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SALUS POPULI SUPREMA LEX ESTO

"The welfare of the people shall be the supreme law."



ROBIN CARNAHAN SECRETARY OF STATE

MISSOURI REGISTER

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Missouri



REGISTER

February 15, 2011 Vol. 36 No. 4 Pages 699-870

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EMERGENCY RULES	CONSTRUCTION TRANSIENT LIST
Department of Insurance, Financial Institutions and Professional Registration State Board of Nursing	DISSOLUTIONS848 SOURCE GUIDES
EXECUTIVE ORDERS705	RULE CHANGES SINCE UPDATE
PROPOSED RULES Department of Agriculture Weights and Measures	EXECUTIVE ORDERS
Department of Conservation Conservation Commission	
Air Conservation Commission	
ORDERS OF RULEMAKING	
Department of Natural Resources Division of Energy	
Department of Social Services MO HealthNet Division	
-	

Register	Register	Code	Code
Filing Deadlines	Publication Date	Publication Date	Effective Date
October 1, 2010	November 1, 2010	November 30, 2010	December 30, 2010
October 15, 2010	November 15, 2010	November 30, 2010	December 30, 2010
November 1, 2010	December 1, 2010	December 31, 2010	January 30, 2011
November 15, 2010	December 15, 2010	December 31, 2010	January 30, 2011
December 1, 2010	January 3, 2011	January 29, 2011	February 28, 2011
December 15, 2010	January 18, 2011	January 29, 2011	February 28, 2011
January 3, 2011	February 1, 2011	February 28, 2011	March 30, 2011
January 18, 2011	February 15, 2011	February 28, 2011	March 30, 2011
February 1, 2011	March 1, 2011	March 31, 2011	April 30, 2011
February 15, 2011	March 15, 2011	March 31, 2011	April 30, 2011
March 1, 2011	April 1, 2011	April 30, 2011	May 30, 2011
March 15, 2011	April 15, 2011	April 30, 2011	May 30, 2011
April 1, 2011	May 2, 2011	May 31, 2011	June 30, 2011
April 15, 2011	May 16, 2011	May 31, 2011	June 30, 2011
May 2, 2011	June 1, 2011	June 30, 2011	July 30, 2011
May 16, 2011	June 15, 2011	June 30, 2011	July 30, 2011
June 1, 2011	July 1, 2011	July 31, 2011	August 30, 2011
June 15, 2011	July 15, 2011	July 31, 2011	August 30, 2011

Documents will be accepted for filing on all regular workdays from 8:00 a.m. until 5:00 p.m. We encourage early filings to facilitate the timely publication of the Missouri Register. Orders of Rulemaking appearing in the Missouri Register will be published in the Code of State Regulations and become effective as listed in the chart above. Advance notice of large volume filings will facilitate their timely publication. We reserve the right to change the schedule due to special circumstances. Please check the latest publication to verify that no changes have been made in this schedule. To review the entire year's schedule, please check out the website at http://www.sos.mo.gov/adrules/pubsched.asp

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HOW TO CITE RULES AND RSMo

RULES—Cite material in the *Missouri Register* by volume and page number, for example, Vol. 28, *Missouri Register*, page 27. The approved short form of citation is 28 MoReg 27.

The rules are codified in the Code of State Regulations in this system—

 Title
 Code of State Regulations
 Division
 Chapter
 Rule

 1
 CSR
 10 1.
 010

 Department
 Agency, Division
 General area regulated
 Specific area regulated

They are properly cited by using the full citation, i.e., 1 CSR 10-1.010.

Each department of state government is assigned a title. Each agency or division within the department is assigned a division number. The agency then groups its rules into general subject matter areas called chapters and specific areas called rules. Within a rule, the first breakdown is called a section and is designated as (1). Subsection is (A) with further breakdown into paragraph 1., subparagraph A., part (I), subpart (a), item I. and subitem a.

ules appearing under this heading are filed under the authority granted by section 536.025, RSMo 2000. An emergency rule may be adopted by an agency if the agency finds that an immediate danger to the public health, safety, or welfare, or a compelling governmental interest requires emergency action; follows procedures best calculated to assure fairness to all interested persons and parties under the circumstances; follows procedures which comply with the protections extended by the Missouri and the United States Constitutions; limits the scope of such rule to the circumstances creating an emergency and requiring emergency procedure, and at the time of or prior to the adoption of such rule files with the secretary of state the text of the rule together with the specific facts, reasons, and findings which support its conclusion that there is an immediate danger to the public health, safety, or welfare which can be met only through the adoption of such rule and its reasons for concluding that the procedure employed is fair to all interested persons and parties under the circumstances.

ules filed as emergency rules may be effective not less than ten (10) days after filing or at such later date as may be specified in the rule and may be terminated at any time by the state agency by filing an order with the secretary of state fixing the date of such termination, which order shall be published by the secretary of state in the *Missouri Register* as soon as practicable.

Il emergency rules must state the period during which they are in effect, and in no case can they be in effect more than one hundred eighty (180) calendar days or thirty (30) legislative days, whichever period is longer. Emergency rules are not renewable, although an agency may at any time adopt an identical rule under the normal rulemaking procedures.

Title 20—DEPARTMENT OF INSURANCE, FINANCIAL INSTITUTIONS AND PROFESSIONAL REGISTRATION

Division 2200—State Board of Nursing Chapter 4—General Rules

EMERGENCY AMENDMENT

20 CSR 2200-4.010 Fees. The board is proposing to amend subsection (1)(J).

PURPOSE: The State Board of Nursing is statutorily obligated to enforce and administer the provisions of sections 335.011 to 335.355, RSMo. Pursuant to section 335.036, RSMo, the board shall by rule and regulation set the amount of fees authorized by sections 335.011 to 335.355, RSMo, so that the revenue produced is sufficient, but not excessive, to cover the cost and expense to the board for administering the provisions of sections 335.011 to 335.355, RSMo. Based on the board's five (5)-year projections, the board finds it necessary to reduce fees for the upcoming renewal periods for 2011 and 2012.

EMERGENCY STATEMENT: The State Board of Nursing is statutorily obligated to enforce and administer the provisions of sections 335.011 to 335.355, RSMo. Pursuant to section 335.036, RSMo, the board shall by rule and regulation set the amount of fees authorized by sections 335.011 to 335.355, RSMo, so that the revenue produced is sufficient, but not excessive, to cover the cost and expense to the board for administering the provisions of sections 335.011 to

335.355, RSMo. The board is proposing to decrease the registered professional nurse (RN) license renewal fee from sixty dollars (\$60) to thirty-five dollars (\$35) and the licensed practical nurse license (LPN) renewal fee from fifty-two dollars (\$52) to twenty-seven dollars (\$27) beginning January 1, 2011, and continuing through December 31, 2012. The RN license expires on April 30, 2011, and the LPN license expires on May 31, 2012. However, reinstatement of a lapsed or inactive license is not limited to a renewal period and can occur at anytime.

The renewal notices for RNs will be mailed in January 2011, and any RN or LPN wishing to reinstate their license during 2011 and 2012 will be assessed the decreased renewal fee. Without this emergency amendment, the decreased fee requirement will not be effective in time for the renewal notice and the board will collect more revenue that it is statutorily authorized to collect.

The scope of the emergency amendment is limited to the circumstances creating the emergency and complies with the protections extended in the Missouri and United States Constitutions. In developing this emergency amendment, the board has determined that the fee decrease is necessary beginning January 1, 2011, and continuing through December 31, 2012, to prevent funds from exceeding the maximum fund balance thereby resulting in a transfer from the fund to general revenue as set forth in section 331.070.2, RSMo. Pursuant to section 324.001.10, RSMo, a compelling governmental interest is deemed to exist for the purposes of section 536.025, RSMo, for licensure fees to be reduced by emergency rule, if the projected fund balance of any agency assigned to the division of professional registration is reasonably expected to exceed an amount that would require transfer from that fund to general revenue. The board believes this emergency amendment to be fair to all interested parties under the circumstances. This emergency amendment was filed January 4, 2011, becomes effective January 14, 2011, and expires July 12, 2011.

(1) The following fees are established by the State Board of Nursing: (J) Biennial Renewal Fee—

1. RN-

A. Effective January 1, 2009 \$ 60

B. Effective January 1, 2011, to December 31, 2012 \$ 40

C. Effective January 1, 2013 \$ 60

LPN—

A. Effective January 1, 2009 \$ 52

A. Effective January 1, 2009 \$ 52 B. Effective January 1, 2011, to December 31, 2012 \$ 32 C. Effective January 1, 2013 \$ 52

- 3. License renewal for a professional nurse shall be biennial; occurring on odd-numbered years and the license shall expire on April 30 of each odd-numbered year. License renewal for a practical nurse shall be biennial; occurring on even-numbered years and the license shall expire on May 31 of each even-numbered year. Renewal shall be for a twenty-four (24)-month period except in instances when renewal for a greater or lesser number of months is caused by acts or policies of the Missouri State Board of Nursing. Renewal applications (see 20 CSR 2200-4.020) shall be mailed every even-numbered year by the Missouri State Board of Nursing to all LPNs currently licensed and every odd-numbered year to all RNs currently licensed;
- 4. Renewal fees for each biennial renewal period shall be accepted by the Missouri State Board of Nursing only if accompanied by an appropriately completed renewal application[.]; and
- 5. All fees established for licensure or licensure renewal of nurses incorporate an educational surcharge in the amount of one dollar (\$1) per year for practical nurses and five dollars (\$5) per year for professional nurses. These funds are deposited in the professional and practical nursing student loan and nurse repayment fund;

AUTHORITY: sections 324.001.10 and 335.036, RSMo Supp. [2008] 2010 and section 335.046, RSMo 2000. This rule originally filed as 4 CSR 200-4.010. Emergency rule filed Aug. 13, 1981, effective Aug. 23,

1981, expired Dec. 11, 1981. Original rule filed Aug. 13, 1981, effective Nov. 12, 1981. For intervening history, please consult the Code of State Regulations. Emergency amendment filed Jan. 4, 2011, effective Jan. 14, 2011, expires July 12, 2011. A proposed amendment covering this same material is published in this issue of the Missouri Register.

February 15, 2011 Vol. 36, No. 4

Executive Orders

MISSOURI REGISTER

he Secretary of State shall publish all executive orders beginning January 1, 2003, pursuant to section 536.035.2, RSMo Supp. 2010.

EXECUTIVE ORDER 11-01

WHEREAS, the State Emergency Management Agency has advised me that severe weather has caused a natural disaster of significant proportions in Missouri; and

WHEREAS, the severe winter weather that began on December 30, 2010 has created a condition of distress and hazards to the safety and welfare of the citizens of the state of Missouri beyond the capabilities of some local jurisdictions and other established agencies; and

WHEREAS, the Missouri Department of Natural Resources is charged by law with protecting and enhancing the quality of Missouri's environment and with enforcing a variety of environmental rules and regulations; and

WHEREAS, in order to respond to the emergency and expedite the cleanup and recovery process, it is necessary to adjust certain environmental rules and regulations on a temporary and short-term basis.

NOW THEREFORE, I, JEREMIAH W. (JAY) NIXON, GOVERNOR OF THE STATE OF MISSOURI, by virtue of the authority vested in me by Chapter 44, RSMo, do hereby issue the following order:

The Director of the Missouri Department of Natural Resources is vested with full discretionary authority to temporarily waive or suspend the operation of any statutory or administrative rule or regulation currently in place under her purview in order to best serve the interests of the public health and safety during the period of the emergency and the subsequent recovery period.

This order shall terminate on January 31, 2011, unless extended in whole or in part.



IN WITNESS WHEREOF, I have hereunto set my hand and caused to be affixed the Great Seal of the State of Missouri, in the City of Jefferson, on this 4th day of January, 2011.

Jeremiah W. (Jay) Nixon Governor

ATTEST:

Robin Carnahan Secretary of State Inder this heading will appear the text of proposed rules and changes. The notice of proposed rulemaking is required to contain an explanation of any new rule or any change in an existing rule and the reasons therefor. This is set out in the Purpose section with each rule. Also required is a citation to the legal authority to make rules. This appears following the text of the rule, after the word "Authority."

ntirely new rules are printed without any special symbology under the heading of the proposed rule. If an existing rule is to be amended or rescinded, it will have a heading of proposed amendment or proposed rescission. Rules which are proposed to be amended will have new matter printed in boldface type and matter to be deleted placed in brackets.

n important function of the *Missouri Register* is to solicit and encourage public participation in the rulemaking process. The law provides that for every proposed rule, amendment, or rescission there must be a notice that anyone may comment on the proposed action. This comment may take different forms.

If an agency is required by statute to hold a public hearing before making any new rules, then a Notice of Public Hearing will appear following the text of the rule. Hearing dates must be at least thirty (30) days after publication of the notice in the *Missouri Register*. If no hearing is planned or required, the agency must give a Notice to Submit Comments. This allows anyone to file statements in support of or in opposition to the proposed action with the agency within a specified time, no less than thirty (30) days after publication of the notice in the *Missouri Register*.

n agency may hold a public hearing on a rule even though not required by law to hold one. If an agency allows comments to be received following the hearing date, the close of comments date will be used as the beginning day in the ninety (90)-day-count necessary for the filing of the order of rulemaking.

If an agency decides to hold a public hearing after planning not to, it must withdraw the earlier notice and file a new notice of proposed rulemaking and schedule a hearing for a date not less than thirty (30) days from the date of publication of the new notice.

Proposed Amendment Text Reminder: **Boldface text indicates new matter**.

[Bracketed text indicates matter being deleted.]

Title 2—DEPARTMENT OF AGRICULTURE Division 90—Weights and Measures Chapter 30—Petroleum Inspection

PROPOSED AMENDMENT

2 CSR 90-30.080 Measuring Devices. The director is amending section (12) and adding a new section (19).

PURPOSE: This amendment modifies the size specifications for diesel fuel and kerosene nozzles and adds a section establishing color coding for dispenser nozzles to reduce instances of misfueling.

(12) Size of Nozzle Spout for Dispensing Motor Fuels. Each dispensing device from which gasoline or other motor fuel that contains lead or phosphorus, **diesel fuel, or kerosene** is sold shall be equipped with a nozzle spout having a terminal end with an outside

diameter of not less than ninety-three hundredths inch (0.93") (two and three hundred sixty-two thousandths centimeters (2.362 cm)). A gasoline or other motor fuel is considered to contain lead or phosphorus if it contains more than five hundredths (0.05) grams lead per United States gallon (thirteen thousandths (0.013) grams lead per liter) or more than five thousandths (0.005) grams phosphorus per United States gallon (thirteen ten thousandths (0.0013) per liter).

- (19) Colored dispenser nozzles or nozzle covers shall be used for all products. The color convention shall apply to the following products:
- (A) Gasoline (all grades) including blends up to ten percent (10%) ethanol shall be black in color;
- (B) E85 and intermediate blends intended for use in only flexible-fuel vehicles shall be yellow in color;
- (C) Diesel fuel intended for on-highway use shall be green in color;
- (D) Diesel fuel intended for off-highway use shall be red in color; and
 - (E) Kerosene shall be blue in color.

AUTHORITY: section 414.142, RSMo Supp. [1998] 2010. This rule was previously filed as 2 CSR 90-30.020. Emergency rule filed Dec. 1, 1987, effective Jan. 1, 1988, expired March 1, 1988. Original rule filed Oct. 16, 1987, effective Feb. 11, 1988. Amended: Filed April 2, 1990, effective June 28, 1990. Amended: Filed April 14, 1994, effective Sept. 30, 1994. Amended: Filed April 8, 1999, effective Nov. 30, 1999. Amended: Filed Jan. 18, 2011.

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate.

PRIVATE COST: This proposed amendment will cost private entities thirty-eight thousand one hundred fifteen dollars (\$38,115) in the aggregate.

NOTICE TO SUBMIT COMMENTS: Anyone may file a statement in support of or in opposition to this proposed amendment with the Missouri Department of Agriculture, Weights and Measures Division, PO Box 630, Jefferson City, MO 65102-0630. To be considered, comments must be received within thirty days (30) days after publication of this notice in the Missouri Register.

FISCAL NOTE PRIVATE COST

I. Department Title: Department of Agriculture

Division Title: Weights and Measures Chapter Title: Petroleum Inspection

Rule Number and Title:	2 CSR 90-30.080 Measuring Devices
Type of Rulemaking:	Proposed Amendment

II. SUMMARY OF FISCAL IMPACT

Estimate of the number of entities by class which would likely be affected by the adoption of the rule:	Classification by types of the business entities which would likely be affected:	Estimate in the aggregate as to the cost of compliance with the rule by the affected entities:
4,000	Retail filling stations	\$38,115

III. WORKSHEET

The majority of dispenser nozzles currently comply with the proposed rule. The projected conformance rate for each product type is:

- Ninety percent of the 3,000 on-highway diesel nozzles
- Ninety-eight of the 28,000 gasoline nozzles
- One hundred percent of the 300 E85 nozzles
- Five percent of the kerosene nozzles; and
- · Five percent of the 400 off-highway diesel nozzles

The estimated cost for the remaining non-conforming nozzles is a sum of \$38,115 (4,235 nozzles at \$9/nozzle).

IV. ASSUMPTIONS

Based upon the numbers above, the Department of Agriculture estimates there are approximately 4,235 nozzles that do not comply with the requirements of this proposed amendment. However, some cost would be offset by reducing the number of consumer claims against facility owners related to misfueling.

The cost of replacement is \$9.00 per nozzle.

Title 2—DEPARTMENT OF AGRICULTURE Division 90—Weights and Measures Chapter 30—Petroleum Inspection

PROPOSED RULE

2 CSR 90-30.086 Financial Responsibility for Aboveground Storage Tank Owners and Operators

PURPOSE: This rule establishes allowable mechanisms for owners and operators of regulated aboveground storage tanks to demonstrate financial responsibility for releases of products from those tanks as required by section 414.036, RSMo.

(1) Applicability.

- (A) Except as outlined in paragraphs 1. and 2. of this subsection, this rule applies to the legal owner and operator of an aboveground storage tank, defined as any one (1) or a combination of tanks, including pipes connected thereto, used to contain an accumulation of petroleum and the volume of which, including the volume of the aboveground pipes connected thereto, is ninety percent (90%) or more above the surface of the ground, which is utilized for the sale of products regulated by Chapter 414, RSMo.
 - 1. This rule does not apply to—
- A. The owner or operator of an aboveground storage tank at a refinery, pipeline terminal, rail terminal, or marine terminal;
- B. The owner or operator of an aboveground storage tank used for storing heating oil for consumptive use on the premises where stored; or
- C. The owner or operator of an aboveground storage tank situated in an underground area, such as a basement, cellar, mineworking, drift, shaft, or tunnel, if the storage tank is situated upon or above the surface of the floor.
- 2. Aboveground storage tanks which meet the following criteria are deferred from complying with this rule as long as the owner of such tank(s) complies with all other applicable requirements of 2 CSR 90-30:
 - A. The tanks are in use at a single location;
- B. The tank(s), piping, and dispensing equipment are above-ground and totally contained in a liquid-tight metal, concrete, or synthetic containment:
- C. The aggregate capacity of the tank(s) located in the secondary containment is two thousand (2,000) gallons or less.
- (B) Owners and operators of aboveground storage tanks which are in operation on or after January 1, 2011, are subject to this rule.
- (C) If the owner and operator of an aboveground storage tank are separate persons, only one (1) person is required to demonstrate financial responsibility; however, both parties are liable in the event of noncompliance.
- (2) Amount and Scope of Required Financial Responsibility.
- (A) The owner or operator of an aboveground storage tank (AST) shall demonstrate financial responsibility for taking corrective action and for compensating third parties for bodily injury and/or property damage caused by sudden and non-sudden accidental releases arising from the operation of the AST in at least the following amounts:
 - 1. One (1) million dollars per occurrence; and
 - 2. Two (2) million dollars annual aggregate.
- (B) This rule shall not serve to limit the liability of the owner or operator.

(3) Allowable Mechanisms.

(A) An owner or operator may use any one (1) or a combination of the following mechanisms to meet the requirements of this rule,

provided that the total scope and amounts meet the requirements of this rule:

- 1. Self-insurance, subject to the requirements on subsection (B) of this section;
 - 2. The Missouri Petroleum Storage Tank Insurance Fund;
- 3. An insurance policy issued by a commercial insurance company or a risk retention group, subject to the requirements in subsection (C) of this section.
- (B) Requirements for Self-Insurance—An owner or operator must have a tangible net worth of at least ten (10) million dollars, per audited year-end financial statements for the latest completed fiscal year or per financial statements filed with the U.S. Securities and Exchange Commission for the latest completed fiscal year.
- (C) Requirements for Insurance or Risk Retention Group Coverage.
- 1. An owner or operator may satisfy the financial responsibility requirements of this rule by obtaining liability insurance from a qualified insurer or risk retention group. This insurance may be in the form of a separate insurance policy or an endorsement to an existing insurance policy.
- 2. The endorsement or policy must provide coverage for claims otherwise covered by the policy that are reported to the insurer or risk retention group within six (6) months of the effective date of cancellation or non-renewal of the policy except where the new or renewed policy has the same retroactive date or retroactive date earlier than that of the prior policy and which arise out of any covered occurrence that commenced after the policy retroactive date, if applicable and prior to such policy renewal or termination date.
- 3. The endorsement or policy shall be issued by an insurer or risk retention group that, at a minimum, is licensed to transact the business of insurance or eligible to provide insurance as an excess or surplus lines insurer in this state.
- (4) Cancellation or Nonrenewal by a Provider of Financial Assurance.
- (A) Except as otherwise provided, a provider of financial assurance may cancel or fail to renew an assurance mechanism by sending a notice of termination by certified mail to the owner or operator. Notice of termination shall comply with the following requirement:
- 1. Termination of insurance or risk retention group coverage, except for nonpayment or misrepresentation by the insured, shall not occur until sixty (60) days after the date on which the notice is mailed. Termination for nonpayment of premium or misrepresentation by the insured may not occur until a minimum of ten (10) days after the date on which the notice of termination is mailed.
- (B) If a provider of financial responsibility cancels or fails to renew for reasons other than incapacity of the provider, the owner or operator shall obtain alternate coverage within sixty (60) days after the date coverage cancels or does not renew. If the owner or operator fails to obtain alternate coverage within sixty (60) days, the owner or operator shall immediately notify the director of the Department of Agriculture by mail of the cancellation of coverage and shall submit—
- $1. \ \mbox{The name}$ and address of the provider of financial assurance; and
 - 2. The effective date of termination.

(5) Reporting and Enforcement.

- (A) Upon request, an owner or operator shall submit one (1) or more documents demonstrating compliance with this rule to the director of the Department of Agriculture.
- (B) If an owner or operator fails to comply with this rule or fails to provide documents to the director demonstrating compliance, the

director may, at his sole discretion take enforcement action in accordance with section 414.152, RSMo.

AUTHORITY: section 414.036, RSMo Supp. 2010. Original rule filed Jan. 18, 2011.

PUBLIC COST: This proposed rule will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate.

PRIVATE COST: This proposed rule will not cost private entities more than five hundred dollars (\$500) in the aggregate.

NOTICE TO SUBMIT COMMENTS: Anyone may file a statement in support of or in opposition to this proposed rule with the Missouri Department of Agriculture, Weights and Measures Division, PO Box 630, Jefferson City, MO 65102-0630. To be considered, comments must be received within thirty (30) days after publication of this notice in the Missouri Register.

Title 3—DEPARTMENT OF CONSERVATION Division 10—Conservation Commission Chapter 4—Wildlife Code: General Provisions

PROPOSED AMENDMENT

3 CSR 10-4.135 Transportation. The commission proposes to amend section (2) of this rule.

PURPOSE: This amendment removes the reference to fur handlers which will no longer be relevant with the elimination of the Resident Fur Handlers Permit.

(2) In addition to personal transportation, legally possessed commercial fish, frogs, deer hides, squirrel and rabbit pelts, and furbearer pelts and carcasses may be shipped by mail, express and freight, when truly labeled with the names and addresses of shipper and addressee, shipper's permit number, or Telecheck confirmation number, as required, and the contents of each package. Wildlife breeders, taxidermists, fur dealers, and tanners[, and fur handlers] may ship according to regulations specifically provided for such permittees. Wildlife shall not be accepted for shipment unless the shipper shall have complied with the provisions of this rule.

AUTHORITY: sections 40 and 45 of Art. IV, Mo. Const. and section 252.240, RSMo 2000. Original rule filed Aug. 14, 1970, effective Dec. 31, 1970. For intervening history, please consult the Code of State Regulations. Amended: Filed Jan. 4, 2011.

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate.

PRIVATE COST: This proposed amendment will not cost private entities more than five hundred dollars (\$500) in the aggregate.

NOTICE TO SUBMIT COMMENTS: Anyone may file a statement in support of or in opposition to this proposed amendment with Tom A. Draper, Deputy Director, Department of Conservation, PO Box 180, Jefferson City, MO 65102-0180. To be considered, comments must be received within thirty (30) days after publication of this notice in the Missouri Register. No public hearing is scheduled.

Title 3—DEPARTMENT OF CONSERVATION Division 10—Conservation Commission Chapter 5—Wildlife Code: Permits

PROPOSED AMENDMENT

3 CSR 10-5.215 Permits and Privileges: How Obtained; Not Transferable. The commission proposes to amend section (5) of this rule.

PURPOSE: This amendment removes reference to the Resident Fur Handlers Permit and clarifies methods of obtaining permits, restrictions on use, obligations, and validity taking into consideration the availability of ePermits.

(5) Permits are nontransferable and are valid from date of purchase through the last day of February of the prescribed permit year; except the Migratory Bird Hunting Permit, the Resident Trapping Permit, [the Resident Fur Handler Permit,] and the Nonresident Furbearer Hunting and Trapping Permit shall be valid through June 30. Except as provided for permits purchased by telephone [or through the Internet], no affidavit, receipt, or other document may be issued or used in lieu of the required permit. Temporary permit authorization number(s) allowing immediate use of permit privileges may be provided for permits (except deer and turkey permits) purchased through the department's authorized telephone [or Internet] sales service provider. The temporary permit authorization number(s) and picture identification must be carried at all times while hunting, fishing, or trapping until the actual permit(s) is received. Any permit issued or obtained by false statement or through fraud, or while privileges are revoked or denied by the commission, shall be invalid.

AUTHORITY: sections 40 and 45 of Art. IV, Mo. Const. and section 252.240, RSMo 2000. Original rule filed July 22, 1974, effective Dec. 31, 1974. For intervening history, please consult the Code of State Regulations. Amended: Filed Jan. 4, 2011.

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate.

PRIVATE COST: This proposed amendment will not cost private entities more than five hundred dollars (\$500) in the aggregate.

NOTICE TO SUBMIT COMMENTS: Anyone may file a statement in support of or in opposition to this proposed amendment with Tom A. Draper, Deputy Director, Department of Conservation, PO Box 180, Jefferson City, MO 65102-0180. To be considered, comments must be received within thirty (30) days after publication of this notice in the Missouri Register. No public hearing is scheduled.

Title 3—DEPARTMENT OF CONSERVATION
Division 10—Conservation Commission
Chapter 7—Wildlife Code: Hunting: Seasons, Methods,
Limits

PROPOSED AMENDMENT

3 CSR 10-7.450 Furbearers: Hunting Seasons, Methods. The commission proposes to amend sections (1) and (2) of this rule.

PURPOSE: This amendment allows possession, transportation, and sale of furs throughout the year if the taker holds a permit that includes small game hunting privileges. In addition, it corrects an error in the code for the registration or tagging deadline for bobcats.

- (1) Badger, bobcat, gray fox, opossum, raccoon, red fox, and striped skunk may be taken in any numbers by hunting from November 15 through January 31. Pelts of furbearers may be possessed, transported, consigned for processing, and sold only by the taker [from November 15 through February 15, (except as provided in 3 CSR 10-10.711)] with a valid permit throughout the year, except that bobcats or their pelts shall be delivered by the taker to an agent of the department for registration or tagging before selling, transferring, tanning, or mounting, but not later than [February 15] April 10. Furbearers may be purchased and sold only under provisions of this rule, Chapter 10, and 3 CSR 10-4.135. No person shall accept payment for furbearers taken by another.
- (2) Tagged bobcats or their pelts may be possessed by the taker throughout the year[,] and may be sold only to a licensed taxidermist, tanner, or fur dealer as provided in Chapter 10. It shall be illegal to purchase or sell untagged bobcats or their pelts. [Other pelts may be delivered or shipped and consigned by the taker to a licensed taxidermist or tanner before the close of the possession season for pelts. These pelts must be recorded by the taxidermist or tanner and shall not enter the raw fur market.] After tanning, pelts may be possessed, bought, or sold without permit. Skinned carcasses of legally taken furbearers may be sold by the taker throughout the year.

AUTHORITY: sections 40 and 45 of Art. IV, Mo. Const. and section 252.240, RSMo 2000. Original rule filed Aug. 16, 1972, effective Dec. 31, 1972. For intervening history, please consult the Code of State Regulations. Amended: Filed Jan. 4, 2011.

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate.

PRIVATE COST: This proposed amendment will not cost private entities more than five hundred dollars (\$500) in the aggregate.

NOTICE TO SUBMIT COMMENTS: Anyone may file a statement in support of or in opposition to this proposed amendment with Tom A. Draper, Deputy Director, Department of Conservation, PO Box 180, Jefferson City, MO 65102-0180. To be considered, comments must be received within thirty (30) days after publication of this notice in the Missouri Register. No public hearing is scheduled.

Title 3—DEPARTMENT OF CONSERVATION Division 10—Conservation Commission Chapter 8—Wildlife Code: Trapping: Seasons, Methods

PROPOSED AMENDMENT

3 CSR 10-8.515 Furbearers: Trapping Seasons. The commission proposes to amend section (2) of this rule.

PURPOSE: This amendment allows possession, transportation, and sale of furs throughout the year.

(2) [Except as provided in 3 CSR 10-10.711, p]Pelts of furbearers may be possessed, transported, consigned for processing, and sold only by the taker [from November 15 through February 15, pelts of beaver, otters, muskrats, and nutria may be possessed, transported, consigned for processing, and sold by the taker from November 15 through April 10, and tagged bobcats and otters or their pelts may be possessed and sold throughout the year] with a valid permit throughout the year. Bobcats and otters or their pelts shall be delivered by the taker to an agent of the department for registration or tagging. Bobcats and

otters shall be registered or tagged before selling, transferring, tanning, or mounting not later than April 10. It shall be illegal to purchase or sell untagged bobcats and otters or their pelts. [Other pelts may be delivered or shipped and consigned by the taker to a licensed taxidermist or tanner before the close of the possession season for pelts. These pelts must be recorded by the taxidermist or tanner and shall not enter the raw fur market.] After tanning, pelts may be possessed, bought, or sold without permit. Skinned carcasses of legally taken furbearers may be sold by the taker throughout the year. (Certain Department of Health and Senior Services' rules also govern how furbearer carcasses might be utilized.)

AUTHORITY: sections 40 and 45 of Art. IV, Mo. Const. and section 252.240, RSMo 2000. Original rule filed July 23, 1974, effective Dec. 31, 1974. For intervening history, please consult the Code of State Regulations. Amended: Filed Jan. 4, 2011.

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate.

PRIVATE COST: This proposed amendment will not cost private entities more than five hundred dollars (\$500) in the aggregate.

NOTICE TO SUBMIT COMMENTS: Anyone may file a statement in support of or in opposition to this proposed amendment with Tom A. Draper, Deputy Director, Department of Conservation, PO Box 180, Jefferson City, MO 65102-0180. To be considered, comments must be received within thirty (30) days after publication of this notice in the Missouri Register. No public hearing is scheduled.

Title 3—DEPARTMENT OF CONSERVATION Division 10—Conservation Commission Chapter 10—Wildlife Code: Commercial Permits: Seasons, Methods, Limits

PROPOSED RESCISSION

3 CSR 10-10.711 Resident Fur Handlers Permit. This rule established a new permit that provides for an extended possession period for hunters and trappers to hold and process raw furs intended for shipment to established fur auction sites or to licensed fur dealers through June 1.

PURPOSE: This rule is being rescinded as the requirement for the Resident Fur Handlers Permit is no longer needed.

AUTHORITY: sections 40 and 45 of Art. IV, Mo. Const. and section 252.240, RSMo 2000. Original rule filed Oct. 13, 2005, effective March 30, 2006. Amended: Filed Sept. 27, 2007, effective Feb. 29, 2008. Rescinded: Filed Jan. 4, 2011.

PUBLIC COST: This proposed rescission will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate.

PRIVATE COST: This proposed rescission will not cost private entities more than five hundred dollars (\$500) in the aggregate.

NOTICE TO SUBMIT COMMENTS: Anyone may file a statement in support of or in opposition to this proposed rescission with Tom A. Draper, Deputy Director, Department of Conservation, PO Box 180, Jefferson City, MO 65102-0180. To be considered, comments must be

received within thirty (30) days after publication of this notice in the **Missouri Register**. No public hearing is scheduled.

Title 3—DEPARTMENT OF CONSERVATION
Division 10—Conservation Commission
Chapter 10—Wildlife Code: Commercial Permits:
Seasons, Methods, Limits

PROPOSED RESCISSION

3 CSR 10-10.716 Resident Fur Handlers: Reports, Requirements. This rule established the requirements and reporting procedures required by the holder of the Resident Fur Handlers Permit.

PURPOSE: This rule is being rescinded as the requirement for the Resident Fur Handlers Permits is being rescinded and the reports and requirements are no longer needed.

AUTHORITY: sections 40 and 45 of Art. IV, Mo. Const. Original rule filed Oct. 13, 2005, effective March 30, 2006. Amended: Filed Oct. 10, 2008, effective April 30, 2009. Rescinded: Filed Jan. 4, 2011.

PUBLIC COST: This proposed rescission will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate.

PRIVATE COST: This proposed rescission will not cost private entities more than five hundred dollars (\$500) in the aggregate.

NOTICE TO SUBMIT COMMENTS: Anyone may file a statement in support of or in opposition to this proposed rescission with Tom A. Draper, Deputy Director, Department of Conservation, PO Box 180, Jefferson City, MO 65102-0180. To be considered, comments must be received within thirty (30) days after publication of this notice in the Missouri Register. No public hearing is scheduled.

Due to extreme weather conditions, the public hearing for rules 10 CSR 10-5.330, 10 CSR 10-5.340, 10 CSR 10-5.442, 10 CSR 10-5.455, 10 CSR 10-6.020, 10 CSR 10-6.060, 10 CSR 10-6.065, and 10 CSR 10-6.200, scheduled for February 3, 2011, had to be canceled and rescheduled. This also resulted in an extension of the end of the public comment period. These rules are being republished in the *Missouri Register* to give adequate notice for the new public hearing date and end of public comment.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 10—Air Conservation Commission
Chapter 5—Air Quality Standards and Air Pollution
Control Rules Specific to the St. Louis Metropolitan
Area

PROPOSED AMENDMENT

10 CSR 10-5.330 Control of Emissions From Industrial Surface Coating Operations. The commission proposes to amend the rule purpose; amend section (1); delete current sections (3), (4), and (5); add new sections (3), (4), and (5); and delete sections (6) and (7). If the commission adopts this rule action, it will be the department's intention to submit this rule amendment to the U.S. Environmental Protection Agency to replace the current rule that is in the Missouri State Implementation Plan. The evidence supporting the need for this proposed rulemaking is available for viewing at the Missouri Department of Natural Resources' Air Pollution Control Program at

the address listed in the Notice of Public Hearing at the end of this rule. More information concerning this rulemaking can be found at the Missouri Department of Natural Resources' Environmental Regulatory Agenda website, www.dnr.mo.gov/regs/index.html.

PURPOSE: This rule restricts the emissions of volatile organic compounds from industrial surface coating operations. This amendment will exempt facilities that are regulated under other rules that limit emissions of volatile organic compounds and will incorporate changes in Reasonably Available Control Technology (RACT) for surface coating operations to be consistent with the current federal RACT guidance documents. The evidence supporting the need for this proposed rulemaking, per section 536.016, RSMo, is the U.S. Environmental Protection Agency 2006–2008 Control Techniques Guidelines for surface coating operations, a petition from The Boeing Company to amend the rule, and Clean Air Act section 182(b)(2).

PURPOSE: This rule restricts the emissions of volatile organic compounds from industrial surface coating operations.

- (1) Applicability.
- (A) This rule shall apply throughout St. Louis City and Jefferson, St. Charles, Franklin, and St. Louis Counties.
- (B) This rule shall apply to any installation with actual emissions of greater than [two and one-half (2 1/2)] three (3) tons in any calendar year [after December 1, 1989,] of volatile organic compounds (VOCs) from surface coating operations, including related cleaning activities, covered under this rule. [This includes any installation which does not have an allowable VOC emission limit established under 10 CSR 10-6.060 or legally enforceable state implementation plan revision, which has actual VOC emissions of greater than two and one-half (2 1/2) tons in any calendar year after December 1, 1989. Once a source is determined to exceed the applicability level of this rule, it shall remain subject to this rule even if its actual emissions drop below the applicability level.] The installation shall not consider the effects of controls when calculating the applicable level of three (3) tons of actual VOC emissions.
- (C) This rule is [not applicable to the surface coating of the following metal parts and products:] only applicable to the surface coating of manufactured items intended for distribution in commerce to persons other than the person or legal entity performing the surface coating.
 - [1. Automobile refinishing;
- 2. Customizing top coating of automobiles and trucks, if production is less than thirty-five (35) vehicles per day; and 3. Exterior of marine vessels.]
 - (D) Exemptions. This rule is not applicable to the following:
 - 1. Motor vehicle refinishing;
- 2. Customizing top coating of motor vehicles, if production is less than thirty-five (35) vehicles per day;
- 3. Surface coating of the exterior of marine vessels except for pleasure craft;
- 4. Surface coating that is part of janitorial, building, and installation maintenance operations;
- 5. Research and development, performance testing, and quality control of coatings and surface coated products;
 - 6. Aerosol coatings:
- 7. Field application of architectural coatings to buildings, building components, and stationary structures;
 - 8. Powder coatings;
- 9. Surface coating and cleaning of aerospace vehicles or components at an aerospace manufacture or rework installation that—
- A. Is subject to the requirements and/or aerospace-specific exemptions of 10 CSR 10-5.295; or

- B. Is not subject to 10 CSR 10-5.295 because the installation's potential to emit volatile organic compounds from aerospace surface coating and cleaning is twenty-five (25) tons per year or less;
- 10. Surface coating and cleaning of wood furniture or wood furniture components at a wood furniture manufacturing installation that—
- A. Is subject to the requirements and/or wood furniturespecific exemptions of 10 CSR 10-5.530; or
- B. Is not subject to 10 CSR 10-5.530 because the installation's potential to emit volatile organic compounds from wood furniture coating and cleaning is less than twenty-five (25) tons per year;
- 11. Surface coating and cleaning operations that are subject to a Reasonably Available Control Technology determination under 10 CSR 10-5.520;
- 12. Application and storage of traffic coatings that are subject to the requirements of 10 CSR 10-5.450;
- 13. Printing operations that are subject to the requirements of 10 CSR 10-5,340 or 10 CSR 10-5,442;
- 14. Surface coating and cleaning of articles used for internal company operations, including, but not limited to, work stands; scaffolding; jigs; tooling; dollies; tow bars; aircraft ground support equipment; portable equipment used for maintenance, testing, fabrication, or repair; toolboxes; storage bins; shelving; and other manufacturing or warehouse support items;
- 15. Surface coating operations which do not have a VOC limit in section (3) of this rule;
- 16. Adhesives and sealants that contain less than 0.17 pounds of VOC per gallon of coating (less water and exempt compounds) as applied;
 - 17. Cyanoacrylate adhesives;
- 18. Adhesives, sealants, adhesive primers, and sealant primers that are supplied by the manufacturer or supplier in containers with a net volume of sixteen (16) fluid ounces or less, or a net weight of one (1) pound or less, except plastic cement welding adhesives and contact adhesives;
- 19. Contact adhesives that are supplied by the manufacturer or supplier in containers with a net volume of one (1) gallon or less; and
- 20. Adhesives, sealants, adhesive primers, sealant primers, surface preparation, and cleanup solvents that are used in the following operations:
- A. Tire repair operations, provided the adhesive is labeled for tire repair only;
- B. Assembly, repair, and manufacture of aerospace or undersea-based weapon systems;
- C. Solvent welding operations used in the manufacture of medical devices or in the manufacture of medical equipment; and
- D. Plaque laminating operations in which adhesives are used to bond clear, polyester acetate laminate to wood with lamination equipment installed prior to July 1, 1992.
- (E) Once an installation exceeds the applicability level of this rule, it shall remain subject to this rule until it can demonstrate, to the satisfaction of the director, that the actual total VOC emissions from surface coating operations, including related cleaning activities, is below three (3) tons per year for five (5) consecutive calendar years.
- [(3) General Provisions. No person shall emit to the atmosphere any VOC from any surface coating operation in excess of the amount allowed in section (4). A surface coating operation includes an application area(s), flashoff area(s), oven(s) and any other functional area needed to complete a coating.
- (4) Tables of Emission Limitations and Dates of Compliance. (A) Table A: VOC Emission Limits Based on Solids Applied.

	Emission Limit Ibs.	
Operations	VOC/gal.	Dates of
Surface Coating	Solids Applied	Compliance
Auto/light duty truck Topcoat	15.1	12/1/89
Spray Prime or Primer Surfacer	15.1	12/1/89

(B) Table B: VOC Emission Limits Based on Weight of VOC per Gallon of Coating (minus water and non-VOC organic compounds).

	Emission Limit Ibs. VOC/gal. Coating (less	
	water & non-VOC	Dates of
Surface Coatings	organic	Compliance
Operations	compounds)	(See Note)
Large Appliance		
Topcoat	2.8	12/31/81
Final Repair	6.5	12/31/81
Magnet Wire	1.7	12/31/81
Metal Furniture	3.0	12/31/81
Auto/Light Duty Truck		
Chrysler Motor Co. (Ca	r)	
Prime-Electrocoat	1.2	12/31/85
Spray Prime	4.2	12/31/79
	3.4	12/31/83
	2.8	12/31/85
Topcoat	3.9	12/31/79
•	3.0	12/31/84
	2.5	12/31/85
Final Repair	4.8	12/31/81
Miscellaneous Metal F Extreme Performanc and Air Dried		
Coatings	3.5	12/31/82
All Other Coatings	3.0	12/31/82
Chrysler Motor Co. (Truck)	3.0	12/31/62
Prime-Electrocoat	1.2	12/31/84
Spray Prime	4.4	12/31/79
-,,	3.4	12/31/82
	2.8	12/31/84
Topcoat	3.9	12/31/79
•	2.5	12/31/84
Final Repair	4.8	12/31/84
Miscellaneous Metal Po Extreme Performanc and Air Dried	arts	, _ , , , .
Coatings	3.5	12/31/82
All Other Coatings	3.0	12/31/82
Ford Motor Company		
Prime-Electrocoat	1.2	12/31/82
Spray Prime	3.2	12/31/83
Topcoat	3.6	12/31/84
Final Repair	4.8	12/31/84
Miscellaneous Metal I Extreme Performanc and Air Dried		
Coatings	3.5	12/31/82
All Other Coatings	3.0	12/31/82
General Motors Compa		
Cathodic Electrocoat	1.2	12/31/82
Primer Surfacer	3.0	12/31/82
	2.8	12/31/84

5.8	12/31/79
5.0	12/31/81
2.8	12/31/84
6.5	7/1/79
4.8	12/31/84
3.5	12/31/82
3.0	12/31/82
2.9	12/31/81
3.8	12/31/81
2.9	12/31/81
2.6	12/31/81
	, ,
4.0	12/31/82
2.8	12/31/85
	, - ,
4.2	12/31/82
4.2	12/31/82
5.5	12/31/82
4.2	12/31/82
3.7	12/31/85
	-, -, -,
3.5	12/31/82
	-, -, -, -
4.3	12/31/82
	, - , -
3.5	12/31/82
3.0	12/31/82
3.5	4/11/84
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3.5	4/11/85
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	3.5 4.8 3.5 3.0 2.9 3.8 2.9 2.6 4.0 2.8 4.2 4.2 5.5 4.2 3.7 3.5 3.5 3.0 3.5

Note: The emission limit associated with the latest compliance date for each surface coating process supersedes interim emission limits associated with earlier compliance dates. No coating operation shall have emission limits from Tables A and B that apply at the same time.

(5) Determination of Compliance. Compliance with section (4) of this rule shall be determined by one (1) of the following methods specified in subsections (5)(A) and (B) as applicable and appropriate:

(A) For subsection (4)(A), Table A, the calculation of daily volume-weighted emission performance for automobile and light duty truck primer surfacer and topcoat operations shall be made according to procedures detailed in the United States Environmental Protection Agency (EPA) document entitled "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light Duty Truck Topcoat Operations" (U.S. EPA-450/3-88-018) dated December, 1988; and

(B) For subsection (4)(B), Table B-

1. Compliance with the emission limits may be determined using the method referenced in 10 CSR 10-6.030(14)(C) using the one (1)-hour bake. Emission performance shall be on the basis of a daily volume-weighted average of all coatings used in each surface coating operation as delivered to the coating applicator(s) on a coating line. The daily volume-weighted average (DAVG $_{vw}$) shall be calculated by the following formula:

$$DAVG_{vw} = \frac{\sum\limits_{j=1}^{n} (A_{j} \times B)}{\frac{i=1}{C}}$$

Where:

A = daily gal. each coating used (minus water and exempt solvents) in a surface coating operation;

B = lbs. VOC/gal. coating (minus water and exempt solvents);

C = total daily gal. coatings used (minus water and exempt solvents) in a surface coating operation; and

N = number of coatings used in a surface coating operation;

2. Compliance with the emission limits in subsection (4)(B), Table B may be determined on a pounds of VOC per gallon of coating solids basis. The determination is made by first converting the emission limit in subsection (4)(B), Table B to pounds of VOC per gallon of coating solids as shown in the following three (3) steps:

lbs. VOC per gallon of coating (emission limit

1)
$$\frac{minus\ water}{7.36\ lbs.}$$
 per gallon (average density of solvents

used to originally establish

the emission limit)

This value from step 3) is the new emission limit. It is equivalent to the emission limit in subsection (4)(B) on a coating solids basis. The VOC per gallon of coating solids for each coating solids used is then determined using the method referenced in 10 CSR 10-6.030(14)(C) using the one (1)-hour bake. The composite daily weighted average of pounds of VOC per gallon of coating solids as tested for in the actual coatings used is compared to the new emission limit. Source operations on a coating line using coatings with a composite actual daily weighted average value less than or equal to the new emission limit, are in compliance with this rule; or

3. Compliance with the emission limits in subsection (4)(B), Table B may be determined on a pounds of VOC per gallon of coating solids applied basis. An owner or operator may request his/her emission limit be modified to be equivalent to the emission limit in subsection (4)(B), but in emission units of pounds of VOC emitted per gallon of coating solids applied. This new emission limit is derived by dividing the emission limit from paragraph (5)(B)2. by an appropriate value for transfer efficiency (TE) as determined by the director. Prior to this determination, the owner or operator shall demonstrate to the satisfaction of the director that an adequate, fully replicable TE test method exists for the source operation. Upon approval of the TE demonstration, the director will develop an emission limit equivalent to the applicable emission limit in subsection (4)(B).

(6) Record Keeping.

(A) The owner or operator of a coating line shall keep records detailing specific VOC sources as necessary for the director to determine daily compliance. These may include:

- 1. Daily records of the type and the quantity of coatings used daily;
- 2. The coating manufacturer's formulation data for each coating on forms provided or approved by the director;
- 3. Daily records of the type and quantity of solvents for coating, thinning, purging and equipment cleaning used;
- 4. All test results to determine capture and control efficiencies, TEs and coating makeup;

- 5. Daily records of the type and quantity of waste solvents reclaimed or discarded daily;
- 6. Daily records of the quantity of pieces or materials coated daily; and
- 7. Any additional information pertinent to determining compliance.
- (B) Records such as daily production rates may be substituted for actual daily coating use measurements provided the owner submits a demonstration approved by the director that these records are adequate for the purposes of this rule.
- (C) Records required under subsections (6)(A) and (B) shall be retained by the owner or operator for a minimum of two (2) years. These records shall be made available to the director upon request.

(7) Compliance Schedules.

(A) Owners or operators who were subject to this rule prior to December 1, 1989 shall be subject to the compliance dates set forth in section (4). Record keeping systems required of these owners or operators under section (6) shall be in place and functioning not later than April 1, 1990. All other subject owners or operators shall be in compliance and have all record keeping systems in place by December 1, 1990.

(B) Owners or operators subject to this rule, but operating under alternate compliance plans as allowed prior to December 1, 1989, shall submit documentation by March 1, 1990 that their controls represent compliance with this rule. If the director determines that the documentation represents compliance, the director shall propose to the Missouri Air Conservation Commission subsequent rules' amendments to make those control measures enforceable. If documentation is not submitted or if the director determines the documentation does not represent compliance, the owner or operator shall comply with section (4) of this rule. All owners or operators subject to this subsection shall demonstrate compliance by December 1, 1990.]

(3) General Provisions. General provisions for specific coatings may be found in the following subsections of section (3) of this rule:

Coating	Subsection
Large Appliance Coatings	(3)(A)
Metal Furniture Coatings	(3)(B)
Automobile and Light Duty Truck Assembly Coatings	(3)(C)
Paper, Film, and Foil Coatings	(3)(D)
Magnet Wire Coatings	(3)(E)
Coil Coatings	(3)(F)
Can Coatings	(3)(G)
Vinyl and Fabric Coatings	(3)(H)
Flat Wood Paneling Coatings	(3)(I)
Miscellaneous Metal and Plastic Parts Coatings	(3)(J)
Industrial Adhesive Application	(3)(K)

- (A) Large Appliance Coatings.
- 1. The requirements in this subsection apply to the surface coating of doors, cases, lids, panels, and interior support parts of the following residential and commercial products:
 - A. Washers;
 - B. Dryers;
 - C. Ranges;
 - D. Refrigerators;
 - E. Freezers;
 - F. Water heaters;
 - G. Dishwashers;
 - H. Trash compactors;

- I. Air conditioners; and
- J. Other similar products.
- 2. Emission limits.

A. Prior to September 1, 2011, no owner or operator of a surface coating unit subject to this subsection may cause, allow, or permit the discharge into the ambient air of any VOCs in excess of the following, as delivered to the coating applicator(s):

Large Appliance Coatings		
Emission Limit		
pounds of VOC per gallon of coating		
Coating Category (minus water and exempt compound		
Topcoat	2.8	
Final Repair 6.5		

B. On or after September 1, 2011, no owner or operator of a surface coating unit subject to this subsection may cause, allow, or permit the discharge into the ambient air of any VOCs in excess of the following, as delivered to the coating applicator(s):

Large Appliance Coatings			
	Emission Limit pounds of VOC per gallon of coating (minus water and exempt compounds)		
Coating Category	Baked Air Dried		
General, One Component	2.3	2.3	
General, Multi Component	2.3	2.8	
Extreme High Gloss	3.0	2.8	
Extreme Performance	3.0	3.5	
Heat Resistant	3.0	3.5	
Metallic	3.5	3.5	
Pretreatment Coatings	3.5	3.5	
Solar Absorbent	3.0 3.5		
Repair and Touch Up	6.5	6.5	

- 3. Method and determination of compliance. The emission limits in paragraph (3)(A)2. of this rule shall be achieved through one (1) of the following:
- A. VOC content of coatings. Determine the daily volume-weighted average VOC content of all coatings used in a surface coating unit, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds) per subparagraph (5)(C)3.A. of this rule. The surface coating unit is in compliance if this value is less than or equal to the emission limits in paragraph (3)(A)2. of this rule;
- B. Combination of VOC content of coatings and add-on controls. Calculate the required control system efficiency per paragraph (5)(C)4. of this rule. The surface coating unit is in compliance if the actual overall control system efficiency is greater than or equal to the required control system efficiency; or
- C. Control system. If a control system is used to achieve compliance, the overall control system efficiency must be ninety percent (90%) or greater.
- 4. Application equipment. On or after September 1, 2011, one (1) or a combination of the following equipment shall be used for coating application, unless achieving compliance by using an add-on control system per subparagraph (3)(A)3.C. of this rule:
 - A. Electrostatic equipment;
 - B. High-volume low-pressure (HVLP) spray equipment;
 - C. Flow coating;
 - D. Roller coating;
 - E. Dip coating, including electrodeposition;
 - F. Airless spray;

- G. Air-assisted airless spray; and
- H. Other coating application method capable of achieving a transfer efficiency equivalent or better than achieved by HVLP spraying.
- 5. Work practices. On or after September 1, 2011, work practices shall be used to minimize VOC emissions from solvent storage, mixing operations, and handling operations for coatings, thinners, cleaning materials, and waste materials. Work practices shall include, but not be limited to, the following:
- A. Store all VOC-containing coatings, thinners, and cleaning materials in closed containers;
- B. Ensure that mixing and storage containers used for VOC containing coatings, thinners, coating related waste, and cleaning materials are kept closed at all times except when depositing or removing these materials;
- C. Minimize spills of VOC-containing coatings, thinners, and cleaning materials;
 - D. Clean up spills immediately;
- E. Convey any coatings, thinners, and cleaning materials in closed containers or pipes from one (1) location to another; and
- F. Minimize VOC 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.
- 6. The VOC limits in paragraph (3)(A)2. of this rule do not apply to the following types of coatings and coating operations:
 - A. Stencil coatings;
 - **B.** Safety-indicating coatings;
 - C. Solid film lubricants; or
 - D. Electric-insulating and thermal-conducting coatings.
 - (B) Metal Furniture Coatings.
- 1. The requirements in this subsection apply to surface coating of any furniture made of metal or any metal part that will be assembled with other metal, wood, fabric, plastic, or glass parts to form a furniture piece.
 - 2. Emission limits.
- A. Prior to September 1, 2011, no owner or operator of a surface coating unit subject to this subsection may cause, allow, or permit the discharge into the ambient air of any VOCs in excess of three (3.0) pounds of VOC per gallon of coating (minus water and exempt compounds) as delivered to the coating applicator(s).
- B. On or after September 1, 2011, no owner or operator of a surface coating unit subject to this subsection may cause, allow, or permit the discharge into the ambient air of any VOCs in excess of the following, as delivered to the coating applicator(s):

Metal 1	Furniture Coatings	
	Emission Limit pounds of VOC per gallon of coating (minus water and exempt compounds)	
Coating Category	Baked	Air Dried
General, One Component	2.3	2.3
General, Multi Component	2.3	2.8
Extreme High Gloss	3.0	2.8
Extreme Performance	3.0 3.5	
Heat Resistant	3.0	3.5
Metallic	3.5	3.5
Pretreatment Coatings	3.5 3.5	
Solar Absorbent	3.0	3.5

3. Method and determination of compliance. The emission limits in paragraph (3)(B)2. of this rule shall be achieved through

one (1) of the following:

- A. VOC content of coatings. Determine the daily volume-weighted average VOC content of all coatings used in a surface coating unit, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds) per subparagraph (5)(C)3.A. of this rule. The surface coating unit is in compliance if this value is less than or equal to the emission limits in paragraph (3)(B)2. of this rule;
- B. Combination of VOC content of coatings and add-on controls. Calculate the required control system efficiency per paragraph (5)(C)4. of this rule. The surface coating unit is in compliance if the actual overall control system efficiency is greater than or equal to the required control system efficiency; or
- C. Control system. If a control system is used to achieve compliance, the overall control system efficiency must be ninety percent (90%) or greater.
- 4. Application equipment. On or after September 1, 2011, one (1) or a combination of the following equipment shall be used for coating application, unless achieving compliance by using an add-on control system per subparagraph (3)(B)3.C. of this rule:
 - A. Electrostatic equipment;
 - B. HVLP spray equipment;
 - C. Flow coating:
 - D. Roller coating;
 - E. Dip coating, including electrodeposition;
 - F. Airless spray;
 - G. Air-assisted airless spray; and
- H. Other coating application method capable of achieving a transfer efficiency equivalent or better than achieved by HVLP spraying.
- 5. Work practices. On or after September 1, 2011, work practices shall be used to minimize VOC emissions from solvent storage, mixing operations, and handling operations for coatings, thinners, cleaning materials, and waste materials. Work practices shall include, but not be limited to, the following:
- A. Store all VOC-containing coatings, thinners, and cleaning materials in closed containers;
- B. Ensure that mixing and storage containers used for VOC-containing coatings, thinners, coating related waste, and cleaning materials are kept closed at all times except when depositing or removing these materials;
- C. Minimize spills of VOC-containing coatings, thinners, and cleaning materials;
 - D. Clean up spills immediately;
- E. Convey any coatings, thinners, and cleaning materials in closed containers or pipes from one (1) location to another; and
- F. Minimize VOC 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.
- 6. The VOC limits in paragraph (3)(B)2. of this rule do not apply to the following types of coatings and coating operations:
 - A. Stencil coatings;
 - B. Safety-indicating coatings;
 - C. Solid film lubricants: and
 - D. Electric-insulating and thermal-conducting coatings.
 - (C) Automobile and Light Duty Truck Assembly Coatings.
- 1. The requirements in this subsection apply to automobile and light duty truck surface coating operations performed in an automobile or light duty truck assembly installation.
 - 2. Emission limits.
- A. Prior to September 1, 2011, no owner or operator of an automobile or light duty truck assembly installation may cause, allow, or permit the discharge into the ambient air of any VOC in excess of the following:

Automobile and Light Duty Truck Assembly Coatings		
Coating Category	Emission Limit	
Topcoat	15.1 pounds of VOC per gallon of coating solids deposited	
Spray Primer or Primer Surfacer	15.1 pounds of VOC per gallon of coating solids deposited	
Electrodeposition Primer	1.4 pounds of VOC per gallon of coating solids deposited	
Final Repair	4.8 pounds of VOC per gallon of coating (minus water and exempt compounds)	
Miscellaneous Metal Parts, Extreme Performance, and Air Dried Coatings	3.5 pounds of VOC per gallon of coating (minus water and exempt compounds)	
All Other Coatings	3.0 pounds of VOC per gallon of coating (minus water and exempt compounds)	

B. On or after September 1, 2011, no owner or operator of an automobile or light duty truck assembly installation may cause, allow, or permit the discharge into the ambient air of any VOC in excess of the following:

Automobile and Light Duty Truck Assembly Coatings			
Coating Category	Emission Limit		
	$R_T < 0.040$	$0.040 \le R_T < 0.160$	R _T ≥ 0.160
Electrodeposition primer (EDP)	No VOC Emission Limit	0.7 × 350 ^{0.160-R₇} pounds of VOC per gallon of coating solids deposited	0.7 pounds of VOC per gallon of coating solids deposited
Primer-surfacer	12.0 pounds of VOC per gallon of coating solids deposited		
Topcoat	12.0 pounds of VOC per gallon of coating solids deposited		
Combined Primer- Surfacer and Topcoat	12.0 nounds of VOC per gallon of coating solids deposited		
Final repair	4.8 pounds of VOC per gallon of coating (minus water and exempt compounds)		

Miscellaneous Materials		
Material	Emission Limit pounds of VOC per gallon of coating (minus water and exempt compounds)	
Automobile and light duty truck glass bonding primer	7.5	
Automobile and light duty truck adhesive	2.1	
Automobile and light duty truck cavity wax	5.4	
Automobile and light duty truck sealer	5.4	
Automobile and light duty truck deadener	5.4	
Automobile and light duty truck gasket/gasket-sealing material	1.7	
Automobile and light duty truck underbody coating	5.4	
Automobile and light duty truck trunk interior coating	5.4	
Automobile and light duty truck bedliner	1.7	
Automobile and light duty truck weatherstrip adhesive	6.3	
Automobile and light duty truck lubricating wax/compound	5.8	

- 3. Method and determination of compliance. The emission limits in paragraph (3)(C)2. of this rule shall be achieved through the following:
- A. Spray primer; primer-surfacer; topcoat; and combined primer-surfacer and topcoat. The VOC emission rate, expressed as pounds of VOC per gallon of coating solids deposited, is determined by the procedures in the U.S. Environmental Protection Agency (EPA) document *Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Primer-Surfacer and Topcoat Operations* (EPA-453/R-08-002), dated September 2008. The surface coating unit is in compliance if the emission rate is less than or equal to the emission limit in paragraph (3)(C)2. of this rule;
- B. Electrodeposition primer (EDP). Determine the monthly volume-weighted average VOC emission rate of the EDP coating unit, expressed as pounds of VOC per gallon of coating solids deposited, per subparagraph (5)(C)3.D. of this rule. The EDP coating unit is in compliance if this value is less than or equal to the emission limit in paragraph (3)(C)2. of this rule;
- C. Final repair coatings. Determine the daily volume-weighted average VOC content of all coatings used in a surface coating unit, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds) per subparagraph (5)(C)3.A. of this rule. The surface coating unit is in compliance if this value is less than or equal to the emission limits in paragraph (3)(C)2. of this rule; and
- D. All other coatings. Determine the monthly volume-weighted average VOC content of all coatings used in a surface coating unit, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds) per subparagraph (5)(C)3.E. of this rule. The surface coating unit is in compliance if this value is less than or equal to the emission limit in paragraph (3)(C)2. of this rule.
 - 4. Work practices and work practice plan.
- A. Work practices. On or after September 1, 2011, work practices shall be used to minimize VOC emissions from storage, mixing operations, and handling operations for coatings, thinners, cleaning materials, and waste materials. Work practices shall include, but not be limited to, the following:
- (I) Store all VOC-containing coatings, thinners, and cleaning materials in closed containers;
- (II) Ensure that mixing and storage containers used for VOC-containing coatings, thinners, coating related waste, and cleaning materials are kept closed at all times except when depositing or removing these materials;
- (III) Minimize spills of VOC-containing coatings, thinners, and cleaning materials;
 - (IV) Clean up spills immediately;
- (V) Convey any coatings, thinners, and cleaning materials in closed containers or pipes from one (1) location to another; and
- (VI) Minimize VOC 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.
- B. Work practice plan. Installations subject to subparagraph (3)(C)4.A. of this rule shall develop and implement a work practice plan to minimize VOC emissions from cleaning and purging of equipment associated with all coating operations for which emission limits are specified in paragraph (3)(C)2. of this rule. The plan shall specify practices and procedures to ensure that VOC emissions from the following operations are minimized:
 - (I) Vehicle body wiping;
 - (II) Coating line purging;
 - (III) Flushing of coating systems;
 - (IV) Cleaning of spray booth grates;
 - (V) Cleaning of spray booth walls;
 - (VI) Cleaning of spray booth equipment;

- (VII) Cleaning external spray booth areas; and
- (VIII) Other housekeeping measures, such as keeping solvent-laden rags in closed containers.
 - (D) Paper, Film, and Foil Coatings.
- 1. The requirements in this subsection apply to paper, film, and foil coating operations, with the exception of the following:
- A. Paper, film, and foil surface coating units with potential to emit below twenty-five (25) tons per year of VOC from coating, prior to controls;
- B. Coating performed on or in-line with any offset lithographic, screen, letterpress, flexographic, rotogravure, or digital printing press that is part of a printing process; and
- C. Size presses and on-machine coaters on papermaking machines that apply sizing or water-based clays.
 - 2. Emission limits.
- A. Prior to September 1, 2011, no owner or operator of a surface coating unit subject to this subsection may cause, allow, or permit the discharge into the ambient air of any VOCs in excess of two and nine-tenths (2.9) pounds of VOC per gallon of coating (minus water and exempt compounds) as delivered to the coating applicator(s).
- B. On or after September 1, 2011, no owner or operator of a surface coating unit subject to this subsection may cause, allow, or permit the discharge into the ambient air of any VOCs in excess of the following, as delivered to the coating applicator(s):

Paper, Film, and Foil Coatings	
	Emission Limit
Candle o Control	pounds of VOC per
Coating Category	pound of coating solids 0.2
Pressure sensitive tape and label	Ų.Z
Paper, film, and foil surface coating (not including pressure	0.4
sensitive tape and label)	

- 3. Method and determination of compliance. The emission limits in paragraph (3)(D)2. of this rule shall be achieved through one (1) of the following:
 - A. VOC content of coatings.
- (I) Prior to September 1, 2011. Determine the daily volume-weighted average VOC content of all coatings used in a surface coating unit, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds) per subparagraph (5)(C)3.A. of this rule. The surface coating unit is in compliance if this value is less than or equal to the emission limit in paragraph (3)(D)2. of this rule.
- (II) On or after September 1, 2011. Determine the daily mass-weighted average VOC content of all coatings used in a surface coating unit, expressed as pounds of VOC per pound of coating solids per subparagraph (5)(C)3.C. of this rule. The surface coating unit is in compliance if this value is less than or equal to the emission limits in paragraph (3)(D)2. of this rule; or
- B. Control system. If a control system is used to achieve compliance, the overall control system efficiency must be ninety percent (90%) or greater.
- 4. Work practices. On or after September 1, 2011, work practices shall be used to minimize VOC emissions from solvent storage, mixing operations, and handling operations for coatings, thinners, cleaning materials, and waste materials. Work practices shall include, but not be limited to, the following:
- A. Store all VOC-containing coatings, thinners, and cleaning materials in closed containers;
- B. Ensure that mixing and storage containers used for VOC-containing coatings, thinners, coating related waste, and cleaning materials are kept closed at all times except when depositing or removing these materials;
- C. Minimize spills of VOC-containing coatings, thinners, and cleaning materials;

- D. Clean up spills immediately;
- E. Convey any coatings, thinners, and cleaning materials in closed containers or pipes from one (1) location to another; and
- F. Minimize VOC 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.
 - (E) Magnet Wire Coatings.
- 1. The requirements in this subsection apply to the coating of electrically insulating varnish or enamel to aluminum or copper wire for use in electrical machinery.
- 2. Emission limits. No owner or operator of a surface coating unit subject to this subsection may cause, allow, or permit the discharge into the ambient air of any VOCs in excess of one and seven-tenths (1.7) pounds of VOC per gallon of coating (minus water and exempt compounds) as delivered to the coating applicator(s).
- 3. Method and determination of compliance. The emission limits in paragraph (3)(E)2. of this rule shall be achieved through one (1) of the following:
- A. VOC content of coatings. Determine the daily volume-weighted average VOC content of all coatings used in a surface coating unit, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds), per subparagraph (5)(C)3.A. of this rule. The surface coating unit is in compliance if this value is less than or equal to the emission limit in paragraph (3)(E)2. of this rule;
- B. Combination of VOC content of coatings and add-on controls. Calculate the required control system efficiency per paragraph (5)(C)4. of this rule. The surface coating unit is in compliance if the actual overall control system efficiency is greater than or equal to the required control system efficiency; or
- C. Control system. If a control system is used to achieve compliance, the overall control system efficiency must be ninety percent (90%) or greater.
 - (F) Coil Coatings.
- 1. The requirements in this subsection apply to the surface coating of any flat metal sheet or strip that comes in rolls or coils.
- 2. Emission limits. No owner or operator of a surface coating unit subject to this subsection may cause, allow, or permit the discharge into the ambient air of any VOCs in excess of two and six-tenths (2.6) pounds of VOC per gallon of coating (minus water and exempt compounds) as delivered to the coating applicator(s)
- 3. Method and determination of compliance. The emission limits in paragraph (3)(F)2. of this rule shall be achieved through one (1) of the following:
- A. VOC content of coatings. Determine the daily volume-weighted average VOC content of all coatings used in a surface coating unit, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds), per subparagraph (5)(C)3.A. of this rule. The surface coating unit is in compliance if this value is less than or equal to the emission limit in paragraph (3)(F)2. of this rule;
- B. Combination of VOC content of coatings and add-on controls. Calculate the required control system efficiency per paragraph (5)(C)4. of this rule. The surface coating unit is in compliance if the actual overall control system efficiency is greater than or equal to the required control system efficiency; or
- C. Control system. If a control system is used to achieve compliance, the overall control system efficiency must be ninety percent (90%) or greater.
 - (G) Can Coatings.
- 1. The requirements in this subsection apply to the surface coating of cans.
- Emission limits. No owner or operator of a surface coating unit subject to this subsection may cause, allow, or permit the

discharge into the ambient air of any volatile organic compounds, as delivered to the coating applicator(s), in excess of the following:

Can Coatings	
	Emission Limit pounds of VOC per gallon of coating (minus water and exempt
Coating Category	compounds)
2-Piece Exterior Sheet Basecoat	2.8
2- and 3-Piece Interior Body Spray	4.2
2-Piece End Exterior	4.2
3-Piece Side Seam	5.5
End Seal Compound	3.7

- 3. Method and determination of compliance. The emission limits in paragraph (3)(G)2. of this rule shall be achieved through one (1) of the following:
- A. VOC content of coatings. Determine the daily volume-weighted average VOC content of all coatings used in a surface coating unit, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds), per subparagraph (5)(C)3.A. of this rule. The surface coating unit is in compliance if this value is less than or equal to the emission limit in paragraph (3)(G)2. of this rule;
- B. Combination of VOC content of coatings and add-on controls. Calculate the required control system efficiency per paragraph (5)(C)4. of this rule. The surface coating unit is in compliance if the actual overall control system efficiency is greater than or equal to the required control system efficiency; or
- C. Control system. If a control system is used to achieve compliance, the overall control system efficiency must be ninety percent (90%) or greater.
 - (H) Vinyl and Fabric Coatings.
- 1. The requirements in this subsection apply to vinyl coating and fabric coating.
- 2. Emission limits. No owner or operator of a surface coating unit subject to this subsection may cause, allow, or permit the discharge into the ambient air of any volatile organic compounds, as delivered to the coating applicator(s), in excess of the following:

Vinyl and Fabric Coatings		
Emission Limit		
j	pounds of VOC per gallon of coating	
Coating Category	(minus water and exempt compounds)	
Vinyl	3.8	
Fabric	. 2.9	

- 3. Method and determination of compliance. The emission limits in paragraph (3)(H)2. of this rule shall be achieved through one (1) of the following:
- A. VOC content of coatings. Determine the daily volume-weighted average VOC content of all coatings used in a surface coating unit, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds), per subparagraph (5)(C)3.A. of this rule. The surface coating unit is in compliance if this value is less than or equal to the emission limit in paragraph (3)(H)2. of this rule;
- B. Combination of VOC content of coatings and add-on controls. Calculate the required control system efficiency per paragraph (5)(C)4. of this rule. The surface coating unit is in compliance if the actual overall control system efficiency is greater than or equal to the required control system efficiency; or
- C. Control system. If a control system is used to achieve compliance, the overall control system efficiency must be ninety percent (90%) or greater.

- (I) Flat Wood Paneling Coatings.
- 1. The requirements in this subsection apply to the coating of the following:
- A. Printed interior panels made of hardwood plywood and thin particle board;
 - B. Natural finish hardwood plywood panels;
 - C. Hardboard paneling with Class II finishes;
 - D. Exterior siding; and
 - E. Tileboard.
- 2. Emission limits. On or after September 1, 2011, no owner or operator of a surface coating unit subject to this subsection may cause, allow, or permit the discharge into the ambient air of any VOCs in excess two and one-tenths (2.1) pounds of VOC per gallon of coating (minus water and exempt compounds) as delivered to the coating applicator(s).
- 3. Method and determination of compliance. The emission limits in paragraph (3)(I)2. of this rule shall be achieved through one (1) of the following:
- A. VOC content of coatings. Determine the daily volume-weighted average VOC content of all coatings used in a surface coating unit, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds), per subparagraph (5)(C)3.A. of this rule. The surface coating unit is in compliance if this value is less than or equal to the emission limit in paragraph (3)(I)2. of this rule;
- B. Combination of VOC content of coatings and add-on controls. Calculate the required control system efficiency per paragraph (5)(C)4. of this rule. The surface coating unit is in compliance if the actual overall control system efficiency is greater than or equal to the required control system efficiency; or
- C. Control system. If a control system is used to achieve compliance, the overall control system efficiency must be ninety percent (90%) or greater.
- 4. Work practices. On or after September 1, 2011, work practices shall be used to minimize VOC emissions from solvent storage, mixing operations, and handling operations for coatings, thinners, cleaning materials, and waste materials. Work practices shall include, but not be limited to, the following:
- A. Store all VOC-containing coatings, thinners, and cleaning materials in closed containers;
- B. Ensure that mixing and storage containers used for VOC-containing coatings, thinners, coating related waste, and cleaning materials are kept closed at all times except when depositing or removing these materials;
- C. Minimize spills of VOC-containing coatings, thinners, and cleaning materials;
 - D. Clean up spills immediately;
- E. Convey any coatings, thinners, and cleaning materials in closed containers or pipes from one (1) location to another; and
- F. Minimize VOC 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.
 - (J) Miscellaneous Metal and Plastic Parts Coatings.
- 1. The requirements in this subsection apply to the surface coating of all other miscellaneous metal and plastic parts including, but not limited to, the following:
 - A. Large and small farm implements and machinery;
 - B. Railroad cars;
 - C. Small household appliances;
 - D. Office equipment;
 - E. Commercial and industrial machinery and equipment;
- F. Any other industrial category that coats metal parts or products under the Standard Industrial Classification Code of major groups #33, #34, #35, #36, #37, #38, and #39;
 - G. Fabricated metal products;
 - H. Molded plastic parts;

- I. Automotive or transportation equipment;
- J. Interior or exterior automotive parts;
- K. Construction equipment;
- L. Motor vehicle accessories;
- M. Bicycles and sporting goods;
- N. Toys;
- O. Recreational vehicles;
- P. Pleasure craft (recreational boats);
- Q. Extruded aluminum structural components;
- R. Heavier vehicles;
- S. Lawn and garden equipment;
- T. Business machines;
- U. Laboratory and medical equipment;
- V. Electronic equipment;
- W. Steel drums:
- X. Metal pipes; and
- Y. Prefabricated architectural components when the coating is applied in a surface coating unit as defined in subsection (2)(S).

2. Emission limits.

A. Prior to September 1, 2011, no owner or operator of a surface coating unit subject to this subsection may cause, allow, or permit the discharge into the ambient air of any VOCs in excess of the following, as delivered to the coating applicator(s):

Coating Category	Emission Limit pounds of VOC per gailon of coating (minus water and exempt compounds)
Metal Parts	
Clear Coat	4.3
Extreme Performance Coatings	3.5
Air Dried Coatings	3.5
All Other Coatings	3.0
Plastic Parts	3.5
Railroad Cars	3,5
Farm Implements and Machinery	3.5
Heavy Duty Trucks	3.5
Mail Boxes and Shutters	3.5

B. On or after September 1, 2011, no owner or operator of a surface coating unit subject to this subsection may cause, allow, or permit the discharge into the ambient air of any VOCs in excess of the following, as delivered to the coating applicator(s):

Metal Parts and Products Coatings		
	Emission Limit pounds of VOC per gallon of coating (minus water and exempt compounds)	
Coating Category	Air Dried	Baked
General, One Component	2.8	2.3
General, Multi Component	2.8	2.3
Camouflage	3.5	3.5
Clear Coat	4.3	4.3
Electric-Insulating Varnish	3.5	3.5
Etching Filler	3.5	3.5
Extreme High Gloss	3.5	3.0
Extreme Performance	3.5	3.0
Heat Resistant	3.5	3.0
High Performance Architectural	6.2	6.2
High Temperature	3.5	3.5
Metallic	3.5	3.5
Military Specification	2.8	2.3
Mold Seal	3.5	3.5
Pan Backing	3.5	3.5
Prefabricated Architectural	3.5	2.3
Pretreatment Coatings	3.5	3.5
Repair and Touch Up	3.5	3.0
Silicone Release	3.5	3.5
Solar Absorbent	3.5	3.0
Vacuum Metalizing	3.5	3.5
Drum, New, Exterior	2.8	2.8
Drum, New, Interior	3.5	3.5
Drum, Reconditioned, Exterior	3.5	3.5
Drum, Reconditioned, Interior	4.2	4.2

Plastic Parts and Products Coatings		
	Emission Limit pounds of VOC per gallon of coating (minus water and	
Coating Category	exempt compounds)	
Automotive/Transportation		
High Bake, Interior and		
Exterior Parts		
Flexible Primer	4.5	
Non-Flexible Primer	3.5	
Basecoat	4.3	
Clear Coat	4.0	
Non-		
Basecoat/Clear Coat	4.3	
Low Bake/Air Dried,		
Exterior Parts		
Primer	4.8	
Basecoat	5.0	
Clear Coat	4.5	
Non- Basecoat/Clear Coat	5.0	
Low Bake/Air Dried, Interior Parts	5.0	
Touch Up and Repair	5.2	
Business Machine		
Primer	2.9	
Topcoat	2.9	
Texture Coat	2,9	
Fog Coat	2.2	
Touch Up and Repair	2.9	
Plastic, All Other	15	
General, One Component	2.3	
General, Multi Component	3.5	
Electric Dissipating and Shock-Free	6.7	
Extreme Performance	3,5	
Metallic	3,5	
Military Specification		
One (1) Pack	2.8	
Two (2) Pack	3.5	
Mold Seal	6.3	
Multi Colored	5.7	
Optical	6.7	
Polyurethane Shoe Sole	6.7	
Vacuum-Metalizing	6.7	

Pleasure Craft Coatings	
	Emission Limit pounds of VOC per gallon of coating (minus water and
Coating Category	exempt compounds)
Extreme High Gloss Topcoat	5.0
High Gloss Topcoat	3.5
Pretreatment Wash Primer	6.5
Finish Primer/Surfacer	3.5
High Build Primer/Surfacer	2.8
Aluminum Substrate Antifoulant	4.7
Other Substrate Antifoulant	2.8
Antifoulant Sealer/Tie	3.5
All Other	3.5

Motor Vehicle Materials	
	Emission Limit pounds of VOC per gallon of coating (minus water and
Coating Category	exempt compounds)
Motor Vehicle Cavity Wax	5.4
Motor Vehicle Sealer	5.4
Motor Vehicle Deadener	5.4
Motor Vehicle Gasket/Gasket- Sealing Material	1.7
Motor Vehicle Underbody	5.4
Motor Vehicle Trunk Interior	5.4
Motor Vehicle Bedliner	1.7
Motor Vehicle Lubricating Wax/Compound	5.8

- 3. Method and determination of compliance. The emission limits in paragraph (3)(J)2. of this rule shall be achieved through one (1) of the following:
- A. VOC content of coatings. Determine the daily volume-weighted average VOC content of all coatings used in a surface coating unit, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds), per subparagraph (5)(C)3.A. of this rule. The surface coating unit is in compliance if this value is less than or equal to the emission limit in paragraph (3)(J)2. of this rule;
- B. Combination of VOC content of coatings and add-on controls. Calculate the required control system efficiency per paragraph (5)(C)4. of this rule. The surface coating unit is in compliance if the actual overall control system efficiency is greater than or equal to the required control system efficiency; or
- C. Control system. If a control system is used to achieve compliance, the overall control system efficiency must be ninety percent (90%) or greater.
- 4. Application equipment. On or after September 1, 2011, one (1) or a combination of the following equipment shall be used for coating application, unless achieving compliance by using an add-on control device per subparagraph (3)(J)3.C. of this rule:
 - A. Electrostatic equipment;
 - B. HVLP spray equipment;
 - C. Flow coating:
 - D. Roller coating;
 - E. Dip coating, including electrodeposition;
 - F. Airless spray:
 - G. Air-assisted airless spray; and
- H. Other coating application method capable of achieving a transfer efficiency equivalent or better than achieved by HVLP spraying.
- 5. Work practices. On or after September 1, 2011, work practices shall be used to minimize VOC emissions from solvent storage, mixing operations, and handling operations for coatings, thinners, cleaning materials, and waste materials. Work practices shall include, but not be limited to, the following:
- A. Store all VOC-containing coatings, thinners, and cleaning materials in closed containers;
- B. Ensure that mixing and storage containers used for VOC-containing coatings, thinners, coating related waste, and cleaning materials are kept closed at all times except when depositing or removing these materials;
- C. Minimize spills of VOC-containing coatings, thinners, and cleaning materials;
 - D. Clean up spills immediately;
- E. Convey any coatings, thinners, and cleaning materials in closed containers or pipes from one (1) location to another; and

- F. Minimize VOC 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.
- 6. For metal parts coatings, the VOC limits in paragraph (3)(J)2. of this rule do not apply to the following types of coatings and coating operations:
 - A. Stencil coatings:
 - **B.** Safety-indicating coatings;
 - C. Solid film lubricants;
 - D. Electric-insulating and thermal-conducting coatings;
 - E. Magnetic data storage disk coatings; and
 - F. Plastic extruded onto metal parts to form a coating.
- 7. For metal parts coatings, the application equipment requirements in paragraph (3)(J)4. of this rule do not apply to the following types of coatings and coating operations:
 - A. Touch-up coatings;
 - B. Repair coatings; and
 - C. Textured coatings.
- 8. For plastic parts coatings, the VOC limits in paragraph (3)(J)2. of this rule do not apply to the following types of coatings and coating operations:
 - A. Touch-up and repair coatings;
- B. Stencil coatings applied on clear or transparent substrates;
 - C. Clear or translucent coatings;
- D. Coatings applied at a paint manufacturing installation while conducting performance tests on the coatings;
- E. Any individual coating category used in volumes less than fifty (50) gallons in any one (1) year, if substitute compliant coatings are not available, provided that the total usage of all such coatings does not exceed two hundred (200) gallons per year, per installation:
 - F. Reflective coating applied to highway cones;
- G. Mask coatings that are less than one-half (0.5) millimeter thick (dried) and the area coated is less than twenty-five (25) square inches;
- H. Electromagnetic interference and radio frequency interference (EMI/RFI) shielding coatings; and
- I. Heparin-benzalkonium chloride (HBAC)-containing coatings applied to medical devices, provided that the total usage of all such coatings does not exceed one hundred (100) gallons per year, per installation.
- 9. For plastic parts coatings, the application equipment requirements in paragraph (3)(J)4. of this rule do not apply to airbrush operations using five (5) gallons or less per year of coating.
- 10. For automobile, transportation, or business machine plastic parts coatings, the VOC limits in paragraph (3)(J)2. of this rule do not apply to the following types of coatings and coating operations:
 - A. Texture coatings;
 - B. Vacuum metalizing coatings;
 - C. Gloss reducers:
 - D. Texture adhesion primers;
 - E. Electrostatic preparation coatings;
 - F. Resist coatings; and
 - G. Stencil coatings.
- 11. For pleasure craft surface coating operations, the application equipment requirements in paragraph (3)(J)4. of this rule do not apply to extreme high gloss coatings.
- 12. The limits for military specification coatings in subparagraph (3)(J)2.B. of this rule do not apply to coatings that meet the following criteria:
- A. The coating is applied to military equipment used for national defense;
- B. The coating performance is critical to the successful operation of the military equipment;
 - C. The coating is mandated in a specification or contract

and a substitution of coatings that meet the VOC limits in subparagraph (3)(J)2.B. of this rule is prohibited; and

- D. The director grants approval for the use of the coating at the installation.
 - (K) Industrial Adhesive Application.
- 1. The requirements in this subsection apply to adhesive application processes.
 - 2. Emission limits.

A. On or after September 1, 2011, no owner or operator of an adhesive application process subject to this subsection may cause, allow, or permit the discharge into the ambient air of any VOCs in excess of the following, as delivered to the coating applicator(s):

	Emission Limit pounds of VOC per
	gallon of coating
Cotonomy	(minus water and
Category A dhanium A pplied to the Specific	exempt compounds)
Adhesives Applied to the Specific Substrates	
Reinforced Plastic Composites	1.7
Flexible Vinyl	2.1
Metal	0.3
Porous Material (Except Wood)	1.0
Rubber	2.1
Wood	0.3
Other Substrates	2.1
Specialty Adhesive Application Processes	
Ceramic Tile Installation	1.1
Contact Adhesive	2.1
Cove Base Installation	1.3
Floor Covering Installation, Indoor	1.3
Floor Covering Installation, Outdoor	2.1
Floor Covering Installation, Perimeter	5.5
Bonded Sheet Vinyl Metal to Urethane/Rubber	7.1
Molding or Casting	
Motor Vehicle Adhesive	2.1
Motor Vehicle Weatherstrip Adhesive	6.3
Multipurpose Construction	1.7
Plastic Solvent Welding, ABS	3.3
Plastic Solvent Welding, Except ABS	4.2
Sheet Rubber Lining Installation	7.1
Single-Ply Roof Membrane Installation/Repair, Except EPDM Glue	2.1
Structural Glazing	0.8
Thin Metal Laminating	6.5
Tire Repair	0.8
Waterproof Resorcinol	1.4
Adhesive Primer Application Processes	
Motor Vehicle Glass Bonding Primer	7.5
Plastic Solvent Welding Adhesive Primer	5.4
Single-Ply Roof Membrane Adhesive Primer	2.1
Other Adhesive Primer	2.1
Other Authorize Limith	<u> </u>

- B. The VOC limits in subparagraph (3)(K)2.A. of this rule for adhesives or adhesive primers applied to particular substrates shall apply as follows:
- (I) If an adhesive is subject to a specific VOC limit in subparagraph (3)(K)2.A., the specific limit is applicable rather than an adhesive-to-substrate limit; and
- (II) When an adhesive is used to bond dissimilar substrates, the applicable substrate category with the highest VOC content shall be the limit.
- 3. Method and determination of compliance. The emission limits in paragraph (3)(K)2. of this rule shall be achieved through one (1) of the following:
- A. VOC content of coatings. Determine the daily volume-weighted average VOC content of all coatings used in an adhesive application process, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds) per subparagraph (5)(C)3.A. of this rule. The adhesive application process is in compliance if this value is less than or equal to the emission limits in paragraph (3)(K)2. of this rule;
- B. Combination of VOC content of coatings and add-on controls. Calculate the required control system efficiency per paragraph (5)(C)4. of this rule. The adhesive application process is in compliance if the actual overall control system efficiency is greater than or equal to the required control system efficiency; or
- C. Control system. If a control system is used to achieve compliance, the overall control system efficiency must be eighty-five percent (85%) or greater.
- 4. Application equipment. On or after September 1, 2011, one (1) or a combination of the following equipment shall be used for adhesive application, unless achieving compliance by using an add-on control device per subparagraph (3)(K)3.C. of this rule:
 - A. Electrostatic spray;
 - B. HVLP spray;
 - C. Flow coat;
- D. Roller coat or hand application, including non-spray application methods similar to hand- or mechanically-powered caulking gun, brush, or direct-hand application;
 - E. Dip coat, including electrodeposition;
 - F. Airless spray;
 - G. Air-assisted airless spray; and
- H. Other adhesive application method capable of achieving a transfer efficiency equivalent or better than achieved by
- 5. Work practices. On or after September 1, 2011, work practices shall be used to minimize VOC emissions from solvent storage, mixing operations, and handling operations for coatings, thinners, cleaning materials, and waste materials. Work practices shall include, but not be limited to, the following:
- A. Store all VOC-containing coatings, thinners, and cleaning materials in closed containers;
- B. Ensure that mixing and storage containers used for VOC-containing coatings, thinners, coating related waste, and cleaning materials are kept closed at all times except when depositing or removing these materials;
- C. Minimize spills of VOC-containing coatings, thinners, and cleaning materials;
 - D. Clean up spills immediately;
- E. Convey any coatings, thinners, and cleaning materials in closed containers or pipes from one (1) location to another; and
- F. Minimize VOC 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.
- (4) Reporting and Record Keeping.
- (A) The owner or operator of a surface coating unit covered under this rule shall keep records as necessary to determine com-

- pliance. Records kept should be appropriate for the facility, their products, and operations. These may include, as applicable, one (1) or more of the following:
- 1. Current list of coatings used and the VOC content as applied;
 - 2. Daily volume usage of each coating;
- 3. Records of the weighted average VOC content for each coating type included in averaging for coating operations that achieve compliance through coating VOC content or a combination of coating VOC content and control system;
- 4. Annual VOC emissions from surface coating equipment cleaning; and
- 5. All test results to determine capture efficiency, control efficiency, and coating properties.
- (B) Records such as daily production rates may be substituted for actual daily coating use measurements provided the owner submits a demonstration, approved by the director, that these records are adequate for the purposes of this rule.
- (C) Any owner or operator using an emission control device to achieve compliance shall maintain daily records of key system operating parameters for emission control equipment including, but not limited to:
 - 1. Identification of the type of emissions control system used;
 - 2. Hours of operation;
- 3. Routine and non-routine maintenance, including dates and duration of any outages;
 - 4. Records of test reports conducted;
- 5. An owner or operator of a surface coating unit employing a thermal or catalytic oxidizer to achieve compliance shall comply with the following requirements:
- A. Continuous temperature monitoring and recording equipment shall be installed and operated to accurately measure the operating temperature(s) for the control device; and
- B. The following information shall be collected and recorded each day of operation of the surface coating unit and the control device:
- (I) A log or record of the operating time for the control device, monitoring equipment, and the associated surface coating unit;
- (II) For thermal oxidizers, all three (3)-hour periods of operation during which the average combustion temperature was more than fifty degrees Fahrenheit (50°F) below the average combustion temperature during the most recent emission test that demonstrated that the surface coating unit was in compliance; and
- (III) For catalytic oxidizers, all three (3)-hour periods of operation during which the average temperature of the exhaust gases immediately before the catalyst bed was more than fifty degrees Fahrenheit (50°F) below the average temperature of the exhaust gases during the most recent emission test that demonstrated that the surface coating unit was in compliance, and all three (3)-hour periods during which the average temperature difference across the catalyst bed was less than eighty percent (80%) of the average temperature difference during the most recent emission test that demonstrated that the surface coating operation was in compliance; and
- 6. An owner or operator of a surface coating unit employing a carbon adsorption system to achieve compliance shall comply with the following requirements:
- A. The following types of monitoring and recording equipment shall be installed and operated for the carbon adsorption system:
- (I) A continuous emission monitoring and recording system that is capable of accurately measuring and recording the concentration of organic compounds in the exhaust gases from the carbon adsorption system;

- (II) Monitoring and recording equipment that is capable of accurately measuring and recording the total mass steam flow rate for each regeneration cycle of each carbon bed; and
- (III) Monitoring and recording equipment that is capable of accurately measuring and recording the temperature of each carbon bed after regeneration (and after completion of any cooling cycle(s)); and
- B. The following information shall be collected and recorded each day of operation of the surface coating unit and the carbon adsorption system:
- (I) A log or record of the operating time for the carbon adsorption system, monitoring equipment, and the associated surface coating unit;
- (II) For a carbon adsorption system that employs a continuous emission monitoring and recording system to measure and record the concentration of organic compounds in the exhaust gases, all three (3)-hour periods of operation during which the average concentration level or reading in the exhaust gases is more than twenty percent (20%) greater than the exhaust gas organic compound concentration level or reading measured by the most recent performance test that demonstrated that the surface coating unit was in compliance;
- (III) For a carbon adsorption system that employs monitoring and recording equipment to measure and record the total mass steam flow rate for each regeneration cycle of each carbon bed, all carbon bed regeneration cycles during which the total mass steam flow rate was more than ten percent (10%) below the total mass steam flow rate during the most recent performance test that demonstrated that the surface coating unit was in compliance; and
- (IV) For a carbon adsorption system that employs monitoring and recording equipment to measure and record the temperature of each carbon bed after regeneration (and after completion of any cooling cycle(s)) was more than ten percent (10%) greater than the carbon bed temperature during the most recent performance test that demonstrated that the surface coating unit was in compliance.
- (D) Records required under subsections (4)(A) through (4)(C) of this rule shall be retained by the owner or operator for a minimum of five (5) years. These records shall be made available to the director upon request.

(5) Test Methods.

- (A) Test Methods for Control Systems. Owners or operators demonstrating compliance with the provisions of this rule via a control system shall determine the overall control system efficiency as the product of the capture efficiency and control device efficiency, using the following test methods:
- 1. The VOC concentration of gaseous air streams shall be determined with a test consisting of three (3) separate runs, each lasting a minimum of sixty (60) minutes using one (1) of the following methods as specified by 40 CFR 60, Appendix A—Reference Methods:
- A. Method 18—Measurement of Gaseous Organic Compound Emissions by Gas Chromatography;
- B. Method 25—Determination of Total Gaseous Nonmethane Organic Emissions as Carbon; or
- C. Method 25A—Determination of Total Gaseous Organic Concentration Using Flame Ionization Analyzer;
- 2. Sample and velocity traverses shall be determined by using one (1) of the following methods as specified by 40 CFR 60, Appendix A—Reference Methods:
- A. Method 1—Sample and Velocity Traverses for Stationary Sources; or
- B. Method 1A—Sample and Velocity Traverses for Stationary Sources with Small Stacks or Ducts;
- 3. Velocity and volumetric flow rates shall be determined by using one (1) of the following methods as specified by 40 CFR 60,

Appendix A—Reference Methods:

- A. Method 2—Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube);
- B. Method 2A—Direct Measurement of Gas Volume Through Pipes and Small Ducts;
- C. Method 2C—Determination of Stack Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube):
- D. Method 2D—Measurement of Gas Volumetric Flow Rates in Small Pipes and Ducts;
- E. Method 2F—Determination of Stack Gas Velocity and Volumetric Flow Rate With Three-Dimensional Probes;
- F. Method 2G—Determination of Stack Gas Velocity and Volumetric Flow Rate With Two-Dimensional Probes; or
- G. Method 2H—Determination of Stack Gas Velocity Taking Into Account Velocity Decay Near the Stack Wall;
- 4. To analyze the exhaust gases, use the method in 10 CSR 10-6.030(3):
- 5. To measure the moisture in the stack gas, use the method in $10 \ \text{CSR} \ 10\text{-}6.030(4)$; and
- 6. To determine capture efficiency, use the procedure in 10 CSR 10-6.030(20).
- (B) Test Methods for Determining Coating Properties. The coating properties in paragraphs (5)(B)1. through (5)(B)6. of this rule shall be determined from the coating manufacturer's supplied data or the method referenced in 10 CSR 10-6.030(14)(C). If there is a discrepancy between the manufacturer's supplied data and the method referenced in 10 CSR 10-6.030(14)(C), compliance shall be based on the method referenced in 10 CSR 10-6.030(14)(C).
 - 1. Density of coating, D_C .
- A. Electrodeposition primer. For electrodeposition primer, the coating density shall be as received.
- B. All other coatings. For all other coatings, the coating density shall be as applied.
 - 2. Volume fraction of solids in the coating, V_S .
- A. Electrodeposition primer. For electrodeposition primer, the volume fraction of solids in the coating shall be as received
- B. All other coatings. For all other coatings, the volume fraction of solids in the coating shall be as applied.
 - 3. Weight fraction of exempt compounds in the coating, $W_{\rm E}$.
- 4. Weight fraction of regulated VOC in the coating, $W_{\rm O}$. This value does not include the weight fraction of water or exempt compounds.
- A. Electrodeposition primer. For electrodeposition primer, the weight fraction of VOC in the coating shall be as received.
- B. All other coatings. For all other coatings, the weight fraction of VOC in the coating shall be as applied.
 - 5. Weight fraction of solids in the coating, W_s.
 - 6. Weight fraction of water in the coating, W_w.
 - (C) Other Test Methods and Calculations.
 - 1. Calculating the VOC content of the coating.
- A. The VOC content of the coating as applied, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds), shall be determined using Equation (1) as follows:

$$B = \frac{D_C \times W_O}{1 - \left(\frac{D_C \times W_W}{8.33}\right) - \left(\sum_{j=1}^m \frac{D_C \times W_{E_j}}{D_{E_j}}\right)}$$
(1)

Where:

B = VOC content of the coating as applied, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds);

 $\mathbf{D}_{\mathrm{C}} = \text{density}$ of coating as applied, expressed as pounds per gallon:

 $W_{\rm O}=$ weight fraction of regulated VOC in the coating, as applied. This value does not include the weight fraction of water or exempt compounds;

 $W_W =$ weight fraction of water in the coating, as applied;

 $\mathbf{W}_{\mathrm{E}}^{-}$ = weight fraction of exempt compounds in the coating, as applied;

 $\mathbf{D}_{\mathrm{E}} = \text{density of each exempt compound, expressed as pounds per gallon;}$

m = number of exempt compounds in the coating; and

8.33 = density of water, expressed as pounds per gallon.

B. The VOC content of the coating as applied, expressed as pounds of VOC per gallon of coating solids, shall be determined using Equation (2) as follows:

$$B_S = \frac{D_C \times W_O}{V_S} \tag{2}$$

Where:

 ${f B}_S={
m VOC}$ content of the coating as applied, expressed as pounds of VOC per gallon of coating solids;

 $\mathbf{D}_{\mathrm{C}} = \text{density of coating as applied, expressed as pounds per gallon;}$

 $W_{\rm O}=$ weight fraction of regulated VOC in the coating, as applied. This value does not include the weight fraction of water or exempt compounds; and

 V_S = volume fraction of solids in the coating, as applied.

C. The VOC content of the coating as applied, expressed as pounds of VOC per pound of coating solids, shall be determined using Equation (3) as follows:

$$B_{MWS} = \frac{D_C \times W_O}{D_C \times W_S} \tag{3}$$

Where:

 $\mathbf{B}_{\mathrm{MWS}} = \mathrm{VOC}$ content of the coating as applied, expressed as pounds of VOC per pound of coating solids;

 $\mathbf{D}_{\mathrm{C}} = \text{density of coating as applied, expressed as pounds per gallon;}$

 $W_{\rm O}=$ weight fraction of regulated VOC in the coating, as applied. This value does not include the weight fraction of water or exempt compounds; and

 W_S = weight fraction of solids in the coating, as applied.

2. Equivalent emission limits. Emission limits expressed as pounds of VOC per gallon of coating (minus water and exempt compounds) shall be converted to an equivalent emission limit expressed as pounds of VOC per gallon of coating solids using Equation (4) as follows:

$$L_S = \frac{L}{\left(1 - \frac{L}{7.36}\right)} \tag{4}$$

Where:

 $L_{\rm S}=$ emission limit expressed as pounds of VOC per gallon of coating solids;

L = emission limit expressed as pounds of VOC per gallon of coating (minus water and exempt compounds); and

7.36 = average density of solvents, in pounds per gallon, used to originally establish the emission limits.

3. Weighted averaging.

A. The daily volume-weighted average VOC content of all coatings used in a surface coating unit, expressed as pounds of

VOC per gallon of coating (minus water and exempt compounds), shall be calculated using Equation (5) as follows:

$$DAVG_{VW} = \frac{\sum_{i=1}^{n} (A_i \times B_i)}{C}$$
(5)

Where:

 ${
m DAVG_{VW}}={
m daily}$ volume-weighted average VOC content, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds);

A = daily gallons of each coating used (minus water and exempt compounds) in a surface coating unit;

B = VOC content of the coating as applied, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds). This is determined by subparagraph (5)(C)1.A. of this rule;

C = total daily gallons of coatings used (minus water and exempt compounds) in a surface coating unit; and

n = number of coatings used in a surface coating unit.

B. The daily volume-weighted average VOC content of all coatings used in a surface coating unit, expressed as pounds of VOC per gallon of coating solids, shall be calculated using Equation (6) as follows:

$$DAVG_{VWS} = \frac{\sum_{i=1}^{n} (A_{S_i} \times B_{S_i})}{C_S}$$
 (6)

Where:

DAVG_{VWS} = daily volume-weighted average VOC content, expressed as pounds of VOC per gallon of coating solids;

 A_S = daily gallons of coating solids for each coating used in a surface coating unit;

 $B_S = VOC$ content of the coating as applied, expressed as pounds of VOC per gallon of coating solids. This is determined by subparagraph (5)(C)1.B. of this rule;

 C_S = total daily gallons of coatings solids used in a surface coating unit; and

n = number of coatings used in a surface coating unit.

C. The daily mass-weighted average VOC content of all coatings used in a surface coating unit, expressed as pounds of VOC per pound of coating solids, shall be calculated using Equation (7) as follows:

$$DAVG_{MWS} = \frac{\sum_{i=1}^{n} (A_{MWS_i} \times B_{MWS_i})}{C_{MWS}}$$
(7)

Where

 $DAVG_{MWS}$ = daily mass-weighted average VOC content, expressed as pounds of VOC per pound of coating solids;

 ${\bf A}_{\rm MWS}$ = daily pounds of coating solids for each coating used in a surface coating unit;

 $B_{\rm MWS} = {
m VOC}$ content of the coating as applied, expressed as pounds of VOC per pound of coating solids. This is determined by subparagraph (5)(C)1.C. of this rule;

 $C_{\mbox{\scriptsize MWS}}$ = total daily pounds of coatings solids used in a surface coating unit; and

n = number of coatings used in a surface coating unit.

D. The monthly volume-weighted average VOC emission rate of an electrodeposition primer, expressed as pounds of VOC per gallon of coating solids deposited, shall be determined using Equation (8) as follows:

$$MAVG_{VWS} = \underbrace{\begin{bmatrix} \sum_{i=1}^{n} L_{C_{i}} D_{C_{i}} W_{O_{i}} + \sum_{j=1}^{m} L_{D_{j}} D_{D_{j}} \\ \sum_{i=1}^{n} L_{C_{i}} V_{S_{i}} \end{bmatrix}}_{N} \times [1-E/100]$$
(8)

Where:

 $MAVG_{VWS}$ = monthly volume-weighted average VOC emission rate of the electrodeposition primer, expressed as pounds of VOC per gallon of coating solids deposited;

 \bar{L}_{C} = monthly volume of each coating consumed, as received, expressed as gallons;

 $\mathbf{D}_{\mathbf{C}}=$ density of each coating as received, expressed as pounds per gallon:

 $\overline{W_0}$ = weight fraction of VOC in each coating, as received;

 L_D = monthly volume of each type of VOC dilution solvent added to the coating, expressed as gallons;

 $\mathbf{D}_{\mathbf{D}} = \text{density of each type of VOC dilution solvent added to the coating, expressed as pounds per gallon;}$

 V_S = volume faction of solids in each coating as received, expressed as gallons of solids per gallon of coating;

E = overall control system efficiency;

n = number of coatings used; and

m = number of VOC dilution solvents used.

E. The monthly volume-weighted average VOC content of all coatings used in a surface coating unit, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds), shall be calculated using Equation (9) as follows:

$$MAVG_{VW} = \frac{\sum_{i=1}^{n} (A_i \times B_i)}{C}$$
(9)

Where:

 $MAVG_{VW} = monthly volume-weighted average VOC content as applied, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds);$

A = monthly gallons of each coating used (minus water and exempt compounds) in a surface coating unit;

B = VOC content of the coating as applied, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds), as delivered to the coating applicator. This is determined by subparagraph (5)(C)1.A. of this rule;

C = total monthly gallons of coatings used (minus water and exempt compounds) in a surface coating unit; and

n = number of coatings used in a surface coating unit.

4. The required control system efficiency shall be determined using Equation (10) as follows:

$$R = \frac{\overline{(DAVG_{VWS} - L_S)}}{DAVG_{VWS}} \times 100 \tag{10}$$

Where:

R = required control system efficiency;

 $\mathrm{DAVG}_{\mathrm{VWS}}=$ daily volume-weighted average VOC content of all coatings used in a surface coating unit, expressed as pounds of VOC per gallon of coating solids, per subparagraph (5)(C)3.B. of this rule; and

 L_S = emission limits expressed as pounds of VOC per gallon of coating solids, per paragraph (5)(C)2. of this rule.

AUTHORITY: section 643.050, RSMo Supp. [1999] 2010. Original rule filed Dec. 15, 1978, effective July 12, 1979. For intervening history, please consult the Code of State Regulations. Amended: Filed Nov. 30, 2010.

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate.

PRIVATE COST: This proposed amendment will cost private entities \$2,280,500 in the aggregate. This consists of a one (1)-time initial capital cost of one hundred fifty thousand dollars (\$150,000) and two hundred thirteen thousand fifty dollars (\$213,050) in annualized costs

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COM-MENTS: A public hearing on this proposed amendment will begin at 9:00 a.m., March 31, 2011. The public hearing will be held at Elm Street Conference Center, 1730 East Elm Street, Lower Level, Bennett Springs Conference Room, Jefferson City, Missouri. Opportunity to be heard at the hearing shall be afforded any interested person. Interested persons, whether or not heard, may submit a written or email statement of their views until 5:00 p.m., April 7, 2011. Written comments shall be sent to Chief, Air Quality Planning Section, Missouri Department of Natural Resources' Air Pollution Control Program, PO Box 176, Jefferson City, MO 65102-0176. Email comments shall be sent to apcprulespn@dnr.mo.gov.