be used; provided, however, Method 24,

- incorporated by reference at Section 219.112 of this Part, shall be used to demonstrate compliance; or
- 2) For cleaning solvents, the manufacturer's specifications for VOM content may be used if the manufacturer's specifications are based on results of tests of the VOM content conducted in accordance with methods specified in Section 219.105(a) of this Part; provided, however, Method 24 shall be used to determine compliance.
- e) The owner or operator of a source subject to this Subpart and relying on the VOM content of the cleaning solution to comply with Section 219.891(g)(1) of this Subpart shall:
 - 1) For cleaning solutions that are prepared at the source with equipment that automatically mixes cleaning solvent and water (or other non-VOM):
 - A) Install, operate, maintain, and calibrate the automatic feed equipment in accordance with manufacturer's specifications to regulate the volume of each of the cleaning solvent and water (or other non-VOM), as mixed; and
 - B) Pre-set the automatic feed equipment so that the consumption rates of the cleaning solvent and water (or other non-VOM), as applied, comply with Section 219.891(g)(1);
 - 2) For cleaning solutions that are not prepared at the source with automatic feed equipment, keep records of the usage of cleaning solvent and water (or other non-VOM) as set forth in Section 219.894(g) of this Subpart.
- f) Testing to demonstrate compliance with the VOM composite partial vapor pressure limitation for cleaning solvents set forth in Section 219.891(g) of this Subpart shall be conducted in accordance with the applicable methods and procedures set forth in Section 219.110 of this Part.

(Common	Added at 34 Ill.	Dag	offostivia
(Source:	Added at 54 III.	Reg.	effective

Section 219.894 Recordkeeping and Reporting Requirements

- a) The owner or operator of a source exempt from the limitations of this Subpart because of the criteria in Section 219.890(a) of this Subpart shall:
 - 1) By May 1, 20122011, or upon initial start-up, whichever is later, submit a certification to the Agency that includes the following:

- A) A declaration that the source is exempt from the requirements in this Subpart because of the criteria in Section 219.890(a);
- B) Calculations that demonstrate that combined emissions of VOM from all subject fiberglass boat manufacturing operations (including solvents used for cleanup operations associated with the fiberglass boat manufacturing operation) at the source never equal or exceed 6.8 kg/day (15 lbs/day), in the absence of air pollution control equipment. To calculate daily emissions of VOM, the owner or operator shall determine the monthly emissions of VOM from fiberglass boat manufacturing operations at the source (including solvents used for cleanup operations associated with the fiberglass boat manufacturing operations) and divide the amount by the number of days during that calendar month that the fiberglass boat manufacturing operations were in operation;
- Notify the Agency of any record that shows that the combined emissions of VOM from subject fiberglass boat manufacturing operations at the source, including related cleaning activities, ever equal or exceed 6.8 kg/day (15 lbs/day), in the absence of air pollution control equipment, within 30 days after the event occurs, and provide copies of the record upon request by the Agency.
- b) All sources subject to the requirements of this Subpart shall:
 - 1) By May 1, 2012 2011, or upon initial start-up of the source, whichever is later, and upon start-up of a new fiberglass boat manufacturing operation at the source, submit a certification to the Agency that includes:
 - <u>A)</u> <u>Identification of each subject fiberglass boat manufacturing</u> operation as of the date of certification;
 - B) A declaration that all subject fiberglass boat manufacturing operations, including related cleaning operations, are in compliance with the requirements of this Subpart;
 - C) The limitation with which each subject fiberglass boat manufacturing operation will comply (i.e., the VOM content limitation, the emissions averaging alternative, or the emissions control system alternative);
 - D) Initial documentation that each subject fiberglass boat manufacturing operation will comply with the applicable limitation, including copies of manufacturer's specifications, test results (if any), formulation data, and calculations;

- E) Identification of the methods that will be used to demonstrate continuing compliance with the applicable limitations;
- A description of the practices and procedures that the source will follow to ensure compliance with the limitations in Section 219.891(h) of this Subpart;
- G) A description of each fiberglass boat manufacturing operation exempt pursuant to Section 219.890(b) of this Subpart, if any;
- <u>H)</u> A description of materials subject to Section 219.891(f) of this Subpart, if any, used in each fiberglass boat manufacturing operation;
- At least 30 calendar days before changing the method of compliance in accordance with Section 219.891(b), (c), and (d), notify the Agency in writing of the change. The notification shall include a demonstration of compliance with the newly applicable subsection;
- 3) Notify the Agency in writing of any violation of the requirements of this Subpart within 30 days following the occurrence of the violation and provide records documenting the violation upon request by the Agency;
- 4) Retain all records required by this Section for at least three years and make those records available to the Agency upon request.
- c) The owner or operator of a fiberglass boat manufacturing operation subject to the limitations of Section 219.891 of this Subpart and complying by means of Section 219.891(b) shall comply with the following.
 - 1) By May 1, 20122011, or upon initial start-up, whichever is later, submit a certification to the Agency that includes the name, identification number, and VOM content of each subject resin and gel coat as applied each day by each subject fiberglass boat manufacturing operation;
 - 2) Collect and record the following information each day for each fiberglass boat manufacturing operation complying with Section 219.891(b):
 - A) The name, identification number, and VOM content of each subject resin and gel coat as applied each day by each fiberglass boat manufacturing operation; and

- B) If complying with Section 219.891(b)(2), the daily weighted average VOM content of all subject resins and gel coats as applied by each subject fiberglass boat manufacturing operation.
- d) The owner or operator of a fiberglass boat manufacturing operation subject to the requirements of Section 219.891 of this Subpart and complying by means of Section 219.891(c) shall:
 - 1) On and after May 1, 2012 2011, collect and record the following information each month:
 - A) The amount of production resin, pigmented gel coat, clear gel coat, tooling resin, and tooling gel coat used in each subject fiberglass boat manufacturing operation;
 - B) The VOM content of each production resin, pigmented gel coat, clear gel coat, tooling resin, and tooling gel coat used in each subject fiberglass boat manufacturing operation;
 - <u>C)</u> Total monthly VOM emissions for all subject fiberglass boat manufacturing operations;
 - 2) At the end of the first 12-month averaging period, and at the end of each subsequent month, collect and record the following information:
 - A) The monomer VOM mass emission limit for all subject fiberglass boat manufacturing operations for the applicable 12-month averaging period, with supporting calculations;
 - B) The total actual emissions of VOM from all subject fiberglass boat manufacturing operations for the applicable 12-month averaging period.
- e) The owner or operator of a fiberglass boat manufacturing operation subject to the requirements of Section 219.891 of this Subpart and complying by means of Section 219.891(d) shall:
 - 1) By May 1, 20122011, or upon initial start-up, whichever is later, and upon start-up of a new control device, submit a certification to the Agency that includes the following:
 - A) The type of control device used to comply with the requirements of Section 219.891(d);

- B) The results of all tests and calculations necessary to demonstrate compliance with the requirements of Section 219.891(d); and
- C) A declaration that the monitoring equipment required under Section 219.892 of this Subpart has been properly installed and calibrated according to manufacturer's specifications;
- 2) Within 90 days after conducting testing pursuant to Section 219.892, submit to the Agency a copy of all test results, as well as a certification that includes the following:
 - A) A declaration that all tests and calculations necessary to demonstrate whether the fiberglass boat manufacturing operation is in compliance with Section 219.891(d) have been properly performed;
 - B) A statement whether the fiberglass boat manufacturing operations are or are not in compliance with Section 219.891(d);
 - <u>C)</u> The emissions limitation applicable during the control device performance test, with supporting calculations;
 - <u>D)</u> The operating parameters of the fiberglass boat manufacturing process during testing, as monitored in accordance with Section 219.892;
- Collect and record daily the following information for each fiberglass boat manufacturing operation subject to the requirements of Section 219.891(d), and submit that information to the Agency upon request:
 - A) Afterburner or other approved control device monitoring data in accordance with Section 219.892 of this Subpart;
 - B) A log of operating time for the control device and monitoring equipment;
 - C) A maintenance log for the control device and monitoring equipment detailing all routine and non-routine maintenance performed, including dates and duration of any outages;
 - D) Information to substantiate that the fiberglass boat manufacturing operation is operating in compliance with the parameters determined pursuant to Section 219.892.

- f) The owner or operator of a source subject to the requirements in Section 219.891(f) of this Subpart shall collect and record the following information for each fiberglass boat manufacturing operation:
 - 1) The name and identification number of each material subject to Section 219.891(f) as applied each day by each subject fiberglass boat manufacturing operation;
 - 2) If subject to Section 219.891(f)(2), the amount of production and tooling resins, and pigmented, clear, and tooling gel coats used for part or mold repair and touch-ups, used each month at the subject source, and the total amount of all resins and gel coats used each month at the subject source;
 - 3) If subject to Section 219.891(f)(3), the amount of pure, 100 percent vinylester resins used for skin coats each month at the subject source, and the total amount of all resins used each month at the subject source.
- g) The owner or operator of a source subject to the requirements of Section 219.891 of this Subpart shall collect and record the following information for each cleaning solution used in each fiberglass boat manufacturing operation:
 - 1) For each cleaning solution for which the owner or operator relies on the VOM content to demonstrate compliance with Section 219.891(g) of this Subpart and that is prepared at the source with automatic equipment:
 - A) The name and identification of each cleaning solution;
 - B) The VOM content of each cleaning solvent in the cleaning solution, as determined in accordance with Section 219.892(d) of this Subpart;
 - C) Each change to the setting of the automatic equipment, with date, time, description of changes in the cleaning solution constituents (e.g., cleaning solvents), and a description of changes to the proportion of cleaning solvent and water (or other non-VOM);
 - D) The proportion of each cleaning solvent and water (or other non-VOM) used to prepare the as-used cleaning solution;
 - E) The VOM content of the as-used cleaning solution, with supporting calculations; and
 - F) A calibration log for the automatic equipment, detailing periodic checks;

For each batch of cleaning solution for which the owner or operator relies

	on the	VOM content to demonstrate compliance with Section 219.891(g),
	and tha	at is not prepared at the source with automatic equipment:
	<u>A)</u>	The name and identification of each cleaning solution;
	<u>B)</u>	Date and time of preparation, and each subsequent modification, of the batch;
	<u>C)</u>	The VOM content of each cleaning solvent in the cleaning solution, as determined in accordance with Section 219.892(d);
	<u>D)</u>	The total amount of each cleaning solvent and water (or other non-VOM) used to prepare the as-used cleaning solution; and
	<u>E)</u>	The VOM content of the as-used cleaning solution, with supporting calculations;
<u>3)</u>	on the	ch batch of cleaning solution for which the owner or operator relies vapor pressure of the cleaning solution to demonstrate compliance ection 219.891(g):
	<u>A)</u>	The name and identification of each cleaning solution;
	<u>B)</u>	Date and time of preparation, and each subsequent modification, of the batch;
	<u>C)</u>	The molecular weight, density, and VOM composite partial vapor pressure of each cleaning solvent, as determined in accordance with Section 219.892(f) of this Subpart;
	<u>D)</u>	The total amount of each cleaning solvent used to prepare the asused cleaning solution; and
	<u>E)</u>	The VOM composite partial vapor pressure of each as-used cleaning solution, as determined in accordance with Section 219.110 of this Part.
(Source: Add	ed at 34	- Ill. Reg, effective)
SUBP	ART JJ	: MISCELLANEOUS INDUSTRIAL ADHESIVES

Section 219.900 Applicability

<u>2)</u>

- a) Except as provided in subsection (b) of this Section, on and after May 1, 20122011, the requirements of this Subpart shall apply to miscellaneous industrial adhesive application operations at sources where the total actual VOM emissions from all such operations, including related cleaning activities, equal or exceed 6.8 kg/day (15 lbs/day), calculated in accordance with Section 219.904(a)(1)(B), in the absence of air pollution control equipment.
- b) Notwithstanding subsection (a) of this Section:
 - 1) The requirements of this Subpart shall not apply to miscellaneous industrial adhesive application operations associated with the following:
 - A) Aerospace coatings;
 - B) Metal furniture coatings;
 - <u>C)</u> Large appliance coatings;
 - D) Flat wood paneling coatings;
 - E) Paper, film, and foil coatings;
 - F) <u>Lithographic printing</u>;
 - G) Letterpress printing;
 - H) Flexible package printing;
 - <u>I)</u> Coil coating;
 - J) Fabric coating;
 - K) Rubber tire manufacturing.
 - 2) The requirements of Section 219.901(b) through (e) of this Subpart shall not apply to the following:
 - A) Adhesives or adhesive primers being tested or evaluated in any research and development operation or quality assurance or analytical laboratory;
 - B) Adhesives or adhesive primers used in the assembly, repair, or manufacture of aerospace or undersea-based weapon systems;

- <u>C)</u> Adhesives or adhesive primers used in medical equipment manufacturing operations;
- <u>D</u>) <u>Cyanoacrylate adhesive application operations;</u>
- E) Aerosol adhesive and aerosol adhesive primer application operations;
- <u>F)</u> Operations using polyester bonding putties to assemble fiberglass parts at fiberglass boat manufacturing facilities and at other reinforced plastic composite manufacturing facilities;
- G) Operations using adhesives and adhesive primers that are supplied to the manufacturer in containers with a net volume of 0.47 liters (16 oz) or less, or a net weight of 0.45 kg (1 lb) or less.
- c) If a miscellaneous industrial adhesive application operation at a source is or becomes subject to one or more of the limitations in this Subpart, the miscellaneous industrial adhesive application operation is always subject to the applicable provisions of this Subpart.
- d) The owner or operator of a source exempt from the emission limitations and control requirements of this Subpart because of the criteria in subsection (a) of this Section is subject to the recordkeeping and reporting requirements specified in Section 219.904(a) of this Subpart.

(Source:	Added at 34 Ill. Reg.	, effective

Section 219.901 Emission Limitations and Control Requirements

- a) The owner or operator of a source subject to the requirements of this Subpart shall comply with the limitations in subsection (b), (c), or (d) of this Section, as well as with the limitations in subsections (e) and (f) of this Section. Notwithstanding this requirement, sources subject to Section 219.900(b)(2) shall comply with the limitations in subsection (f) of this Section only.
- b) The owner or operator of adhesive application operations listed in this subsection
 (b) shall comply with the following VOM emission limitations. If an adhesive is
 used to bond dissimilar substrates together, the substrate category with the highest
 VOM emission limitation shall apply:

kg VOM/l	lb VOM/gal
adhesive or	adhesive or
adhesive	adhesive
<u>primer</u>	<u>primer</u>
<u>applied</u>	<u>applied</u>

<u>1)</u>	Gene	ral adhesive application operations		
	<u>A)</u>	Reinforced plastic composite	0.200	(1.7)
	<u>B)</u>	Flexible vinyl	0.250	(2.1)
	<u>C)</u>	Metal	0.030	(0.3)
	<u>D)</u>	Porous material (except wood)	0.120	(1.0)
	<u>E)</u>	Rubber	0.250	(2.1)
	<u>F)</u>	Wood	0.030	(0.3)
	<u>G)</u>	Other substrates	0.250	<u>(2.1)</u>
<u>2)</u>	Speci	alty adhesive application operations		
	<u>A)</u>	Ceramic tile installation	<u>0.130</u>	(1.1)
	<u>B)</u>	Contact adhesive	0.250	(2.1)
	<u>C)</u>	Cove base installation	<u>0.150</u>	(1.3)
	<u>D)</u>	Indoor floor covering installation	<u>0.150</u>	(1.3)
	<u>E)</u>	Outdoor floor covering installation	0.250	(2.1)
	<u>F)</u>	<u>Installation of perimeter bonded sheet</u> <u>flooring</u>	0.660	(5.5)
	<u>G)</u>	Metal to urethane/rubber molding or casting	0.850	(7.1)
	<u>H)</u>	Motor vehicle adhesive	0.250	(2.1)
	<u>I)</u>	Motor vehicle weatherstrip adhesive	0.750	(6.3)
	<u>J)</u>	Multipurpose construction	0.200	<u>(1.7)</u>
	<u>K)</u>	Plastic solvent welding (acrylonitrile butadiene styrene (ABS) welding)	0.400	(3.3)
	<u>L)</u>	Plastic solvent welding (except ABS welding)	0.500	(4.2)
	<u>M)</u>	Sheet rubber lining installation	0.850	<u>(7.1)</u>

	<u>N)</u>	Single-ply roof membrane installation/repair (except ethylene propylenediene monomer (EPDM) roof membrane)	0.250	(2.1)
	<u>O)</u>	Structural glazing	0.100	(0.8)
	<u>P)</u>	Thin metal laminate	0.780	<u>(6.5)</u>
	<u>Q)</u>	<u>Tire repair</u>	0.100	(0.8)
	<u>R)</u>	Waterproof resorcinol glue	0.170	<u>(1.4)</u>
<u>3)</u>	Adhes	ive primer application operations		
	<u>A)</u>	Motor vehicle glass bonding primer	0.900	(7.5)
	<u>B)</u>	<u>Plastic solvent welding adhesive primer</u>	0.650	<u>(5.4)</u>
	<u>C)</u>	Single-ply roof membrane adhesive primer	0.250	(2.1)
	<u>D)</u>	Other adhesive primer	0.250	<u>(2.1)</u>

- No owner or operator of a source subject to this Subpart shall operate a miscellaneous industrial adhesive application operation unless the daily-weighted average VOM content of subject adhesives as applied each day by the operation, calculated in accordance with subsection (c)(1) of this Section, is less than or equal to the emissions limitation calculated in accordance with subsection (c)(2) of this Section.
 - 1) Weighted Average of VOM Content of Adhesives Applied Each Day

$$VOM_{WA} = \frac{\sum_{i=1}^{n} M_{i} VOM_{i}}{\sum_{i=1}^{n} M_{1}}$$

where:

 $\frac{VOM_{WA}}{VOM \text{ per volume in 1 (gal) of all subject adhesives as}} = \frac{VOM \text{ per volume in 1 (gal) of all subject adhesives as}}{VOM \text{ per volume in 1 (gal) of all subject adhesives as}}$

<u>i</u> = <u>Subscript denoting a specific adhesive as applied;</u>

<u>n</u> = The number of different adhesives as applied each day by each miscellaneous industrial adhesive application operation;

 $\underline{\mathbf{M}_{i}}$ = The mass of each adhesive, as applied, in units of kg/l (lb/gal):

 $\underline{VOM_i}$ = $\underline{The \ VOM \ content \ in \ units \ of \ kg \ (lbs) \ VOM \ per \ volume \ in}}$ $1 \ (gal) \ of \ each \ adhesive \ as \ applied;$

2) Mass Weighted Average VOM Limit for an Averaging Operation

$$Limit_{WA} = \frac{\sum_{i=1}^{n} M_{i} Limit_{i}}{\sum_{i=1}^{n} M_{i}}$$

where:

<u>Limit_{WA}</u> = The mass weighted average VOM limit in units of kg (lbs)

VOM per volume in 1 (gal) of all subject adhesives as applied each day in a single operation;

<u>i</u> <u>= Subscript denoting a specific adhesive as applied;</u>

<u>n</u> = The number of different adhesives as applied each day by each miscellaneous industrial adhesive application operation;

 $\underline{M_i}$ = The mass of each adhesive, as applied, in units of kg/l (lb/gal);

<u>Limit</u> = The VOM limit, taken from subsection (b) of this Section, in units of kg (lbs) VOM per volume in l (gal) of each adhesive as applied.

d) No owner or operator of a source subject to this Subpart shall operate a miscellaneous industrial adhesive application operation employing a capture system and control device unless either:

- An afterburner or carbon adsorption system is used that provides at least 85 percent reduction in the overall emissions of VOM from the application operation;
- An alternative capture and control system is used that provides at least 85 percent reduction in the overall emissions of VOM from the application operation and is approved by the Agency and USEPA within federally enforceable permit conditions. The owner or operator shall submit a plan to the Agency detailing appropriate monitoring devices, test methods, recordkeeping requirements, and operating parameters for the control device; or
- 3) The owner or operator complies with the applicable limitation set forth in subsection (b) of this Section by utilizing a combination of low-VOM adhesives and an afterburner or carbon adsorption system. The owner or operator may use an alternative capture and control system if the owner or operator submits a plan to the Agency detailing appropriate monitoring devices, test methods, recordkeeping requirements, and operating parameters for the capture and control system and the system is approved by the Agency and USEPA within federally enforceable permit conditions.
- e) The owner or operator of a source subject to this Subpart shall apply all miscellaneous industrial adhesives using one or more of the following methods:
 - 1) Electrostatic spray;
 - 2) High volume low pressure (HVLP) spray;
 - 3) Flow coating. For the purposes of this Subpart, flow coating means a non-atomized technique of applying coating to a substrate with a fluid nozzle with no air supplied to the nozzle;
 - 4) Roll coating or hand application, including non-spray application methods similar to hand or mechanically powered caulking gun, brush, or direct hand application;
 - Dip coating, including electrodeposition. For purposes of this Subpart,
 "electrodeposition" means a water-borne dip coating process in which
 opposite electrical charges are applied to the substrate and the coating.
 The coating is attracted to the substrate due to the electrochemical
 potential difference that is created;
 - 6) Airless spray;
 - 7) Air-assisted airless spray; or

- 8) Another adhesive application method capable of achieving a transfer efficiency equal to or better than that achieved by HVLP spraying, if the method is approved in writing by the Agency.
- <u>f)</u> The owner or operator of a source subject to this Subpart shall comply with the following work practices for each subject miscellaneous adhesive application operation at the source:
 - 1) Store all VOM-containing adhesives, adhesive primers, process-related waste materials, cleaning materials, and used shop towels in closed containers;
 - 2) Ensure that mixing and storage containers used for VOM-containing adhesives, adhesive primers, process-related waste materials, and cleaning materials are kept closed at all times except when depositing or removing those materials;
 - 3) Minimize spills of VOM-containing adhesives, adhesive primers, processrelated waste materials, and cleaning materials;
 - <u>4)</u> Convey VOM-containing adhesives, adhesive primers, process-related waste materials, and cleaning materials from one location to another in closed containers or pipes; and
 - 5) Minimize VOM emissions from the cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.

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Section 219.902 Testing Requirements

- a) Testing to demonstrate compliance with the requirements of this Subpart shall be conducted by the owner or operator within 90 days after a request by the Agency, or as otherwise provided in this Subpart. The testing shall be conducted at the expense of the owner or operator and the owner or operator shall notify the Agency in writing 30 days in advance of conducting the testing to allow the Agency to be present during testing.
- b) Testing to demonstrate compliance with the VOM content limitations in Section 219.901(b) of this Subpart shall be conducted as follows:

- 1) Method 24, incorporated by reference in Section 219.112 of this Part, shall be used for non-reactive adhesives. If it is demonstrated to the satisfaction of the Agency and the USEPA that plant adhesive formulation data are equivalent to Method 24 results, formulation data may be used. In the event of any inconsistency between a Method 24 test and a facility's formulation data, the Method 24 test will govern.;
- 2) Appendix A of 40 CFR 63, Subpart PPPP, incorporated by reference in Section 219.112 of this Part, shall be used for reactive adhesives;
- The manufacturer's specifications for VOM content for adhesives may be used if the specifications are based on results of tests of the VOM content conducted in accordance with methods specified in subsections (b)(1) and (b)(2) of this Section, as applicable.
- <u>For afterburners and carbon adsorbers, the methods and procedures of Section 219.105(d) through (f) of this Part shall be used for testing to demonstrate compliance with the requirements of Section 219.901(d) of this Subpart, as follows:</u>
 - 1) To select the sampling sites, Method 1 or 1A, as appropriate, 40 CFR 60, appendix Appendix A, incorporated by reference in Section 219.112 of this Part;
 - <u>To determine the volumetric flow rate of the exhaust stream, Method 2, 2A, 2C, or 2D, as appropriate, 40 CFR 60, appendix Appendix A, incorporated by reference in Section 219.112 of this Part;</u>
 - 3) To determine the VOM concentration of the exhaust stream entering and exiting the emissions control system, Method 25 or 25A, as appropriate, 40 CFR 60, appendix A, incorporated by reference in Section 219.112 of this Part. For thermal and catalytic afterburners, Method 25 must be used, except under the following circumstances, in which case Method 25A must be used:
 - <u>A)</u> The allowable outlet concentration of VOM from the emissions control system is less than 50 ppmv, as carbon;
 - B) The VOM concentration at the inlet of the emissions control system and the required level of control result in exhaust concentrations of VOM of 50 ppmv, or less, as carbon;
 - C) Due to the high efficiency of the emissions control system, the anticipated VOM concentration at the emissions control system exhaust is 50 ppmv or less, as carbon, regardless of inlet

concentration. If the source elects to use Method 25A under this option, the exhaust VOM concentration must be 50 ppmv or less, as carbon, and the required destruction efficiency must be met for the source to have demonstrated compliance. If the Method 25A test results show that the required destruction efficiency apparently has been met, but the exhaust concentration is above 50 ppmv, as carbon, a retest is required. The retest shall be conducted using either Method 25 or Method 25A. If the retest is conducted using Method 25A and the test results again show that the required destruction efficiency apparently has been met, but the exhaust concentration is above 50 ppmv, as carbon, the source must retest using Method 25;

- D) During testing, the cleaning equipment shall be operated at representative operating conditions and flow rates.
- d) An owner or operator using an emissions control system other than an afterburner or carbon adsorber shall conduct testing to demonstrate compliance with the requirements of Section 219.901(d) as set forth in the owner's or operator's plan approved by the Agency and USEPA pursuant to Section 219.901(d)(3).

(Source:	Added at 34	Ill. Reg.	, effective)
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Section 219.903 Monitoring Requirements

- <u>a)</u> <u>If an afterburner or carbon adsorber is used to demonstrate compliance, the owner or operator of a source subject to Section 219.901(d) of this Subpart shall:</u>
 - Install, calibrate, operate, and maintain temperature monitoring devices with an accuracy of 3°C or 5°F on the emissions control system in accordance with Section 219.105(d)(2) of this Part and in accordance with the manufacturer's specifications. Monitoring shall be performed at all times when the emissions control system is operating; and
 - 2) Install, calibrate, operate and maintain, in accordance with manufacturer's specifications, a continuous recorder on the temperature monitoring devices, such as a strip chart, recorder or computer, with at least the same accuracy as the temperature monitor;
- b) If an emissions control system other than an afterburner or carbon adsorber is used to demonstrate compliance, the owner or operator of a source subject to Section 219.901(d) of this Subpart shall install, maintain, calibrate, and operate the monitoring equipment as set forth in the owner's or operator's plan approved by the Agency and USEPA pursuant to Section 219.901(d)(3).

(Source:	Added at 34 Ill. Reg.	, effective

Section 219.904 Recordkeeping and Reporting Requirements

- a) The owner or operator of a source exempt from the limitations of this Subpart because of the criteria in Section 219.900(a) of this Subpart shall comply with the following:
 - 1) By May 1, 20122011, or upon initial start-up of the source, whichever is later, submit a certification to the Agency that includes:
 - A) A declaration that the source is exempt from the requirements of this Section because of the criteria in Section 219.900(a);
 - B) Calculations that demonstrate that combined emissions of VOM from miscellaneous industrial adhesive application operations at the source, including related cleaning activities, never equal or exceed 6.8 kg/day (15 lbs/day), in the absence of air pollution control equipment. To calculate daily emissions of VOM, the owner or operator shall determine the monthly emissions of VOM from miscellaneous industrial adhesive application operations at the source (including related cleaning activities) and divide this amount by the number of days during that calendar month that miscellaneous industrial adhesive application operations at the source were in operation;
 - 2) Collect and record the following information each month for each miscellaneous industrial adhesive application operation, maintain the information at the source for a period of three years, and provide the information to the Agency upon request:
 - <u>A)</u> The name and identification number of each adhesive as applied by each miscellaneous industrial adhesive application operation; and
 - B) The weight of VOM per volume and the volume of each adhesive (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each month by each miscellaneous industrial adhesive application operation;
 - Notify the Agency of any record that shows that the combined emissions of VOM from miscellaneous industrial adhesive application operations at the source, including related cleaning activities, ever equal or exceed 6.8 kg/day (15 lbs/day), in the absence of air pollution control equipment, within 30 days after the event occurs, and provide copies of those records upon request by the Agency.

- <u>b)</u> All sources subject to the requirements of this Subpart shall:
 - 1) By May 1, 20122011, or upon initial start-up of the source, whichever is later, submit a certification to the Agency that includes:
 - A) <u>Identification of each subject adhesive application operation as of the date of certification;</u>
 - B) A declaration that all subject adhesive application operations are in compliance with the requirements of this Subpart;
 - C) The limitation with which each subject adhesive application operation will comply (i.e., the VOM content limitation, the daily weighted averaging alternative, or the emissions control system alternative);
 - D) Initial documentation that each subject adhesive application operation will comply with the applicable limitation, including copies of manufacturer's specifications, test results (if any), formulation data, and calculations;
 - E) <u>Identification of the methods that will be used to demonstrate continuing compliance with the applicable limitations;</u>
 - F) A description of the practices and procedures that the source will follow to ensure compliance with the limitations in Section 219.901(f) of this Subpart;
 - G) A description of each adhesive application operation exempt pursuant to Section 219.900(b)(2) of this Subpart, if any; and
 - H) The application methods used by each subject adhesive application operation;
 - At least 30 calendar days before changing the method of compliance in accordance with Section 219.901(b), (c), and (d), notify the Agency in writing of the change. The notification shall include a demonstration of compliance with the newly applicable subsection;
 - 3) Notify the Agency in writing of any violation of the requirements of this Subpart within 30 days following the occurrence of the violation and provide records documenting the violation upon request by the Agency;

- 4) Retain all records required by this Section for at least three years and make those records available to the Agency upon request.
- <u>C)</u> The owner or operator of an adhesive application operation subject to the limitations of Section 219.901 of this Subpart and complying by means of Section 219.901(b) shall comply with the following:
 - 1) By May 1, 20122011, or upon the initial start-up date, whichever is later, submit a certification to the Agency that includes the name, identification number, and VOM content of each adhesive as applied by each subject adhesive application operation;
 - 2) Collect and record the name, identification number, and VOM content of each adhesive as applied each day by each adhesive application operation complying with Section 219.901(b).
- d) The owner or operator of an adhesive application operation subject to the limitations of Section 219.901 of this Subpart and complying by means of Section 219.901(c) shall comply with the following:
 - 1) By May 1, 20122011, or upon initial start-up, whichever is later, submit a certification to the Agency that includes the name, identification number, and VOM content of each adhesive as applied by each subject adhesive application operation;
 - 2) Collect and record the following information each day for each adhesive application operation complying by means of Section 219.901(c):
 - A) The name, identification number, and VOM content of each adhesive as applied each day by each subject adhesive application operation;
 - B) The daily weighted average VOM content of all adhesives as applied by each subject adhesive application operation.
- e) The owner or operator of an adhesive application operation subject to the requirements of Section 219.901 of this Subpart and complying by means of Section 219.901(d) shall:
 - 1) By May 1, 20122011, or upon the initial start-up date, whichever is later, and upon initial start-up of a new control device, submit a certification to the Agency that includes the following:
 - A) The type of afterburner or other approved control device used to comply with the requirements of Section 219.901(d);

- B) The results of all tests and calculations necessary to demonstrate compliance with the control requirements of Section 219.901(d); and
- C) A declaration that the monitoring equipment required under Section 219.903 of this Subpart has been properly installed and calibrated according to manufacturer's specifications;
- 2) Within 90 days after conducting testing pursuant to Section 219.902 of this Subpart, submit to the Agency a copy of all test results, as well as a certification that includes the following:
 - A) A declaration that all tests and calculations necessary to demonstrate whether the adhesive application operations are in compliance with Section 219.901(d) have been properly performed;
 - B) A statement whether the adhesive application operations are or are not in compliance with Section 219.901(d); and
 - <u>C)</u> The operating parameters of the afterburner or other approved control device during testing, as monitored in accordance with Section 219.903 of this Subpart;
- 3) Collect and record daily the following information for each adhesive application operation subject to the requirements of Section 219.901(d):
 - A) Afterburner or other approved control device monitoring data in accordance with Section 219.903 of this Subpart;
 - B) A log of operating time for the afterburner or other approved control device, monitoring equipment, and the associated application unit; and
 - C) A maintenance log for the afterburner or other approved control device and monitoring equipment detailing all routine and non-routine maintenance performed, including dates and duration of any outages.

(Source:	Added at 34 Ill. Reg.	, effective))
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I, John T. Therriault, Assistant Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above opinion and order on September 2, 2010, by a vote of 4-0.

John T. Therriault, Assistant Clerk

John T. Therranks

Illinois Pollution Control Board