Under 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."

Entirely 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 If an existing rule is to be amended or rescinded, it will have a heading of proposed amendment or proposed rescission.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.

An 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*.

An 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 4—DEPARTMENT OF ECONOMIC DEVELOPMENT
Division 240—Public Service Commission
Chapter 2—Practice and Procedure

PROPOSED AMENDMENT

4 CSR 240-2.080 Pleadings, Filing, and Service. The commission is amending sections (8) and (11)–(21), deleting section (10), and renumbering sections (11)–(21).

PURPOSE: These amendments allow parties before the Missouri Public Service Commission to make filings in an electronic format. The amendments eliminate the requirement for parties to file multiple paper copies if the party chooses to file in an electronic format. The amendments also allow for service between parties by electronic means. The amendment to former section (12) clarifies the time when a pleading or brief shall be officially stamped "filed" by the commission. Finally, former section (10) is deleted because it is redundant and the remaining sections are renumbered.

(8) Any person filing a pleading or a brief shall file with the secretary of the commission **either:**

(A) *[o]***O**ne (1) **paper** original and eight (8) **paper** copies of the pleading**; or**

(B) An electronic copy of the pleading or brief as permitted elsewhere in these rules.

[(10) Any person filing a pleading which initiates a formal complaint at the commission or filing a pleading in a formal complaint case shall file one (1) original or duplicate original and eight (8) copies of the pleading with the secretary of the commission unless otherwise ordered by the commission.]

[(11)] **(10)** The party filing a pleading or brief shall serve each other party a copy of the pleading or brief and cover letter. Any party may contact the secretary of the commission for the names and addresses of the parties in a case.

[(12)] **(11)** The date of filing shall be the date the pleading or brief is stamped filed by the secretary of the commission. **Pleadings or briefs received after 4:00 p.m. will be stamped filed the next day the commission is regularly open for business.**

[(13)] **(12)** Pleadings and briefs in every instance shall display on the cover or first page the case number and the title of the case. In the event the title of a case contains more than one (1) name as applicants, complainants or respondents, it shall be sufficient to show only the first of these names as it appears in the first document commencing the case, followed by an appropriate abbreviation (et al.) indicating the existence of other parties. Unless a case is consolidated, pleadings or briefs shall be filed with only one (1) case number and title thereon.

[(14)] **(13)** Pleadings and briefs **that are not electronically filed** shall be bound at the top or at an edge, shall be typewritten or printed upon white, eight and one-half by eleven-inch (8 1/2" × 11") paper. Attachments to pleadings or briefs shall be annexed and folded to eight and one-half by eleven-inch (8 1/2" × 11") size whenever practicable. Printing on both sides of the page is encouraged. Lines shall be double-spaced, except that footnotes and quotations in excess of three (3) lines may be single-spaced. Reproduction of any of these documents may be by any process provided all copies are clear and permanently legible. **Electronically filed pleadings or briefs shall be formatted in the same manner as paper filings.**

[(15)] **(14)** Pleadings and briefs which are not in substantial compliance with this rule, applicable statutes or commission orders shall not be accepted for filing. **In addition, filings will be scanned for computer viruses before being uploaded into the commission's electronic system and may not be accepted if the filing is infected.** The secretary of the commission may return these pleadings or briefs with a concise explanation of the deficiencies and the reasons for not accepting them for filing. Tendered filings which have been rejected shall not be entered on the commission's docket. The mere fact of filing shall not constitute a waiver of any noncompliance with these rules and the commission may require amendment of a pleading or entertain appropriate motions in connection with the pleading.

[(16)] **(15)** Parties shall be allowed not more than ten (10) days from the date of filing in which to respond to any pleading unless otherwise ordered by the commission.

[(17)] **(16)** Any party seeking expedited treatment in any case shall include in the title of the pleading the words "Motion for Expedited Treatment." The pleading shall also set out with particularity the following:

(A) The date by which the party desires the commission to act;

(B) The harm that will be avoided, or the benefit that will accrue, including a statement of the negative effect, or that there will be no negative effect, on the party's customers or the general public, if the commission acts by the date desired by the party; and

(C) That the pleading was filed as soon as it could have been or an explanation why it was not.

[(18)] **(17)** Methods of Service.

(A) Any person entitled by law may serve a document on a represented party by—

1. Delivering it to the party's attorney;

2. Leaving it at the office of the party's attorney with a secretary, clerk or attorney associated with or employed by the attorney served;

3. Mailing it to the last known address of the party's attorney; *[or]*

4. *[Facsimile transmission to the current facsimile machine of]* **Transmitting it by facsimile machine to** the party's attorney*[.]***; or**

5. Transmitting it to the e-mail address of the party's attorney.

(B) Any person entitled by law may serve a document on an unrepresented party by—

1. Delivering it to the party; or

2. Mailing it to the party's last known address.

(C) Completion of Service.

1. Service by mail is complete upon mailing.

2. Service by facsimile transmission is complete upon actual receipt.

3. Service by electronic mail is complete upon actual receipt.

[(19)] **(18)** Unless otherwise provided by these rules or by other law, the party filing a pleading or brief shall serve every other party, including the general counsel and the public counsel, a copy of the pleading or brief and cover letter.

[(20)] **(19)** Every pleading or brief shall include a certificate of service. Such certificate of service shall be adequate proof of service.

[(21)] **(20)** Any pleading may be amended within ten (10) days of filing, unless a responsive pleading has already been filed, or at any time by leave of the commission.

*AUTHORITY: section 386.410, RSMo [Supp. 1998] **2000**. Original rule filed Dec. 19, 1975, effective Dec. 29, 1975. Amended: Filed May 15, 1980, effective Sept. 12, 1980. Amended: Filed Nov. 7, 1984, effective June 15, 1985. Amended: Filed Sept. 6, 1985, effective Dec. 15, 1985. Amended: Filed Feb. 23, 1990, effective May 24, 1990. Rescinded and readopted: Filed March 10, 1995, effective Nov. 30, 1995. Rescinded and readopted: Filed Aug. 24, 1999, effective April 30, 2000. Amended: Filed Sept. 11, 2001.*

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 the Missouri Public Service Commission, Dale Hardy Roberts, Secretary, PO Box 360, Jefferson City, MO 65102. To be considered, comments must be received within thirty (30) days after publication of this notice in the **Missouri Register**. Comments should refer to Case No. AX-2002-66 and be filed with an original and six (6) copies. No public hearing is scheduled.*

Title 4—DEPARTMENT OF ECONOMIC DEVELOPMENT
Division 240—Public Service Commission
Chapter 2—Practice and Procedure

PROPOSED AMENDMENT

4 CSR 240-2.130 Evidence. The commission is amending sections (1), (5), (6), (10), (13) and (17).

PURPOSE: These amendments allow parties before the Missouri Public Service Commission to make filings in an electronic format. The amendments also eliminate some paper copies where they are no longer necessary. The amendment to section (13) clarifies how an exhibit filed after a hearing should be submitted. Sections (1), (5), (6), and (13) have been amended for clarity and for grammatical purposes.

(1) In any hearing, **these rules supplement** section 536.070, RSMo*[shall apply, as supplemented by these rules]*.

(5) The rules of privilege *[shall be]* **are** effective to the same extent that they are *[now or may hereafter be]* in civil actions.

(6) Prepared testimony **may be filed electronically. If prepared testimony is not filed electronically it** shall be typed or printed, in black type on white paper eight and one-half inches by eleven inches (8 1/2" × 11"); it shall be double-spaced and pages numbered consecutively at the bottom right-hand corner or bottom center beginning with the first page as page 1; it shall be filed unfolded and stapled together at the top left-hand margin or bound at an edge in booklet form; and it shall *[be filed in sufficient number of copies as required by order of the commission, observing]* **have** the following margins: left-hand margin, one inch (1"); top margin, one inch (1"); right-hand margin, one inch (1"); and bottom margin, one inch (1"). Printing on both sides of the page is encouraged. Schedules shall bear the word "schedule" and the number of the schedule shall be typed in the lower right-hand margin of the first page of the schedule. All prepared testimony and other exhibits and schedules shall contain the following information in the following format on the upper right-hand corner of a cover sheet:

Exhibit No.:	(To be marked by the hearing reporter)
Issue:	(If known at the time of filing)
Witness:	(Full name of witness)
Type of Exhibit:	(Specify whether direct, rebuttal, or other type of exhibit)
Sponsoring Party:	
Case No.:	
Date Testimony Prepared:	

The prepared testimony of each witness shall be filed separately and shall be accompanied by an affidavit providing the witness' oath. Prepared testimony shall be filed on line-numbered pages. Testimony *[which]* **that** addresses more than one (1) issue shall contain a table of contents. **Electronically filed prepared**

testimony shall be formatted and labeled in the same manner as paper filings.

(10) Exhibits shall be legible and, unless otherwise authorized by the commission **or filed electronically**, shall be prepared on standard eight and one-half by eleven inch (8 1/2" × 11")-size paper. The sheets of each exhibit shall be numbered and rate comparisons and other figures shall be set forth in tabular form.

(13) **Unless the presiding officer directs otherwise,** *[W]***w**hen exhibits **that have not previously been filed** are offered in evidence, the original *[and two (2) copies]* shall be furnished to the reporter, and the party offering exhibits also shall be prepared to furnish a copy to each commissioner *[and]***, the** presiding officer and each party*[, unless the copies have previously been furnished or the presiding officer directs otherwise]*.

(17) All *[late filed]* **post-hearing** exhibits shall be *[submitted by simultaneously providing a copy to all parties, and by submitting an original and eight (8) copies to the presiding officer]* **filed with the secretary of the commission in compliance with 4 CSR 240-2.080**. Unless otherwise ordered, any objection to the admission of a *[late filed]* **post-hearing** exhibit must be filed within ten (10) days of the date the exhibit was *[tendered]* **filed**.

AUTHORITY: section 386.410, RSMo [Supp. 1998] 2000. Original rule filed Dec. 19, 1975, effective Dec. 29, 1975. Amended: Filed Nov. 6, 1981, effective Feb. 15, 1982. Amended: Filed Nov. 7, 1984, effective June 15, 1985. Amended: Filed June 9, 1987, effective Nov. 12, 1987. Amended: Filed Feb. 23, 1990, effective May 24, 1990. Rescinded and readopted: Filed March 10, 1995, effective Nov. 30, 1995. Rescinded and readopted: Filed Aug. 24, 1999, effective April 30, 2000. Amended: Filed Sept. 11, 2001.

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 the Missouri Public Service Commission, Dale Hardy Roberts, Secretary, PO Box 360, Jefferson City, MO 65102. To be considered, comments must be received within thirty (30) days after publication of this notice in the ***Missouri Register****. Comments should refer to Case No. AX-2002-67 and be filed with an original and six (6) copies. No public hearing is scheduled.*

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 10-5.300 Control of Emissions From Solvent Metal Cleaning. The commission proposes to amend section (2) and subsection (3)(B), add new subsection (3)(C) that includes original sections (4) and (5), add new subsection (3)(D) that includes original section (6), amend sections (4) and (5) and delete sections (7) and (8). If the commission adopts this rule action, it will be submitted to the U.S. Environmental Protection Agency to replace the current rule in the Missouri State Implementation Plan.

PURPOSE: This rule amendment will exempt paint spray gun cleaning except remote open top paint spray gun cleaning machines. All remote paint spray gun cleaning machines will be required to be operated per the manufacturer's operating instructions and to be closed or covered when not in use to help eliminate fugitive emissions. The evidence supporting the need for this proposed rulemaking, per section 536.016, RSMo, is correspondence from industry that resulted in this change.

(2) Definitions.

(A) Airless cleaning system—A degreasing machine that is automatically operated and seals at a differential pressure of 25 torr (25.0 millimeters of Mercury (mmHg) (0.475 pounds per square inch (psi)) or less, prior to the introduction of solvent vapor into the cleaning chamber and maintains differential pressure under vacuum during all cleaning and drying cycles.

(B) Air-tight cleaning system—A degreasing machine that is automatically operated and seals at a differential pressure no greater than 0.5 pounds per square inch gauge (psig) during all cleaning and drying cycles.

(C) Aqueous solvent—Any solvent consisting of sixty percent (60%) or more by volume water with a flashpoint greater than ninety-three degrees Celsius (93°C)(one hundred ninety-nine point four degrees Fahrenheit (199.4°F)) and is miscible with water.

(D) Electronic components—All portions of an electronic assembly, including, but not limited to, circuit board assemblies, printed wire assemblies, printed circuit boards, soldered joints, ground wires, bus bars, and associated electronic component manufacturing equipment such as screens and filters.

(E) Freeboard area—The air space in a batch-load cold cleaner that extends from the liquid surface to the top of the tank.

(F) Freeboard height—

1. The distance from the top of the solvent to the top of the tank for batch-loaded cold cleaners;

2. The distance from the air-vapor interface to the top of the tank for open-top vapor degreasers; or

3. The distance from either the air-solvent or air-vapor interface to the top of the tank for conveyorized degreasers.

(G) Freeboard ratio—The freeboard height divided by the smaller of either the inside length or inside width of the degreaser.

(H) Medical device—An instrument, apparatus, implement, machine, contrivance, implant, *in vitro* reagent or other similar article, including any component or accessory that meets one (1) of the following conditions:

1. It is intended for use in the diagnosis of disease or other conditions, or in the cure, mitigation, treatment, or prevention of disease;

2. It is intended to affect the structure or any function of the body; or

3. It is defined in the *National Formulary* or the *United States Pharmacopoeia*, or any supplement to them.

[(2)] **(I)** Definitions of certain terms specified in this rule**, other than those specified in this rule section,** may be found in 10 CSR 10-6.020.

(3) General Provisions.

[(B) The owner or operator of a solvent metal cleaning or degreasing operation shall keep monthly inventory records of solvent types and amounts purchased and solvent consumption for a period of two (2) years. These records shall include all types and amounts of solvent containing waste material transferred to either a contract reclamation service or to a disposal facility and all amounts distilled on the premises. The records also shall

include maintenance and repair logs for both the degreaser and any associated control equipment. The director may require further recordkeeping if necessary to adequately demonstrate compliance with this rule. All these records shall be made available to the director upon his/her request.]

(B) Equipment Specifications.

1. Cold cleaners.

A. After September 30, 1998—

(I) No owner or operator shall allow the operation of any cold cleaner using a cold cleaning solvent with a vapor pressure greater than 2.0 millimeters of Mercury (mmHg) (0.038 psi) at twenty degrees Celsius (20°C) (sixty-eight degrees Fahrenheit (68°F)) unless the cold cleaner is used for carburetor cleaning;

(II) No supplier of cold cleaning solvents shall sell or offer for sale any cold cleaning solvent with a vapor pressure greater than 2.0 mmHg (0.038 psi) at twenty degrees Celsius (20°C)(sixty-eight degrees Fahrenheit (68°F)) for use within the city of St. Louis and St. Charles, St. Louis, Jefferson and Franklin Counties, unless the cold cleaning solvent is used for carburetor cleaning;

(III) No owner or operator shall allow the operation of any cold cleaner using a cold cleaning solvent for the purpose of carburetor cleaning with a vapor pressure greater than 7.0 mmHg (0.133 psi) at twenty degrees Celsius (20°C)(sixty-eight degrees Fahrenheit (68°F)); and

(IV) No supplier of cold cleaning solvents shall sell or offer for sale any cold cleaning solvent for the purpose of carburetor cleaning with a vapor pressure greater than 7.0 mmHg (0.133 psi) at twenty degrees Celsius (20°C)(sixty-eight degrees Fahrenheit (68°F)) for use within the city of St. Louis and St. Charles, St. Louis, Jefferson and Franklin Counties.

B. After April 1, 2001—

(I) No owner or operator shall operate or allow the operation of any cold cleaner using a cold cleaning solvent with a vapor pressure greater than 1.0 mmHg (0.019 psi) at twenty degrees Celsius (20°C)(sixty-eight degrees Fahrenheit (68°F)) unless the cold cleaner is used for carburetor cleaning;

(II) No supplier of cold cleaning solvents shall sell or offer for sale any cold cleaning solvent with a vapor pressure greater than 1.0 mmHg (0.019 psi) at twenty degrees Celsius (20°C)(sixty-eight degrees Fahrenheit (68°F)) for use within the city of St. Louis and St. Charles, St. Louis, Jefferson and Franklin Counties, unless the cold cleaning solvent is used for carburetor cleaning;

(III) No owner or operator shall allow the operation of any cold cleaner using a cold cleaning solvent for the purpose of carburetor cleaning with a vapor pressure greater than 5.0 mmHg (0.095 psi) at twenty degrees Celsius (20°C)(sixty-eight degrees Fahrenheit (68°F)); and

(IV) No supplier of cold cleaning solvents shall sell or offer for sale any cold cleaning solvent for the purpose of carburetor cleaning with a vapor pressure greater than 5.0 mmHg (0.095 psi) at twenty degrees Celsius (20°C) (sixty-eight degrees Fahrenheit (68°F)) for use within the city of St. Louis and St. Charles, St. Louis, Jefferson and Franklin Counties.

C. Each cold cleaner shall have a cover which will prevent the escape of solvent vapors from the solvent bath while in the closed position or an enclosed reservoir which will limit the escape of solvent vapors from the solvent bath whenever parts are not being processed in the cleaner.

D. Exemptions.

(I) Sales of cold cleaning solvents in quantities of five (5) gallons or less shall be exempt from the requirements of parts (3)(B)1.A.(II), (3)(B)1.A.(IV), (3)(B)1.B.(II) and (3)(B)1.B.(IV) of this rule.

(II) The cleaning of electronic components shall be exempt from the requirements of parts (3)(B)1.A.(I) and (3)(B)1.B.(I) of this rule.

(III) Solvent cleaning operations which meet the emission control requirements of 10 CSR 10-5.330, 10 CSR 10-5.340 or 10 CSR 10-5.442 shall be exempt from the requirements of parts (3)(B)1.A.(I) and (3)(B)1.B.(I) of this rule.

(IV) Cold cleaners using aqueous solvents shall be exempt from the requirements of parts (3)(B)1.A.(I), (3)(B)1.A.(III), (3)(B)1.B.(I) and (3)(B)1.B.(III) of this rule.

(V) Cold cleaners using solvents regulated under any federal National Emission Standard for Hazardous Air Pollutants shall be exempt from the requirements of parts (3)(B)1.A.(I), (3)(B)1.A.(III), (3)(B)1.B.(I) and (3)(B)1.B.(III) of this rule.

(VI) Any cold cleaner with a liquid surface area of one (1) square foot or less or a maximum capacity of one (1) gallon or less shall be exempt from the requirements of parts (3)(B)1.A.(I) and (3)(B)1.B.(I) of this rule.

(VII) The cleaning of medical and optical devices shall be exempt from the requirements of parts (3)(B)1.A.(I) and (3)(B)1.B.(I) of this rule.

(VIII) Air-tight or airless cleaning systems shall be exempt from the requirements of parts (3)(B)1.A.(I) and (3)(B)1.B.(I) of this rule if the following requirements are met:

(a) The equipment is operated in accordance with the manufacturer's specifications and operated with a door or other pressure sealing apparatus that is in place during all cleaning and drying cycles;

(b) All waste solvents are stored in properly identified and sealed containers, and managed in compliance with the Missouri Hazardous Waste Management Commission rules codified at 10 CSR 25, as applicable. All associated pressure relief devices shall not allow liquid solvents to drain out;

(c) Spills during solvent transfer shall be wiped up immediately and managed in compliance with the Missouri Hazardous Waste Commission rules codified at 10 CSR 25, as applicable, and the used wipe rags shall be stored in closed containers; and

(d) A differential pressure gauge shall be installed to indicate the sealed chamber pressure.

(IX) Janitorial and institutional cleaning shall be exempt from the requirements of parts (3)(B)1.A.(I) and (3)(B)1.B.(I) of this rule.

(X) Paint spray gun and nozzle cleaning machines with the exception of remote open top spray gun cleaning machines shall be exempt from the requirements of parts (3)(B)1.A.(I) and (3)(B)1.B.(I) of this rule. Paint spray guns and nozzles only may be cleaned in solvent-based materials capable of stripping hardened paint for cleaning, provided the solvent container (not to exceed five (5) gallons in size) is kept tightly covered at all times except when being accessed. All remote paint spray gun cleaning machines shall be operated within the manufacturer's specifications. All remote closed top spray gun cleaning machines shall not be operated unless the cover is closed and shall be closed or covered when not in use.

E. An owner or operator of a cold cleaner may use an alternate method for reducing cold cleaning emissions if the owner or operator shows the level of emission control is equivalent to or greater than the requirements of parts (3)(B)1.A.(I), (3)(B)1.A.(III), (3)(B)1.B.(I) and (3)(B)1.B.(III) of this rule. This alternate method must be approved by the director.

F. When one (1) or more of the following conditions exist, the design of the cover shall be such that it can be easily operated with one (1) hand such that minimal disturbing of the solvent vapors in the tank occurs. (For covers larger than ten (10) square feet, this shall be accomplished by either mechanical

assistance such as spring loading or counter weighing or by power systems):

(I) The solvent volatility is greater than 0.3 psi measured at thirty-seven point eight degrees Celsius (37.8°C) (one hundred degrees Fahrenheit (100°F)), such as in mineral spirits;

(II) The solvent is agitated; or

(III) The solvent is heated.

G. Each cold cleaner shall have a drainage facility which will be internal so that parts are enclosed under the cover while draining.

H. If an internal drainage facility cannot fit into the cleaning system and the solvent volatility is less than 0.6 psi measured at thirty-seven point eight degrees Celsius (37.8°C) (one hundred degrees Fahrenheit (100°F)), then the cold cleaner shall have an external drainage facility which provides for the solvent to drain back into the solvent bath.

I. Solvent sprays, if used, shall be a solid fluid stream (not a fine, atomized or shower-type spray) and at a pressure which does not cause splashing above or beyond the freeboard.

J. A permanent conspicuous label summarizing the operating procedures shall be affixed to the equipment.

K. Any cold cleaner which uses a solvent that has a solvent volatility greater than 0.6 psi measured at thirty-seven point eight degrees Celsius (37.8°C) (one hundred degrees Fahrenheit (100°F)) or heated above forty-eight point nine degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)) must use one (1) of the following control devices:

(I) A freeboard ratio of at least 0.75;

(II) Water cover (solvent must be insoluble in and heavier than water); or

(III) Other control systems with a mass balance demonstrated overall VOC emissions reduction efficiency greater than or equal to sixty-five percent (65%). These control systems must receive approval from the director prior to their use.

2. Open-top vapor degreasers.

A. Each open-top vapor degreaser shall have a cover which will prevent the escape of solvent vapors from the degreaser while in the closed position and shall be designed to open and close easily with one (1) hand such that minimal disturbing of the solvent vapors in the tank occurs. For covers larger than ten (10) square feet, easy cover use shall be accomplished by either mechanical assistance, such as spring loading or counter weighing or by power systems.

B. Each open-top vapor degreaser shall be equipped with a vapor level safety thermostat with a manual reset which shuts off the heating source when the vapor level rises above the cooling or condensing coil, or an equivalent safety device approved by the director.

C. Each open-top vapor degreaser with an air/vapor interface over ten and three-fourths (10 3/4) square feet shall be equipped with at least one (1) of the following control devices:

(I) A freeboard ratio of at least 0.75;

(II) A refrigerated chiller;

(III) An enclosed design (the cover or door opens only when the dry part actually is entering or exiting the degreaser);

(IV) A carbon adsorption system with ventilation of at least fifty (50) cubic feet per minute per square foot of air vapor area when the cover is open and exhausting less than twenty-five parts per million (25 ppm) of solvent by volume averaged over one (1) complete adsorption cycle as measured using the reference method specified at 10 CSR 10-6.030(14)(A); or

(V) A control system with a mass balance demonstrated overall VOC emissions reduction efficiency greater than or equal to sixty-five percent (65%) and prior approval by the director.

D. A permanent conspicuous label summarizing the operating procedures shall be affixed to the equipment.

3. Conveyorized degreasers.

A. Each conveyorized degreaser shall have a drying tunnel or rotating (tumbling) basket or other means demonstrated to have equal to or better control which shall be used to prevent cleaned parts from carrying out solvent liquid or vapor.

B. Each conveyorized degreaser shall have the following safety switches or equivalent safety devices approved by the director which operate if the machine malfunctions:

(I) A vapor level safety thermostat with manual reset which shuts off the heating source when the vapor level rises just above the cooling or condensing coil; and

(II) A spray safety switch, which shuts off the spray pump if the vapor level in the spray chamber drops four inches (4"), for conveyorized degreasers utilizing a spray chamber.

C. Entrances and exits shall silhouette work loads so that the average clearance between parts and the edge of the degreaser opening is less than four inches (4") or less than ten percent (10%) of the width of the opening.

D. Covers shall be provided for closing off the entrance and exit during hours when the degreaser is not being used.

E. A permanent, conspicuous label summarizing the operating procedures shall be affixed to the equipment.

F. If the air/vapor interface is larger than twenty-one and one-half (21 1/2) square feet, one (1) major control device shall be required. This device shall be one (1) of the following:

(I) A refrigerated chiller;

(II) Carbon adsorption system with ventilation of at least fifty (50) cubic feet per minute per square foot of the total entrance and exit areas (when downtime covers are open) and exhausting less than twenty-five (25) ppm of solvent by volume averaged over one (1) complete adsorption cycle as measured using the reference method specified at 10 CSR 10-6.030(14)(A); or

(III) A control system with a mass balance demonstrated overall VOC emissions reduction efficiency greater than or equal to sixty-five percent (65%) and prior approval by the director.

(C) Operating Procedures.

1. Cold cleaners.

A. Cold cleaner covers shall be closed whenever parts are not being handled in the cleaners or the solvent must drain into an enclosed reservoir.

B. Cleaned parts shall be drained in the freeboard area for at least fifteen (15) seconds or until dripping ceases, whichever is longer.

C. Whenever a cold cleaner fails to perform within the operating parameters established for it by this rule, the unit shall be shut down immediately and shall remain shut down until trained service personnel are able to restore operation within the established parameters.

D. Solvent leaks shall be repaired immediately or the degreaser shall be shut down until the leaks are repaired.

E. Any waste material removed from a cold cleaner shall be disposed of by one (1) of the following methods and in accordance with the Missouri Hazardous Waste Management Commission rules codified at 10 CSR 10-25, as applicable:

(I) Reduction of the waste material to less than twenty percent (20%) VOC solvent by distillation and proper disposal of the still bottom waste; or

(II) Stored in closed containers for transfer to—

(a) A contract reclamation service; or

(b) A disposal facility approved by the director.

F. Waste solvent shall be stored in covered containers only.

2. Open-top vapor degreasers.

A. The cover shall be kept closed at all times except when processing workloads through the degreaser.

B. Solvent carry-out shall be minimized in the following ways:

(I) Parts shall be racked, if practical, to allow full drainage;

(II) Parts shall be moved in and out of the degreaser at less than eleven feet (11') per minute;

(III) Workload shall remain in the vapor zone at least thirty (30) seconds or until condensation ceases;

(IV) Pools of solvent shall be removed from cleaned parts before removing parts from the degreaser freeboard area; and

(V) Cleaned parts shall be allowed to dry within the degreaser freeboard area for at least fifteen (15) seconds or until visually dry, whichever is longer.

C. Porous or absorbent materials such as cloth, leather, wood or rope shall not be degreased.

D. If workloads occupy more than half of the degreaser's open-top area, rate of entry and removal shall not exceed five feet (5') per minute.

E. Spray shall never extend above vapor level.

F. Whenever an open-top vapor degreaser fails to perform within the operating parameters established for it by this rule, the unit shall be shut down until trained service personnel are able to restore operation within the established parameters.

G. Solvent leaks shall be repaired immediately or the degreaser shall be shut down until the leaks are repaired.

H. Ventilation exhaust shall not exceed sixty-five (65) cubic feet per minute per square foot of degreaser open area unless proof is submitted that it is necessary to meet Occupational Safety and Health Administration (OSHA) requirements. Fans shall not be used near the degreaser opening.

I. Water shall not be visually detectable in solvent exiting the water separator.

J. Any waste material removed from an open-top vapor degreaser shall be disposed of by one (1) of the following methods or equivalent and in accordance with the Missouri Hazardous Waste Management Commission rules codified at 10 CSR 10-25, as applicable:

(I) Reduction of the waste material to less than twenty percent (20%) VOC solvent by distillation and proper disposal of the still bottom waste; or

(II) Stored in closed containers for transfer to—

(a) A contract reclamation service; or

(b) A disposal facility approved by the director.

K. Waste solvent shall be stored in closed containers only.

3. Conveyorized degreasers.

A. Ventilation exhaust shall not exceed sixty-five (65) cubic feet per minute per square foot of degreaser opening unless proof is submitted that it is necessary to meet OSHA requirements. Fans shall not be used near the degreaser opening.

B. Solvent carry-out shall be minimized in the following ways:

(I) Parts shall be racked, if practical, to allow full drainage; and

(II) Vertical conveyor speed shall be maintained at less than eleven feet (11') per minute.

C. Whenever a conveyorized degreaser fails to perform within the operating parameters established for it by this rule, the unit shall be shut down immediately and shall remain shut down until trained service personnel are able to restore operation within the established parameters.

D. Solvent leaks shall be repaired immediately or the degreaser shall be shut down until the leaks are repaired.

E. Water shall not be visually detectable in solvent exiting the water separator.

F. Covers shall be placed over entrances and exits immediately after conveyor and exhaust are shut down and removed just before they are started up.

G. Waste solvent shall be stored in closed containers only.

H. Any waste material removed from a conveyorized degreaser shall be disposed of by one (1) of the following methods or equivalent and in accordance with the Missouri Hazardous Waste Management Commission rules codified at 10 CSR 10-25, as applicable:

(I) Reduction of the waste material to less than twenty percent (20%) VOC solvent by distillation and proper disposal of the still bottom waste; or

(II) Stored in closed containers for transfer to—

(a) A contract reclamation service; or

(b) A disposal facility approved by the director.

(D) Operator and Supervisor Training.

1. Only persons trained in at least the operational and equipment requirements specified in this rule for their particular solvent metal cleaning process shall be permitted to operate the equipment.

2. The supervisor of any person who operates a solvent metal cleaning process shall receive equal or greater operational training than the operator.

3. Refresher training shall be given to all solvent metal cleaning equipment operators at least once each twelve (12) months.

4. Training records shall be maintained per subsections (4)(D) and (4)(E) of this rule.

(4) *[Equipment Specifications]* **Reporting and Record Keeping**.

(A) *[Cold Cleaners.]* **The owner or operator of a solvent metal cleaning or degreasing operation shall keep monthly records of solvent types and amounts purchased and solvent consumed. These records shall include all types and amounts of solvents containing waste material transferred either to a contract reclamation service or to a disposal facility and all amounts distilled on the premises. The records also shall include maintenance and repair logs for both the degreaser and any associated control equipment. The director may require additional record keeping if necessary to adequately demonstrate compliance with this rule.**

[1. After September 30, 1998—

A. No owner or operator shall allow the operation of any cold cleaner using a cold cleaning solvent with a vapor pressure greater than 2.0 millimeters of Mercury (mmHg) (0.038 pounds per square inch (psi)) at twenty degrees Celsius (20°C) (sixty-eight degrees Fahrenheit (68°F)) unless the cold cleaner is used for carburetor cleaning;

B. No supplier of cold cleaning solvents shall sell or offer for sale any cold cleaning solvent with a vapor pressure greater than 2.0 mmHg (0.038 psi) at 20°C (68°F) for use within the city of St. Louis and St. Charles, St. Louis, Jefferson and Franklin Counties unless the cold cleaning solvent is used for carburetor cleaning;

C. No owner or operator shall allow the operation of any cold cleaner using a cold cleaning solvent for the purpose of carburetor cleaning with a vapor pressure greater than 7.0 mmHg (0.133 psi) at 20°C (68°F); and

D. No supplier of cold cleaning solvents shall sell or offer for sale any cold cleaning solvent for the purpose of

carburetor cleaning with a vapor pressure greater than 7.0 mmHg (0.133 psi) at 20°C (68°F) for use within the city of St. Louis and St. Charles, St. Louis, Jefferson and Franklin Counties.

2. After April 1, 2001—

A. No owner or operator shall operate or allow the operation of any cold cleaner using a cold cleaning solvent with a vapor pressure greater than 1.0 mmHg (0.019 psi) at 20°C (68°F) unless the cold cleaner is used for carburetor cleaning;

B. No supplier of cold cleaning solvents shall sell or offer for sale any cold cleaning solvent with a vapor pressure greater than 1.0 mmHg (0.019 psi) at 20°C (68°F) for use within the city of St. Louis and St. Charles, St. Louis, Jefferson and Franklin Counties unless the cold cleaning solvent is used for carburetor cleaning;

C. No owner or operator shall allow the operation of any cold cleaner using a cold cleaning solvent for the purpose of carburetor cleaning with a vapor pressure greater than 5.0 mmHg (0.095 psi) at 20°C (68°F); and

D. No supplier of cold cleaning solvents shall sell or offer for sale any cold cleaning solvent for the purpose of carburetor cleaning with a vapor pressure greater than 5.0 mmHg (0.095 psi) at 20°C (68°F) for use within the city of St. Louis and St. Charles, St. Louis, Jefferson and Franklin Counties.

3. Exemptions.

A. Sales of cold cleaning solvents in quantities of five (5) gallons or less shall be exempt from the requirements of subparagraphs (4)(A)1.B., (4)(A)1.D., (4)(A)2.B. and (4)(A)2.D.

B. The cleaning of electronic components shall be exempt from the requirements of subparagraphs (4)(A)1.A. and (4)(A)2.A. For purposes of this rule, electronic components means all portions of an electronic assembly, including, but not limited to, circuit board assemblies, printed wire assemblies, printed circuit boards, soldered joints, ground wires, bus bars, and associated electronic component manufacturing equipment such as screens and filters.

C. Solvent cleaning operations which meet the emission control requirements of 10 CSR 10-5.330, 10 CSR 10-5.340 and 10 CSR 10-5.442 shall be exempt from the requirements of subparagraphs (4)(A)1.A. and (4)(A)2.A.

D. Cold cleaners using aqueous solvents shall be exempt from the requirements of subparagraphs (4)(A)1.A., (4)(A)1.C., (4)(A)2.C. and (4)(A)2.A. For the purposes of this rule an aqueous solvent shall be any solvent consisting of sixty percent (60%) or more by volume water with a flashpoint greater than 93°C and is miscible with water.

E. Cold cleaners using solvents regulated under any federal National Emission Standard for Hazardous Air Pollutants from the requirements of subparagraphs (4)(A)1.A., (4)(A)1.C., (4)(A)2.C. and (4)(A)2.A.

F. Any cold cleaner with a liquid surface area of one (1) square foot or less or a maximum capacity of one (1) gallon or less from the requirements of subparagraphs (4)(A)1.A. and (4)(A)2.A.

G. The cleaning of medical and optical devices shall be exempt from the requirements of subparagraphs (4)(A)1.A. and (4)(A)2.A. For the purposes of this rule a medical device is an instrument, apparatus, implement, machine, contrivance, implant, in vitro reagent or other similar article, including any component or accessory that meets one (1) of the following conditions:

(I) It is intended for use in the diagnosis of disease or other conditions, or in the cure, mitigation, treatment, or prevention of disease; or

(II) It is intended to affect the structure or any function of the body; or

(III) It is defined in the National Formulary or the United States Pharmacopeia, or any supplement to them.

H. Air-tight or airless cleaning systems shall be exempt from the requirements of subparagraphs (4)(A)1.A. and (4)(A)2.A. if the following requirements are met. For purposes of this rule "airless cleaning system" is a degreasing machine that is automatically operated and seals at a differential pressure of 25 torr or less, prior to the introduction of solvent vapor into the cleaning chamber and maintains differential pressure under vacuum during all cleaning and drying cycles. For purposes of this rule "air-tight cleaning system" is a degreasing machine that is automatically operated and seals at a differential pressure no greater than 0.5 pounds per square inch gauge (psig) during all cleaning and drying cycles.

(I) The equipment is operated in accordance with the manufacturer's specifications and operated with a door or other pressure sealing apparatus that is in place during all cleaning and drying cycles.

(II) All waste solvents are stored in properly identified and sealed containers. All associated pressure relief devices shall not allow liquid solvents to drain out.

(III) Spills during solvent transfer shall be wiped up immediately and the used wipe rags shall be stored in closed containers.

(IV) A differential pressure gauge shall be installed to indicate the sealed chamber pressure.

I. Janitorial and institutional cleaning shall be exempt from the requirements of subparagraphs (4)(A)1.A. and (4)(A)2.A.

4. An owner or operator of a cold cleaner may use an alternate method for reducing cold cleaning emissions if the owner or operator shows the level of emission control is equivalent to or greater than the requirements of subparagraphs (4)(A)1.A., (4)(A)1.C., (4)(A)2.A. and (4)(A)2.C. This alternate method must be approved by the director.

5. Each cold cleaner shall have a cover which will prevent the escape of solvent vapors from the solvent bath while in the closed position or an enclosed reservoir which will limit the escape of solvent vapors from the solvent bath whenever parts are not being processed in the cleaner.

6. When one (1) or more of the following conditions exist, the design of the cover shall be such that it can be easily operated with one (1) hand and without disturbing the solvent vapors in the tank. (For covers larger than ten (10) square feet, this shall be accomplished by either mechanical assistance such as spring loading or counter weighing or by power systems):

A. The solvent volatility is greater than 0.3 psi measured at one hundred degrees Fahrenheit (100°F), such as in mineral spirits;

B. The solvent is agitated; or

C. The solvent is heated.

7. Each cold cleaner shall have a drainage facility which will be internal so that parts are enclosed under the cover while draining.

8. If an internal drainage facility cannot fit into the cleaning system and the solvent volatility is less than 0.6 psi measured at one hundred degrees Fahrenheit (100°F), then the cold cleaner shall have an external drainage

facility which provides for the solvent to drain back into the solvent bath.

9. Solvent sprays, if used, shall be a solid fluid stream (not a fine, atomized or shower-type spray) and at a pressure which does not cause splashing above or beyond the freeboard.

10. A permanent conspicuous label summarizing the operating procedures shall be affixed to the equipment.

11. Any cold cleaner which uses a solvent that has a solvent volatility greater than 0.6 psi measured at one hundred degrees Fahrenheit (100°F) or heated above one hundred twenty degrees Fahrenheit (120°F) must use one (1) of the following control devices:

A. A freeboard ratio of at least 0.75;

B. Water cover (solvent must be insoluble in and heavier than water); or

C. Other control systems with a mass balance demonstrated overall VOC emissions reduction efficiency greater than or equal to sixty-five percent (65%). These control systems must receive approval from the director prior to their use.

12. Record keeping.

A. After September 30, 1998, all persons subject to the requirements of subparagraphs (4)(A)1.A., (4)(A)1.C., (4)(A)2.A., and (4)(A)2.C. of this rule shall maintain records which include for each purchase of cold cleaning solvent:

(I) The name and address of the solvent supplier;

(II) The date of purchase;

(III) The type of solvent; and

(IV) The vapor pressure of the solvent in mmHg at 20°C (68°F).

B. After September 30, 1998, all persons subject to the requirements of subparagraphs (4)(A)1.B., (4)(A)1.D., (4)(A)2.B., and (4)(A)2.D. of this rule shall maintain records which include for each sale of cold cleaning solvent:

(I) The name and address of the solvent purchaser;

(II) The date of sale;

(III) The type of solvent;

(IV) The unit volume of solvent;

(V) The total volume of solvent; and

(VI) The vapor pressure of the solvent measured in mmHg at 20°C (68°F).

C. All records required under paragraph (4)(A)12. shall be retained for two (2) years and shall be made available to the director upon request.]

(B) *[Open-Top Vapor Degreasers.]* **After September 30, 1998, all persons subject to the requirements of parts (3)(B)1.A.(I), (3)(B)1.A.(III), (3)(B)1.B.(I), (3)(B)1.B.(III) shall maintain records which include for each purchase of cold cleaning solvent:**

[1. Each open-top vapor degreaser shall have a cover which will prevent the escape of solvent vapors from the degreaser while in the closed position and shall be designed to open and close easily with one (1) hand and without disturbing the solvent vapors in the tank. For covers larger than ten (10) square feet, easy cover use shall be accomplished by either mechanical assistance such as spring loading or counter weighing or by power systems.]

1. The name and address of the solvent supplier;

[2. Each open-top vapor degreaser shall be equipped with a vapor level safety thermostat with a manual reset, which shuts off the heating source when the vapor level rises above the cooling or condensing coil or equipped with an equivalent safety device approved by the director.]

2. The date of purchase;

[3. Each open-top vapor degreaser with an air/vapor interface over ten and three-fourths (10 3/4) square feet shall be equipped with at least one (1) of the following control devices:]

3. The type of solvent; and

[A. freeboard ratio of at least 0.75;

B. A refrigerated chiller;

C. An enclosed design (the cover or door opens only when the dry part actually is entering or exiting the degreaser);

D. A carbon adsorption system with ventilation of at least fifty (50) cubic feet per minute per square foot of air vapor area when the cover is open and exhausting less than twenty-five parts per million (25 ppm) of solvent by volume averaged over one (1) complete adsorption cycle as measured using the reference method specified at 10 CSR 10-6.030(14)(A); or

E. A control system with a mass balance demonstrated overall VOC emissions reduction efficiency greater than or equal to sixty-five percent (65%) and prior approval by the director.]

4. *[A permanent conspicuous label summarizing the operating procedures shall be affixed to the equipment]* **The vapor pressure of the solvent in mmHg at twenty degrees Celsius (20°C) (sixty-eight degrees Fahrenheit (68°F))**.

(C) *[Conveyorized Degreasers.]* **After September 30, 1998, all persons subject to the requirements of parts (3)(B)1.A.(II), (3)(B)1.A.(IV), (3)(B)1.B.(II), (3)(B)1.B.(IV) shall maintain records which include for each sale of cold cleaning solvent:**

[1. Each conveyorized degreaser shall have a drying tunnel or rotating (tumbling) basket or other means demonstrated to have equal to or better control which shall be used to prevent cleaned parts from carrying out solvent liquid or vapor.]

1. The name and address of the solvent purchaser;

[2. Each conveyorized degreaser shall have the following safety switches or equivalent safety devices approved by the director which operate if the machine malfunctions:]

2. The date of sale;

[A. A vapor level safety thermostat with manual reset which shuts off the heating source when the vapor level rises just above the cooling or condensing coil; and

B. A spray safety switch, which shuts off the spray pump if the vapor level in the spray chamber drops four inches (4"), for conveyorized degreasers utilizing a spray chamber.]

[3. Entrances and exits shall silhouette work loads so that the average clearance between parts and the edge of the degreaser opening is less than four inches (4") or less than ten percent (10%) of the width of the opening.]

3. The type of solvent;

[4. Covers shall be provided for closing off the entrance and exit during hours when the degreaser is not being used.]

4. The unit volume of solvent;

[5. A permanent conspicuous label summarizing the operating procedures shall be affixed to the equipment.]

5. The total volume of solvent; and

6. *[If the air/vapor interface is larger than twenty-one and one-half (21 1/2) square feet, one (1) major control device shall be required. This device shall be one (1) of the following:]***The vapor pressure of the solvent measured in mmHg at twenty degrees Celsius (20°C) (sixty-eight degrees Fahrenheit (68°F)).**

[A. A refrigerated chiller;

B. Carbon adsorption system with ventilation of at least fifty (50) cubic feet per minute per square foot of the

total entrance and exit areas (when downtime covers are open) and exhausting less than twenty-five (25) ppm of solvent by volume averaged over a complete adsorption cycle as measured using the reference method specified at 10 CSR 10-6.030(14)(A); or

C. A control system with a mass balance demonstrated VOC emissions reduction efficiency greater than or equal to sixty-five percent (65%) and prior approval by the director.]

(D) A record shall be kept of solvent metal cleaning training for each employee.

(E) All records required under subsections (4)(A), (4)(B), (4)(C) and (4)(D) of this rule shall be retained for five (5) years and shall be made available to the director upon request.

(5) *[Operating Procedures.]* **Test Methods.** ***(Not applicable)***

[(A) Cold Cleaners.

1. Cold cleaner covers shall be closed whenever parts are not being handled in the cleaners or the solvent must drain into an enclosed reservoir.

2. Cleaned parts shall be drained in the freeboard area for at least fifteen (15) seconds or until dripping ceases, whichever is longer.

3. Whenever a cold cleaner fails to perform within the operating parameters established for it by this rule, the unit shall be shut down immediately and secured. It shall remain shut down until trained service personnel are able to restore operation within the established parameters.

4. Solvent leaks shall be repaired immediately or the degreaser will be shut down and the leaks secured until they can be more permanently repaired.

5. Any waste material removed from a cold cleaner shall be disposed of by one (1) of the following methods or equivalent (after the director's approval) and in accordance with 10 CSR 25, as applicable:

A. Reduction of the waste material to less than twenty percent (20%) VOC solvent by distillation and disposal of the still bottom waste; or

B. Storage in closed containers for transfer to—

(I) A contract reclamation service; or

(II) A disposal facility approved by the director.

6. Waste solvent shall be stored in closed containers only.

(B) Open-Top Vapor Degreasers.

1. The cover shall be kept closed at all times except when processing work loads through the degreaser.

2. Solvent carry-out shall be minimized in the following ways:

A. Parts shall be racked, if practical, to allow full drainage;

B. Parts shall be moved in and out of the degreaser at less than eleven feet (11') per minute;

C. Work load shall remain in the vapor zone at least thirty (30) seconds or until condensation ceases;

D. Pools of solvent shall be removed from cleaned parts before removing parts from the degreaser freeboard area; and

E. Cleaned parts shall be allowed to dry within the degreaser freeboard area for at least fifteen (15) seconds or until visually dry, whichever is longer.

3. Porous or adsorbent materials such as cloth, leather, wood or rope shall not be degreased.

4. If work loads occupy more than half of the degreaser's open-top area, rate of entry and removal shall not exceed five feet (5') per minute.

5. Spray shall never extend above vapor level.

6. Whenever an open-top vapor degreaser fails to perform within the operating parameters established for it by this rule, the unit shall be shut down immediately and secured. It shall remain shut down until trained service personnel are able to restore operation within the established parameters.

7. Solvent leaks shall be repaired immediately or the degreaser shall be shut down and the leaks secured until they can be more permanently repaired.

8. Ventilation exhaust shall not exceed sixty-five (65) cubic feet per minute per square foot of degreaser open area unless proof is submitted that it is necessary to meet Occupational Safety Health Administration (OSHA) requirements. Fans shall not be used near the degreaser opening.

9. Water shall not be visually detectable in solvent exiting the water separator.

10. Any waste material removed from an open-top vapor degreaser shall be disposed of by one (1) of the following methods or equivalent (after the director's approval), and in accordance with 10 CSR 25, as applicable:

A. Reduction of the waste material to less than twenty percent (20%) VOC solvent by distillation and disposal of the still bottom waste; or

B. Storage in closed containers for transfer to—

(I) A contract reclamation service; or

(II) A disposal facility approved by the director.

11. Waste solvent shall be stored in closed containers only.

(C) Conveyorized Degreasers.

1. Ventilation exhaust shall not exceed sixty-five (65) cubic feet per minute per square foot of degreaser opening unless proof is submitted that it is necessary to meet OSHA requirements. Fans shall not be used near the degreaser opening.

2. Solvent carry-out shall be minimized in the following ways:

A. Parts shall be racked, if practical, to allow full drainage; and

B. Vertical conveyor speed shall be maintained at less than eleven feet (11') per minute.

3. Whenever a conveyorized degreaser fails to perform within the operating parameters established for it by this rule, the unit shall be shut down immediately and secured. It shall remain shut down until trained service personnel are able to restore operation within the established parameters.

4. Solvent leaks shall be repaired immediately or the degreaser shall be shut down and the leaks secured until they can be more permanently repaired.

5. Water shall not be visually detectable in solvent exiting the water separator.

6. Covers shall be placed over entrances and exits immediately after conveyor and exhaust are shut down and removed just before they are started up.

7. Waste solvent shall be stored in closed containers only.

8. Any waste material removed from a conveyorized degreaser shall be disposed of by one (1) of the following methods or equivalent (after the director's approval), and in accordance with 10 CSR 25, as applicable:

A. Reduction of the waste material to less than twenty percent (20%) VOC solvent by distillation and disposal of the still bottom waste; or

B. Storage in closed containers for transfer to—

(I) A contract reclamation service; or

(II) A disposal facility approved by the director.

(6) Operator and Supervisor Training.

(A) Only persons trained in at least the operational and equipment requirements specified in this rule for their particular solvent metal cleaning process shall be permitted to operate the equipment.

(B) The supervisor of any person who operates a solvent metal cleaning process shall receive equal or greater operational training than the operator.

(C) Refresher training shall be given to all solvent metal cleaning equipment operators at least once each twelve (12) months.

(D) A record shall be kept of solvent metal cleaning training for each employee.

(7) Effective Dates of Compliance.

(A) Owners or operators subject to this rule shall be in compliance with operating procedures and operator and supervisor training requirements as described in sections (5) and (6) of this rule no later than June 1, 1979.

(B) Owners or operators subject to this rule shall comply with equipment specifications as described in section (4) of this rule and associated equipment operating procedures by June 11, 1980.

(C) Owners or operators subject to this rule as a result of the amendment, effective March 11, 1989, shall be in compliance with operating procedures and operator and supervisor training requirements as described in sections (5) and (6) no later than September 11, 1989.

(D) Owners and operators subject to this rule as a result of the amendment shall be in compliance with equipment specifications as described in section (4) by March 11, 1989, and associated equipment operating procedures by March 11, 1990.

(8) Exceptions.

(A) Solvent metal cleaning operations using 1,1,1-trichloroethane (methyl chloroform) or trichlorotrifluoroethane (Refrigerant 113) will be exempt from the requirements of this rule. This exemption does not relieve the owners or operators from compliance with other applicable statutes or rules of the department.

(B) 1,1,1-trichloroethane (methyl chloroform) and trichlorotrifluoroethane (Refrigerant 113) have been implicated as having deleterious effects on stratospheric ozone and, therefore, may be subject to future rules.]

*AUTHORITY: section 643.050, RSMo [Supp. 1997] **2000**. Original rule filed Nov. 14, 1978, effective June 11, 1979. Amended: Filed Oct. 4, 1988, effective March 11, 1989. Emergency amendment filed Sept. 2, 1997, effective Jan. 1, 1998, expired June 30, 1998. Amended: Filed Sept. 22, 1997, effective May 30, 1998. Amended: Filed Sept. 13, 2001.*

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 OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: A public hearing on this proposed amendment will begin at 9:00 a.m., December 6, 2001. The public hearing will be held at the Tan-Tar-A Resort, Parasol II, State Road KK, Osage Beach, Missouri. Opportunity to be heard at the hearing shall be afforded any interested person. Written request to be heard should be submitted at least seven (7) days prior to the hearing to Roger D. Randolph, Director, Missouri Department of Natural Resources' Air Pollution Control Program, 205 Jefferson Street, PO Box 176, Jefferson City, MO 65102-0176, (573) 751-4817. Interested persons, whether or not heard, may submit a written statement of their views until 5:00 p.m., December 13, 2001. Written comments shall be sent to Chief, Planning Section, Missouri Department of Natural Resources' Air Pollution Control Program, 205 Jefferson Street, PO Box 176, Jefferson City, MO 65102-0176.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 10—Air Conservation Commission
Chapter 6—Air Quality Standards, Definitions, Sampling and Reference Methods and Air Pollution Control Regulations for the Entire State of Missouri

PROPOSED AMENDMENT

10 CSR 10-6.060 Construction Permits Required. The commission proposes to amend subsection (1)(B) and amend subsection (1)(D). If the commission adopts this rule action, it will be submitted to the U.S. Environmental Protection Agency to replace the current rule in the Missouri State Implementation Plan.

PURPOSE: This amendment provides an exemption for non-commercial incinerators recommended by the University of Missouri extension service for disposal of dead animals and removes the reference to asphaltic concrete plants from the applicability section of the rule. The evidence supporting the need for this proposed rulemaking, per section 536.016, RSMo is the May 28, 2000 memorandum from the Missouri Attorney General's Office identifying the discrepancies between state statute requirements and state permit rule requirements.

(1) Applicability.

(B) Covered Installations/Changes. This rule shall apply to installations throughout Missouri with the potential to emit any pollutant in an amount equal to or greater than the *de minimis* levels. This rule also shall apply to changes at installations which emit less than the *de minimis* levels where the construction or modification itself would be subject to section (6), (7), (8) or (9) of this rule. This rule shall apply to all incinerators *[and asphaltic concrete plants]*.

(D) Exempt Emissions Units.

1. The following combustion equipment is exempt from this rule if the equipment emits only combustion products, and the equipment produces less than one hundred fifty (150) pounds per day of any air contaminant:

A. Any combustion equipment using exclusively natural or liquefied petroleum gas or any combination of these with a capacity of less than ten (10) million British thermal units *[(BTUs)]* **(Btus)** per hour heat input; or

B. Any combustion equipment with a capacity of less than one (1) million *[BTUs]* **Btus** per hour heat input.

2. The following establishments, systems, equipment and operations also are exempt from this rule:

A. Office and commercial buildings, where emissions result solely from space heating by natural or liquefied petroleum gas of less than twenty (20) million *[BTUs]* **Btus** per hour heat input. Incinerators operated in conjunction with these sources are not exempt;

B. Comfort air conditioning or comfort ventilating systems not designed or used to remove air contaminants generated by, or released from, specific units of equipment;

C. Equipment used for any mode of transportation;

D. Livestock and livestock handling systems from which the only potential air contaminant is odorous gas;

E. Any grain handling, storage and drying facility which—

(I) Is in noncommercial use only, that is, used only to handle, dry or store grain produced by the owner if—

(a) The total storage capacity does not exceed seven hundred fifty thousand (750,000) bushels;

(b) The grain handling capacity does not exceed four thousand (4,000) bushels per hour; and

(c) The facility is located at least five hundred feet (500') from any recreational area, residence or business not occupied or used solely by the owner; and

(II) Is in commercial use and the total storage capacity of the new and any existing facility(ies) does not exceed one hundred ninety thousand (190,000) bushels;

F. Restaurants and other retail establishments for the purpose of preparing food for employee and guest consumption;

G. Sand and gravel operations that have a maximum capacity to produce less than seventeen and one-half (17.5) tons of product per hour and use only natural gas as fuel when drying;

H. Fugitive dust controls unless a control efficiency can be assigned to the equipment or control equipment;

I. Equipment or control equipment which eliminates all emissions to the ambient air;

J. Equipment (other than anaerobic lagoons) or control equipment which emits odors unless the equipment or control equipment also emits other regulated air pollutants;

K. Residential wood heaters, cookstoves or fireplaces;

L. Laboratory equipment used exclusively for chemical and physical analysis or experimentation, except equipment used for controlling radioactive air contaminants;

M. Recreational fireplaces; *[and]*

N. Stacks or vents to prevent the escape of sewer gases through plumbing traps for systems handling domestic sewage only. Systems which include any industrial waste do not qualify for this exemption*[.]*/**; and**

O. Noncommercial incineration of dead animals, the on-site incineration of resident animals for which no consideration is received or commercial profit is realized, as authorized in section 269.020.6, RSMo 2000.

3. At installations, previously issued a permit under this rule, construction or modifications are exempt from this rule if they meet the requirements of subparagraphs (1)(D)3.A. or (1)(D)3.B. of this rule for criteria pollutants, except lead, and subparagraph (1)(D)3.C. for hazardous air pollutants. The director may require review of construction or modifications otherwise exempt under subparagraphs (1)(D)3.A., (1)(D)3.B., or (1)(D)3.C. of this rule if the emissions of the proposed construction or modification will appreciably affect air quality or the air quality standards are appreciably exceeded or complaints involving air pollution have been filed in the vicinity of the proposed construction or modification.

A. For proposed construction or modification located less than five hundred (500) feet from the property boundary, at maximum design capacity the proposed construction or modification shall emit each criteria pollutant at a rate of no more than one-half (0.5) pounds per hour. For proposed construction or modification located more than five hundred (500) feet from the property boundary, at a maximum design capacity the proposed construction or modification shall emit each criteria pollutant at a rate of no more than 0.91 pounds per hour.

B. Actual emissions of each criteria pollutant will be no more than eight hundred seventy-six (876) pounds per year.

C. At maximum design capacity the proposed construction or modification will emit a hazardous air pollutant at a rate of no more that one-half (0.5) pounds per hour, or the hazardous air pollutant emission threshold as established in subsection (12)(J) of this rule, whichever is less.

*AUTHORITY: section 643.050, RSMo [Supp. 1998] **2000**. Original rule filed Dec. 10, 1979, effective April 11, 1980. For intervening history, please consult the **Code of State Regulations**. Amended: Filed Sept. 4, 2001.*

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 OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: A public hearing on this proposed amendment will begin at 9:00 a.m., December 6, 2001. The public hearing will be held at the Tan-Tar-A Resort, Parasol II, State Road KK, Osage Beach, Missouri. Opportunity to be heard at the hearing shall be afforded any interested person. Written request to be heard should be submitted at least seven (7) days prior to the hearing to Roger D. Randolph, Director, Missouri Department of Natural Resources' Air Pollution Control Program, 205 Jefferson Street, PO Box 176, Jefferson City, MO 65102-0176, (573) 751-4817. Interested persons, whether or not heard, may submit a written statement of their views until 5:00 p.m., December 13, 2001. Written comments shall be sent to Chief, Planning Section, Missouri Department of Natural Resources' Air Pollution Control Program, 205 Jefferson Street, PO Box 176, Jefferson City, MO 65102-0176.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 10—Air Conservation Commission
Chapter 6—Air Quality Standards, Definitions, Sampling and Reference Methods and Air Pollution Control Regulations for the Entire State of Missouri

PROPOSED AMENDMENT

10 CSR 10-6.065 Operating Permits. The commission proposes to delete subsection (3)(C) and renumber and amend original subsection (3)(D). If the commission adopts this rule action, it will be submitted to the U.S. Environmental Protection Agency to replace the current rule in the Missouri State Implementation Plan.

PURPOSE: This amendment provides an exemption for noncommercial incinerators recommended by the University of Missouri extension service for disposal of dead animals and removes the reference to asphaltic concrete plants from the applicability section of the rule. The evidence supporting the need for this proposed rulemaking, per section 536.016, RSMo is the May 28, 2000 memorandum from the Missouri Attorney General's Office identifying the discrepancies between state statute requirements and state permit rule requirements.

(3) Applicability.

[(C) Asphaltic Concrete Plants. This rule shall apply to all asphaltic concrete plants.]

*[(D)]***(C)** Exempt Installations and Emission Units. The following installations and emission units are exempt from the requirements of this rule unless such units are Part 70 installations or are located at Part 70 installations. Emissions from exempt installations and emission units shall be considered when determining if the installation is a Part 70 installation:

1. Any installation that would be required to obtain a permit solely because it is subject to 10 CSR 10-6.070(7)(AAA) Standards of Performance for New Residential Wood Heaters;

2. Any installation that would be required to obtain a permit solely because it is subject to 10 CSR 10-6.240 or 10 CSR 10-6.250;

3. Single or multiple family dwelling units for not more than three (3) families;

4. Comfort air conditioning or comfort ventilating systems not designed or used to remove air contaminants generated by, or released from, specific units of equipment;

5. Equipment used for any mode of transportation;

6. Livestock and livestock handling systems from which the only potential air contaminant*[s]* is odorous gas;

7. Restaurants and other retail establishments for the purpose of preparing food for employee and guest consumption;

8. Fugitive dust controls unless a control efficiency can be assigned to the equipment or control equipment;

9. Equipment or control equipment which eliminates all emissions to the ambient air;

10. Equipment (other than anaerobic lagoons) or control equipment which emits odors unless this equipment or control equipment also emits other regulated air pollutants;

11. Residential wood heaters, cookstoves or fireplaces;

12. Laboratory equipment used exclusively for chemical and physical analysis or experimentation is exempt, except equipment used for controlling radioactive air contaminants;

13. Recreational fireplaces;

14. Stacks or vents to prevent the escape of sewer gases through plumbing traps for systems handling domestic sewage only. Systems which include any industrial waste do not qualify for this exemption;

15. Combustion equipment that—

A. Emits only combustion products;

B. Produces less than one hundred fifty (150) pounds per day of any air contaminant; and

C. Has a maximum rated capacity of—

(I) Less than ten (10) million British thermal units *[(BTUS)]* **Btus** per hour heat input by using exclusively natural or liquefied petroleum gas, or any combination of these; or

(II) Less than one (1) million *[BTUS]* **Btus** per hour heat input;

16. Office and commercial buildings, where emissions result solely from space heaters using natural gas or liquefied petroleum gas with a maximum rated capacity of less than twenty (20) million *[BTUS]* **Btus** per hour heat input. Incinerators operated in conjunction with these sources are not exempt;

17. Any country grain elevator that never handles more than one million two hundred thirty-eight thousand six hundred fifty-seven (1,238,657) bushels of grain during any twelve (12)-month period and is not located within an incorporated area with a population of fifty thousand (50,000) or more. A country grain elevator is defined as a grain elevator that receives more than fifty percent (50%) of its grain from producers in the immediate vicinity during the harvest season. This exemption does not include grain terminals which are defined as grain elevators that receive grain primarily from other grain elevators. To qualify for this exemption the owner or operator of the facility shall retain monthly records of grain origin and bushels of grain received, processed and stored for a minimum of five (5) years to verify the exemption requirements. Monthly records must be tabulated within seven (7) days of the end of the month. Tabulated monthly records shall be made available immediately to Missouri Department of Natural Resources representatives for an announced inspection or within three (3) hours for an unannounced visit;

[18. Restaurants and other retail establishments for the purpose of preparing food for employee and guest consumption; and]

[19.] **18.** Sand and gravel operations that have a maximum capacity to produce less than seventeen and one-half (17.5) tons of product per hour and use only natural gas as fuel when drying*[.]*; **and**

19. Noncommercial incineration of dead animals, the on-site incineration of resident animals for which no consideration is received or commercial profit is realized, as authorized in section 269.020.6, RSMo 2000.

AUTHORITY: section 643.050, RSMo [Supp. 1998] 2000. Original rule filed Sept. 2, 1993, effective May 9, 1994. Amended: Filed June 5, 1995, effective Jan. 30, 1996. Amended: Filed Oct. 3, 1995, effective June 30, 1996. Amended: Filed Aug. 14, 1997, effective April 30, 1998. Amended: Filed Sept. 22, 1999, effective May 30, 2000. Amended: Filed Sept. 4, 2001.

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 OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: A public hearing on this proposed amendment will begin at 9:00 a.m., December 6, 2001. The public hearing will be held at the Tan-Tar-A Resort, Parasol II, State Road KK, Osage Beach, Missouri. Opportunity to be heard at the hearing shall be afforded any interested person. Written request to be heard should be submitted at least seven days prior to the hearing to Roger D. Randolph, Director, Missouri Department of Natural Resources' Air Pollution Control Program, 205 Jefferson Street, PO Box 176, Jefferson City, MO 65102-0176, (573) 751-4817. Interested persons, whether or not heard, may submit a written statement of their views until 5:00 p.m., December 13, 2001. Written comments shall be sent to Chief, Planning Section, Missouri Department of Natural Resources' Air Pollution Control Program, 205 Jefferson Street, PO Box 176, Jefferson City, MO 65102-0176.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 20—Clean Water Commission
Chapter 6—Permits

PROPOSED AMENDMENT

10 CSR 20-6.200 Storm Water Regulations. The commission proposes to amend sections (1)–(5). EPA promulgated rules effective November 1999 requiring storm water permits on construction sites between one (1) and five (5) acres in size and on municipal storm water sewer systems in urbanized areas serving populations of less than one hundred thousand (100,000). The federal rule also allows for permit exemptions on industrial facilities, which protect their operations from storm water. Missouri must develop a Phase II program and issue permits within three (3) years of the final federal rule.

PURPOSE: This amendment will expand these rules to include a broader group of activities. The evidence supporting this proposed rulemaking per section 536.016, RSMo, lies in the federal rule that mandates this amendment in delegated, state storm water programs.

PUBLISHER'S NOTE: The secretary of state has determined that the publication of the entire text of the material which is incorporated by reference as a portion of this rule would be unduly cumbersome or expensive. Therefore, the material which is so incorporated is on file with the agency who filed this rule, and with the Office of the Secretary of State. Any interested person may view this material at either agency's headquarters or the same will be made available at the Office of the Secretary of State at a cost not to exceed actual cost of copy reproduction. The entire text of the rule is printed here. This note refers only to the incorporated by reference material.

(1) Storm Water Permits—General.

(A) All persons who operate, use, *[disturb land,]* maintain existing storm water point sources *[or before beginning any construction which]* **and who disturb land that** would result in a storm water point source shall apply to the department for the permits required by the Missouri Clean Water Law and these regulations. **A permit must be obtained before beginning any new construction related to the above activities.** The department issues these permits in order to enforce the Missouri Clean Water Law and regulations and administer the state operating permit program.

(B) Nothing shall prevent the department from taking action, including the requirement for issuance of any permits under the Missouri Clean Water Law and regulations, if any of the operations exempted should cause pollution of waters of the state or otherwise violate the Missouri Clean Water Law or these regulations. The following are exempt from storm water permit regulations:

1. Discharges from facilities or activities excluded from the state operating permit program under 10 CSR 20-6.010(1)(B);

2. Areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots, as long as the drainage from the excluded areas is not mixed with storm water drained from permitted areas;

3. *De minimis* discharges as defined by the department in general permits or by the Clean Water Commission;

4. Recycling collection points which are covered in a manner which prevents contact with storm water, including run on;

5. Farmlands, domestic gardens or lands used for sludge management where **domestic** sludge is beneficially reused and which are not physically located in the confines of the facility producing the sludge;

6. Agricultural storm water discharges and irrigation return flows;

7. Sites that disturb less than *[five (5) acres]* **one (1) acre** of total land area which are not part of a common plan or sale. Land disturbance activity on an individual residential building lot is not considered as part of the overall subdivision unless the activity is by the developer to improve the lot for sale;

8. Linear, strip or ribbon construction or maintenance operations meeting one (1) of the following criteria:

A. Grading of existing dirt or gravel roads which does not increase the runoff coefficient and the addition of an impermeable surface over an existing dirt or gravel road;

B. Cleaning or routine maintenance of roadside ditches, sewers, waterlines, pipelines, utility lines or similar facilities;

C. Trenches two feet (2') in width or less; or

D. Emergency repair or replacement of existing facilities as long as best management practices are employed during the emergency repair;

9. Mowing, brush hog clearing, tree cutting or similar activities which do not grade, dig, excavate or otherwise remove or kill the surface growth and root system of the ground cover;

10. Landfills which have received Missouri Department of Natural Resources approval to close and which are in compliance with any post-closure monitoring, management requirements and deed restrictions, unless the department determines the facility is a significant discharger of storm water related pollutants; *[and]*

11. Facilities built to control the release of only storm water are not subject to the construction permitting requirement of 10 CSR 20-6.010(4), provided that the storm water does not come in contact with process waste, process wastewater or significant materials, and the storm water is not a significant contributor of pollutants*[.]*;

12. The department may waive permit coverage if a municipal separate storm sewer system (MS4) serves a population of less than one thousand (1,000) within an urbanized area and the discharges meet the following criteria:

A. The discharges are not contributing substantially to the pollutant loadings of a physically interconnected MS4 that is regulated by the department's storm water program; and

B. If the discharge includes any pollutant(s) that have been identified as a cause of impairment of any water body to which it flows and storm water controls are not needed based on wasteload allocations that are part of a U.S. Environmental Protection Agency (EPA) approved or established total maximum daily load (TMDL) that addresses the pollutant(s) of concern;

13. The department waive permit coverage if a MS4 serves a population under ten thousand (10,000) and the discharges meet the following criteria:

A. The department has evaluated all waters of the state, including small streams, tributaries, lakes, and ponds, that receive a discharge from the MS4;

B. For all such waters, the department has determined that storm water controls are not needed based on wasteload allocations that are part of an EPA approved or established TMDL that addresses the pollutant(s) of concern or, if a TMDL has not been developed or approved, an equivalent analysis that determines sources and allocations for the pollutant(s) of concern;

C. For the purpose of this paragraph, the pollutant(s) of concern include biochemical oxygen demand (BOD), sediment or a parameter that addresses sediment (such as total suspended solids, turbidity or siltation), pathogens, oil and grease, and any pollutant that has been identified as a cause of impairment of any water body that receives a discharge from a MS4; and

D. The department has determined that future discharges from a MS4 do not have the potential to result in exceedances of water quality standards, including impairment of designated uses, or other significant water quality impacts, including habitat and biological impacts;

14. A regulated small MS4, may share the responsibility under the following:

A. A MS4 may develop an agreement with another entity to assist with satisfying the National Pollutant Discharge Elimination System (NPDES) permit obligations or with implementing a minimum control measure if:

(I) The other entity currently implements the control measure;

(II) The particular control measure, or component thereof, is at least as stringent as the corresponding permit requirement; and

(III) A MS4 that relies on another entity to satisfy some of the permit obligations specifies the condition of the agreement, including a description of the obligations implemented by the other entity. The permitted MS4 remains ultimately responsible for compliance with the permit obligations if the other entity fails to implement the control measure (or component thereof);

B. In some cases, the department may recognize, either in an individual permit or in a general permit that another governmental entity is responsible under a permit for implementing one or more of the minimum control measures for a small MS4. Where the department recognizes these dual responsibilities, the department may not require the MS4 to include such minimum control measure(s) in their program. The MS4 permit may be modified to include the requirement to implement a minimum control measure if the other entity fails to implement it;

15. The director may waive the otherwise applicable requirements in a general permit for a storm water discharge from construction activities that disturb less than five (5) acres, but more than one (1) acre, where:

A. The value of the rainfall erosivity factor R in the Revised Universal Soil Loss Equation is less than five (5) during the period of construction activity. The rainfall erosivity factor is determined in accordance with Chapter 2 of Agriculture Handbook Number 703, Predicting Universal Soil Loss Equation (RUSLE), pages 21-64, dated January 1997, which is incorporated in this rule by reference. Copies may be obtained from EPA's Water Resource Center, Mail Code RC4100, 401 M Street S.W., Washington, DC 20460. An operator must certify to the director that the construction activity will take place during a period when the value of the rainfall erosivity factor is less than five (5); or

B. A TMDL approved or established by the department or by the EPA that addresses the pollutant(s) of concern without the need for storm water controls;

C. Waste load allocations are not needed on nonimpaired waters to protect water quality based on consideration of existing in-stream concentrations, expected growth in pollutant contributions from all sources, and a margin of safety. For the purpose of paragraphs (1)(B)15.B. and C. of this rule, the pollutant(s) of concern include sediment or a parameter that addresses sediment (such as total suspended solids, turbidity or siltation) and any other pollutant that has been identified as a cause or a potential cause of impairment of any water body that will receive a discharge from the construction activity. The operator must certify to the department that the construction activity will take place, and that storm water discharges will occur, within the drainage area addressed by the TMDL or by an equivalent analysis; and

16. A storm water permit under this rule may be excluded for industrial activities that do not expose materials to storm water. No exposure exists if the industrial materials and activities are protected from rain, snow, snowmelt and/or runoff and the operator meets the requirements under parts A.(I) through B.(III) of this paragraph.

A. Industrial materials and activities protected by storm resistant shelter. No exposure means that all industrial materials and activities are protected by a storm resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff. Industrial materials or activities include, but are not limited to, material handling equipment or activities, industrial machinery, raw materials, intermediate products, by-products, final products, or waste products. Material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product or waste product. To qualify a permit exclusion under this paragraph, the operator of the discharge must:

(I) Provide a storm resistant shelter to protect industrial materials and activities from exposure to rain, snow, snowmelt, and runoff;

(II) Complete and sign a certification that storm water is not contaminated by exposure to industrial materials and activities from the entire facility, except as provided in paragraph (I)(A)2. of this rule;

(III) Resubmit the signed certification to the department once every five (5) years;

(IV) Allow the department to inspect the facility to determine compliance with the no-exposure conditions;

(V) Make the no-exposure inspection reports available to the public upon request; and

(VI) For facilities that discharge through a MS4, submit a copy of the certification of no-exposure to the MS4 operator, as well as allow inspection and public reporting of the inspection findings by the MS4 operator.

B. Industrial materials and activities not requiring storm resistant shelter. An industrial site may qualify for this exclusion without a storm resistant shelter if:

(I) Drums, barrels, tanks, and similar containers are tightly sealed, provided those containers are not deteriorated and do not leak. Sealed means banded or otherwise secured and without operational taps or valves;

(II) Adequately maintained vehicles are used in material handling; and

(III) All industrial materials consist of final products, other than products that would be mobilized by storm water.

(C) Definitions.

1. Best management practices (BMPs). Schedules of activities, prohibitions of practices, maintenance procedures and other management practices to prevent or reduce the pollution of waters of the state. BMPs also include treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge or waste disposal or drainage from raw material storage.

2. BMPs for land disturbance. A schedule of activities, practices or procedures that reduces the amount of soil available for transport or a device that reduces the amount of suspended solids in runoff before discharge to waters of the state. Types of BMPs for storm water control include, but are not limited to:

A. State-approved standard specifications and permit programs;

B. Employee training in erosion control, material handling and storage and housekeeping of maintenance areas;

C. Site preparation such as grading, surface roughening, topsoiling, tree preservation and protection, and temporary construction entrances;

D. Surface stabilization such as temporary seeding, permanent seeding, mulching, sodding, ground cover including vines and shrubs, riprap and geotextile fabric. Mulches may be hay, straw, fiber mats, netting, wood cellulose, corn or tobacco stalks, bark, corn cobs, wood chips or other suitable material which is reasonably clean and free of noxious weeds and deleterious materials. Grasses used for temporary seeding shall be a quick growing species such as rye grass, Italian rye grass or cereal grasses suitable to the area and which will not compete with the grasses sown later for permanent cover;

E. Runoff control measures such as temporary diversion dikes or berms, permanent diversion dikes or berms, right-of-way or perimeter diversion devices, and retention and detention basins. Sediment traps and barriers, sediment basins, sediment (silt) fence and staked straw bale barriers;

F. Runoff conveyance measures such as grass-lined channels, riprap and paved channels, temporary slope drains, paved flumes or chutes. Slope drains may be constructed of pipe, fiber mats, rubble, Portland cement concrete, bituminous concrete, plastic sheets or other materials that adequately will control erosion;

G. Inlet and outlet protection;

H. Streambank protection such as a vegetative greenbelt between the land disturbance and the watercourse. Also, structural protection which stabilizes the stream channel;

I. A critical path method analysis or a schedule for performing erosion control measures; and

J. Other proven methods for controlling runoff and sedimentation;

3. Copetitioner. A person with apportioned legal, financial and administrative responsibility based on land area under its control for filing Parts 1 and Part 2 of a state operating permit for the discharge of storm water from municipal separate storm sewer systems. A copetitioner becomes a copermittee once the permit is issued.

4. Copermittee. A permittee to a state operating permit that is responsible only for permit conditions relating to the discharge for which it is owner or operator, or both.

5. *De minimis* water contaminant source. A water contaminant source, point source or wastewater treatment facility that is determined by the department to pose a negligible potential impact

on waters of the state even in the event of the malfunction of wastewater treatment controls or material handling procedures.

6. Field screening point. A specific location which during monitoring will provide representative information to indicate the presence of illicit connections or illegal dumping and quality of water within a municipal separate storm sewer system.

7. Illicit discharge. Any discharge to a municipal separate storm sewer that is not composed entirely of storm water, except discharges pursuant to a state operating permit, other than storm water discharge permits and discharges from fire fighting activities.

8. Incorporated place (in Missouri, a municipality). A city, town or village that is incorporated under the laws of Missouri.

9. Landfill. Location where waste materials are deposited on or buried within the soil or subsoil. Included are open dumps and landfills built or operated, or both, prior to the passage of the Missouri Solid Waste Management Law as well as those built or operated, or both, since.

10. Large municipal separate storm sewer system. All municipal separate storm sewers that are either—

A. Located in an incorporated place with a population of two hundred fifty thousand (250,000) or more;

B. Located in the counties designated by the director as unincorporated places with significant urbanization and identified systems of municipal separate storm sewers;

C. Owned and operated by a municipality other than those described in subparagraph (1)(C)10.A. of this rule that are designated by the director as part of a system. In making this determination, the director may consider the following factors:

(I) Physical interconnections between the municipal separate storm sewers;

(II) The location of discharges from the designated municipal storm sewer relative to the discharges from municipal separate storm sewer described in subparagraph (1)(C)10.A. of this rule;

(III) The quantity and nature of pollutants discharged to the waters of the state;

(IV) The nature of the receiving waters; or

(V) Other relevant factors; and

D. The director, upon petition, may designate as a large municipal separate storm sewer system, municipal separate storm sewers located within the boundaries of a region defined by a storm water management regional authority based on a jurisdictional, watershed or other appropriate basis that includes one (1) or more of the systems described in subparagraph (1)(C)10.A. of this rule.

11. MS4 means:

A. A municipal separate storm sewer system.

[11.] **12.** Major municipal separate storm sewer system outfall (major outfall). A municipal separate storm sewer outfall that discharges from a single pipe with an inside diameter of thirty-six inches (36") or more (or its equivalent) or for municipal separate storm sewers that receive storm waters from lands zoned for industrial activity within the municipal separate storm sewer system with an outfall that discharges from a single pipe with an inside diameter of twelve inches (12") or more (or from its equivalent). Industrial activity areas do not include commercial areas.

[12.] **13.** Major outfall. A major municipal separate storm sewer outfall.

[13.] **14.** Major structural controls. Man-made retention basins, detention basins, major infiltration devices or other structures designed and operated for the purpose of containing storm water discharges from an area greater than or equal to fifty (50) acres.

[14.] **15.** Medium municipal separate storm sewer system. All municipal separate storm sewers that are either—

A. Located in an incorporated place with a population of one hundred thousand (100,000) or more but less than two hundred fifty thousand (250,000), as determined by the latest decennial census by the Bureau of Census; or

B. Owned and operated by a municipality other than those described in subparagraph (1)(C)*[14.]***15.**A. of this rule and that are designated by the director as part of the system. In making this determination, the director may consider the following factors:

(I) Physical interconnections between the municipal separate storm sewers;

(II) The locations of discharges from the designated municipal separate storm sewer relative to discharges from the municipal separate storm sewers described in subparagraph (1)(C)*[14.]***15.**A. of this rule;

(III) The quantity and nature of pollutants discharged to waters of the state;

(IV) The nature of the receiving waters;

(V) Other relevant factors; or

(VI) The director, upon petition, may designate as a medium municipal separate storm sewer system, municipal separate storm sewers located within the boundaries of a region defined by a storm water management regional authority based on a jurisdictional watershed, or other appropriate basis that includes one (1) or more of the systems described in subparagraph (1)(C)*[14.]***15.**A. of this rule.

[15. Municipal separate storm sewer means a conveyance or system of conveyances including roads and highways with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, paved or unpaved channels or storm drains designated and utilized for routing of storm water which—

A. Does not include any waters of the state as defined in this rule;

B. Is contained within the municipal corporate limits or is owned and operated by the state, city, town, village, county, district, association or other public body created by or pursuant to the laws of Missouri having jurisdiction over disposal of sewage, industrial waste, storm water or other liquid wastes;

C. Is not a part or portion of a combined sewer system; and

D. Is not a part of a publicly owned treatment works as defined in 40 CFR 122.2.]

16. Municipal separate storm sewer system means:

A. Sewers that are defined as large or medium or small municipal separate storm sewer systems pursuant to paragraphs 10., 15., and 28. of this section, or designated under subsection (1)(B) of this rule.

[16.] **17.** Operator. The owner, or an agent of the owner, of a separate storm sewer with responsibility for operating and maintaining the effectiveness of the system.

[17.] **18.** Outfall. A point source as defined by 10 CSR 20-2.010 at the point where a municipal separate storm sewer discharges and does not include open conveyances connecting two (2) municipal separate storm sewers, pipes, tunnels or other conveyances which connect segments of waters of the state and are used to convey waters of the state.

[18.] **19.** Overburden. Any material of any nature consolidated or unconsolidated that overlays a mineral deposit excluding topsoil or similar naturally occurring surface materials that are not disturbed by mining operations.

[19.] **20.** Owner. A person who owns and controls the use, operation and maintenance of a separate storm sewer.

[20.] **21.** Process wastewater. Any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, by-product or waste product.

[21.] **22.** Receiving waters. Waters of the state as defined in this rule.

[22.] **23.** Recycling facilities. Locations where metals, paper, tires, glass, organic materials, used oils, spent solvents or other materials are collected for reuse, reprocessing or resale.

[23.] **24.** Runoff coefficient. The fraction of total rainfall that will appear at a conveyance as runoff.

[24.] **25.** Significant contributor of pollutants. A person who discharges or causes the discharge of pollutants in storm water which can cause water quality standards of the waters of the state to be violated.

[25.] **26.** Significant material or activity associated with industrial activity.

A. For the categories of industries identified in subsections (2)(A)–(D) of this rule, the term includes, but is not limited to, storm water discharged from industrial plant yards, immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material or by-products used or created by the facility.

B. Significant materials include, but are not limited to, raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under Section 101(14) of the Comprehensive Environmental Response, Compensation, Liability Act of 1980 (CERCLA); any chemical the facility is required to report pursuant to Section 313 of Title III of Superfund Amendments & Reauthorization Act of 1986 (SARA); fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges.

C. Material received in drums, totes or other secure containers or packages which prevent contact with storm water, including run on, are exempted from the significant materials classification until the container has been opened for any reason. If the container is moved into a building or other protected area prior to opening, it will not become a significant material.

D. Empty containers which have been properly triple rinsed are not significant materials.

27. Small construction activity means:

A. Construction activities including clearing, grading and excavating that result in land disturbance of equal to or greater than one (1) acre and less than five (5) acres. Small construction activity also includes the disturbance of less than one (1) acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one (1) and less than five (5) acres. Small construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity or original purpose of the facility.

B. Any other construction activity designated by the department, based on the potential for contribution to a violation of a water quality standard or for significant contribution of pollutants to waters of the United States.

28. Small municipal separate storm sewer system means:

A. Owned or operated by the United States, a state, city, town, borough, county, parish, district, association or other public body (created by or pursuant to state law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the Clean Water Act (CWA) that discharges to water of the United States.

B. Not defined as large or medium municipal separate storm sewer systems pursuant to paragraphs 10 and 15 of this section.

C. This term includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as around individual buildings.

29. Small MS4 means:

A. A small municipal separate storm sewer system.

[26.] **30.** Storm water means storm water runoff, snow melt runoff and surface runoff, and drainage.

[27.] **31.** Storm water discharge associated with industrial activity means the discharge from any conveyance which is used for collecting and conveying storm water and which is directly related to manufacturing, processing or raw material storage areas at an industrial plant.

[28.] **32.** Waters of the state, as it applies to large and medium municipalities under this regulation, means all waters listed as L1, L2 and L3 in Tables G and P, P1 and C in Table H of 10 CSR 20-7.031.

(2) Storm water discharge associated with industrial activity. The discharge from any conveyance which is used for collecting and conveying storm water which is not under a permit issued under 10 CSR 20-6.010 and which is directly related to manufacturing, processing or raw materials storage areas at an industrial plant.

(B) Industries subject to this requirement include:

1. Facilities classified with the following primary standard industry classification (SIC) are considered to be included in this paragraph: 10, Metal Mining; 12, Coal Mining; 13, Oil and Gas Extraction; 14, Nonmetallic Minerals; 24, Lumber and Wood Products; 26, Paper and Allied Products; 28, Chemical and Allied Products; 29, Petroleum Refining; 311, Leather Tanning and Finishing; 32, Stone, Clay, Glass, Concrete; 33, Primary Metal Industries; 3441, Fabricated Structural Metal; 373**,** Ship and Boat Building and Repair; and industries regulated under section 644.052.4, RSMo except for those SICs addressed in paragraph (2)(B)4. of this rule.

2. Facilities classified with the following primary SIC are considered to be included in this paragraph: 40, Railroad; 41, Local, Suburban Transit, etc.; 42, Motor Freight Transportation and Warehousing; 43, United States Postal Service; 44, Water Transportation; 45, Air Transportation; Petroleum Bulk Station, Terminal—only those portions of the facility listed under this paragraph that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling and lubrication) equipment cleaning operations, airport deicing operations or which are otherwise identified under paragraph (2)(B)1., 3. or 4. of this rule are associated with industrial activity.

3. Facilities which meet the following definitions are considered to be included in this subsection:

A. Hazardous waste treatment, storage or disposal facilities, including those that are operating under interim status or a permit under Subtitle C of the Resource Conservation and Recovery Act (RCRA). Hazardous waste generator sites which are exempt from interim status or permitting because they accumulate wastes on-site less than ninety (90) days are not included;

B. Landfills, land application sites and open dumps that receive or have received any industrial wastes (waste that is received from any of the facilities described under this paragraph) including those that are subject to regulation under Subtitle D of RCRA;

C. Facilities involved in the recycling of materials including metal scrap yards, battery re-claimers, salvage yards and automobile junk yards, including*[, but not limited to,]* those with an SIC classification of 5015 and 5093;

D. Steam electric power generating facilities, including coal handling sites;

E. Treatment works treating domestic sewage, or any other sewage sludge or wastewater treatment device or system, used in the storage treatment, recycling and reclamation of municipal or

domestic sewage, including land dedicated to the disposal of sewage sludge that is located within the confines of the facility, with a design flow of 1.0 million gallons per day (mgd) or more or required to have an approved pretreatment program under 10 CSR 20-6.100; and

F. Industrial facilities that are federally, state or municipally owned or operated; and

4. Facilities classified with the following primary SIC are considered to be included in this paragraph: 20; Food and Kindered Products; 21, Tobacco Products; 22, Textile Mill Products; 23, Apparel and Other Finished Products; 2434, Wood Kitchen Cabinets; 25, Furniture and Fixtures; 265, Paperboard Containers and Boxes; 267, Converted Paperboard Products; 27, Printing, Publishing and Allied Industries; 283, Drugs; 285, Paints, Varnishes, Lacquers and Enamels; 30, Rubber and Miscellaneous Plastics; 31, Leather and Leather Products (except for 311); 323, Glass Products; 34, Fabricated Metal Products (except for 3441); 35, Industrial and Commercial Machinery; 36, Electronic and Other Electrical Equipment; 37, Transportation Equipment (except for 373); 38, Measuring, Analyzing and Controlling Instruments; 39, Miscellaneous Manufacturing Industries; 4221–25, Public Warehousing and Storage, only if any of the following activities and materials listed are exposed to storm water: discharges from industrial plant yards; material handling sites; sites used for the application or disposal of any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, by-product or waste product; sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials and intermediate and finished products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water.

(3) Land Disturbance **and Small Construction Activity**.

(A) The owner/operator of an existing or new storm water discharge from a land disturbance **or small construction** activity shall provide a narrative description of—

1. The location (including a map) and the nature of the construction activity;

2. The total area of the site and the area of the site that is expected to undergo excavation during the life of the permit;

3. Proposed measures, including BMPs, to control pollutants in storm water discharges during construction, including a brief description of applicable state and local erosion and sediment control requirements;

4. Proposed measures to control pollutants in storm water discharges that will occur after construction operations have been completed, including a brief description of applicable state or local erosion and sediment control requirements;

5. An estimate of the runoff coefficient of the site and the increase in impervious area after the construction addressed in the permit application is completed, the nature of fill material and existing data describing the soil or the quality of the discharge; and

6. The name of the receiving water.

(B) Land Disturbance **and Small Construction** Activity. Storm water permits shall be the responsibility of the owner/operator of the site. The owner/operator is responsible to see that all contractors comply with the requirements of the permit.

1. Applications for new storm water permits or the renewal of storm water permits must be received at least ninety (90) days before the date construction operations begin or the expiration date of the present operating permit.

(4) Application requirements for large ***[and]*****,** medium municipal separate storm sewer discharges. The owner and operator of a discharge from a large ***[or]*****,** medium municipal separate storm sewer or a municipal separate storm sewer that is designated by the director under paragraph (1)(C)10. of this rule may submit a jurisdiction or system-wide permit application. Where more than one (1) public entity owns and operates a municipal separate storm sewer within a geographic area, including adjacent or interconnected municipal separate storm sewer systems, the owners and operators may be copetitioners to the same application. A public entity which does not participate as a copetitioner with the municipal entity designated as having overall authority over storm water discharges may be required by the director to submit a separate application for its area of responsibility. Permit applications for discharges from large ***[and]*****,** medium municipal storm sewers or municipal storm sewers designated under paragraph (1)(C)14.of this rule shall include:

(A) Part 1 of the application shall consist of—

1. General information. The applicant's name, address, telephone number of contact person, ownership and operator status, and status as a state or local government entity;

2. Legal authority. A description of existing legal authority to control discharges to the municipal separate storm sewer system. When existing legal authority is not sufficient to meet the criteria provided in paragraph (4)(B)1. of this rule, the description shall list additional authorities as will be necessary to meet the criteria and shall include a schedule and commitment to seek the additional authority that will be needed to meet the criteria;

3. Source identification.

A. A description of the historic use of ordinances, guidance or other controls which limit the discharge of nonstorm water discharges to any publicly-owned treatment works serving the same area as the municipal separate storm sewer system.

B. A United States Geological Survey seven and one-half (7.5) minute topographic map (or equivalent topographic map with a scale between 1:10,000 and 1:24,000 if cost effective) extending one (1) mile beyond the service boundaries of the municipal storm sewer system covered by the permit application. The following information shall be provided:

(I) The location of known municipal storm sewer system outfalls discharging to waters of the state;

(II) A description of the land use activities (for example, divisions indicating undeveloped, residential, commercial, agricultural and industrial uses) accompanied with estimates of population densities and projected growth for a ten (10)-year period within the drainage area served by the separate storm sewer. An estimate of an average runoff coefficient shall be provided for each land use type;

(III) The location and a description of the activities of the facility of each currently operating or closed municipal landfill or other treatment, storage or disposal facility for municipal waste;

(IV) The location and the permit number of any known discharge to the municipal storm sewer that has been issued a state operating permit;

(V) The location of major structural controls for storm water discharge (retention basins, detention basins, major infiltration devices, etc.); and

(VI) The identification of publicly-owned parks, recreational areas and other open lands;

4. Discharge characterization.

A. Monthly mean rain and snowfall estimates (or summary of weather bureau data) and the monthly average number of storm events***[;]*****.**

B. Existing quantitative data describing the volume and quality of discharges from the municipal separate storm sewer, including a description of the major outfalls sampled, sampling procedures and analytical methods used***[;]*****.**

C. A list of water bodies that receive discharges from the municipal separate storm sewer system, including downstream segments, groundwater, lakes and wetlands where pollutants from the

system discharges may accumulate and cause water degradation and a brief description of known water quality impacts. At a minimum, the description of impacts shall include a description of whether the water bodies receiving discharges have been:

(I) Assessed and reported in Section 305(b) reports submitted by the state, the basis for the assessment (evaluated or monitored), a summary of designated use support and attainment of *[Clean Water Act (]*CWA*[)]* goals (fishable and swimmable waters) and causes of nonsupport of designated uses;

(II) Listed under Section 304(l) of the CWA that is not expected to meet water quality standards or water quality goals;

(III) Listed in state Nonpoint Source Assessments required by Section 319(a) of the CWA that, without additional action to control nonpoint sources of pollution, cannot reasonably be expected to attain or maintain water quality standards due to storm sewers, construction, highway maintenance and runoff from municipal landfills and municipal sludge adding significant pollution (or contributing to a violation of water quality standards);

(IV) Identified and classified according to eutrophic condition of publicly-owned lakes listed in state reports required under Section 314(a) of the CWA including the following: A description of those publicly-owned lakes for which uses are known to be impaired; a description of procedures, processes and methods to control the discharge of pollutants from municipal separate storm sewers into those lakes and a description of methods and procedures to restore the quality of those lakes;

(V) Recognized by the applicant as highly valued or sensitive waters;

(VI) Defined by the state or United States Fish and Wildlife Service's National Wetlands Inventory as wetlands; and

(VII) Found to have pollutants in bottom sediments, fish tissue or biosurvey data.

D. Field screening. Results of a field screening analysis for illicit connections and illegal dumping for either selected field screening points or major outfalls covered in the permit application. At a minimum, a screening analysis shall include a narrative description, for either each field screening point or major outfall, of visual observations made during dry weather periods. If any flow is observed, two (2) grab samples shall be collected during a twenty-four (24)-hour period with a minimum period of four (4) hours between samples. For all these samples, a narrative description of the color, odor, turbidity, presence of an oil sheen or surface scum as well as any other relevant observations regarding the potential presence of nonstorm water discharges or illegal dumping shall be provided. In addition, a narrative description of the results of a field analysis using suitable methods to estimate pH, total chlorine, total copper, total phenol and detergents (or surfactants) shall be provided along with a description of the flow rate. Where the field analysis does not involve analytical methods approved under 10 CSR 20-7.015, the applicant shall provide a description of the method used, including the name of the manufacturer of the test method along with the range and accuracy of the test. Field screening points shall be major outfalls, other outfall points, manholes, junctions of storm drainage ditches etc., located throughout the storm sewer system by one (1) of the following two (2) methods:

(I) Field screening points shall be located randomly throughout the storm sewer system by placing a grid over a drainage system map and identifying those cells of the grid which contain a segment of the storm sewer system or major outfall. For the use of this method, the field screening points shall be established using the following guidelines and criteria:

(a) A grid system consisting of perpendicular north-south and east-west lines spaced one-quarter (1/4) mile apart shall be overlaid on a map of the municipal storm sewer system creating a series of cells;

(b) All cells that contain a segment of the storm sewer system shall be identified. One (1) field screening point shall be selected in each cell (not to exceed the number required in subpart (4)(A)4.D.(I)(f). Major outfalls may be used as field screening points;

(c) Field screening points should be located downstream of any sources of suspected illegal or illicit activity;

(d) Field screening points shall be located to the degree practicable at the farthest manhole or other accessible location downstream in the system within each cell. However, safety of personnel and accessibility of the location should be considered in making this determination;

(e) Hydrological conditions, total drainage area of the site, population density of the site, traffic density, age of the structures or buildings in the area, history of the area and land-use types;

(f) For medium municipal separate storm sewer systems, no more than two hundred fifty (250) cells need to have identified field screening points. In large municipal separate storm sewer systems, no more than five hundred (500) cells need to have identified field screening points. Cells established by the grid that contain no storm sewer segments will be eliminated from consideration. If fewer than two hundred fifty (250) cells in medium municipal sewers are created, and fewer than five hundred (500) in large systems are created by the overlay on the municipal sewer map, then all those cells which contain a segment of the sewer system shall be subject to field screening unless access to the separate storm sewer system is impossible; and

(g) *[Large or medium m]***M**unicipal separate storm sewer systems which are unable to utilize the procedures described in subpart (4)(A)4.D.(I) of this rule because a sufficiently detailed map of the separate storm sewer systems is unavailable shall field screen no more than five hundred (500) or two hundred fifty (250) major outfalls respectively (or all major outfalls in the system, if fewer). In these circumstances, the applicant shall establish a grid system consisting of north-south and east-west lines spaced one-quarter (1/4) mile apart as an overlay to the boundaries of the municipal storm sewer system, thereby creating a series of cells. The applicant will then select major outfalls in as many cells as possible until at least five hundred (500) major outfalls (large municipalities) or two hundred fifty (250) major outfalls (medium municipalities) are selected. A field screening analysis shall be undertaken at these major outfalls; or

(II) Field screening points shall be located throughout the storm sewer system by the establishment of watersheds for both conduit and open drainage conveyance systems. The drainage system shall be indicated on a drainage system map along with the identification of the appropriate watershed boundaries. For the use of this method, the applicant, with the approval of the director, may develop the runoff characteristics of each land area contributing to a sampling point by utilizing best engineering judgment and current hydrologic analysis methodologies. The proposal shall be submitted to the department as an attachment to the Part 1 storm water permit application required by this regulation.

E. Characterization plan. Information and a proposed program to meet the requirements of paragraph (4)(B)3. of this rule. The description shall include the location of outfalls or field screening points appropriate for representative data collection under paragraph (4)(B)3. of this rule, a description of why the outfall or field screening point is representative, the seasons during which sampling is intended and a description of the sampling equipment. The proposed location of outfalls or field screening points for sampling should reflect water quality concerns to the extent practicable;

5. Management programs.

A. A description of the existing management programs to control pollutants from the municipal separate storm sewer system. The description shall provide information on existing structural and source controls, including operation and maintenance measures for structural controls that are currently being implemented.

These controls may include, but are not limited to, procedures to control pollution resulting from construction activities; flood plain management controls; wetland protection measures; BMPs for new subdivisions and emergency spill response programs. The description may address controls established under state law as well as local requirements.

B. A description of the existing program to identify illicit connections to the municipal storm sewer system. The description should include inspection procedures and methods for detecting and preventing illicit discharges and describe areas where this program has been implemented; and

6. Fiscal resources. A description of the financial resources currently available to the municipality to complete Part 2 of the permit application. A description of the municipality's budget for existing storm water programs, including an overview of the municipality's financial resources and budget, including overall indebtedness and assets and sources of funds for storm water programs; and

(B) Part 2 of the application shall consist of—

1. Adequate legal authority. A demonstration that the applicant can operate pursuant to legal authority established by statute, ordinance or series of contracts which authorizes or enables the applicant(s), at a minimum to—

A. Control through ordinance, permit, contract, order or similar means, the contribution of pollutants to the municipal storm sewer by storm discharges associated with industrial activity and the quality of storm water discharged from sites of industrial activity;

B. Prohibit through ordinance, order or similar means illicit discharges to the municipal separate storm sewer;

C. Control through ordinance, order or similar means the discharge to a municipal separate storm sewer of spills, dumping or disposal of materials other than storm water;

D. Control through interagency agreements among copetitioners the contribution of pollutants from one (1) portion of the municipal system to another portion of the municipal system;

E. Require compliance with terms and conditions in ordinances, permits, contracts or orders; and

F. Carry out all inspection, surveillance and monitoring procedures necessary to determine compliance and noncompliance with permit conditions including the prohibition on illicit discharges to the municipal separate storm sewer;

2. Source identification. The location of any major outfall that discharges to waters of the state that was not reported under paragraph (4)(A)3. of this rule. Provide an inventory and a description (such as SIC codes) which best reflect the principal products or services provided by each facility which may discharge storm water associated with industrial activities to the municipal separate storm sewer;

3. Characterization data. When quantitative data for a pollutant are required under subparagraph (4)(B)3.A. of this rule, the applicant must collect a sample of effluent in accordance with 40 CFR 122.21(g)(7) and analyze it for the pollutant in accordance with analytical methods approved under 40 CFR*/, p/*Part 136. When no analytical method is approved, the applicant may use any suitable method, but must provide a description of the method. The applicant must provide information characterizing the quality and quantity of discharges covered in the permit application including:

A. Quantitative data from representative outfalls or field screening points designated by the director (based on information received in Part 1 of the application, the director shall designate between five (5) and ten (10) outfalls or field screening points as representative of the commercial, residential and industrial land use activities of the drainage area contributing to the system or, where there are less than five (5) outfalls covered in the application, the director shall designate all outfalls or field screening points) developed as follows:

(I) For each outfall or field screening point designated under this part, samples shall be collected of storm water discharges from three (3) storm events occurring at least one (1) month apart;

(II) A narrative description shall be provided of the date and duration of the storm event(s) sampled, rainfall estimates of the storm event which generated the sampled discharge and the duration between the storm event sampled and the end of the previous measurable (greater than one-tenth inch (0.1") rainfall) storm event.

(III) For samples collected and described under parts (4)(B)3.A.(I) and (II) of this rule, quantitative data shall be provided for the organic pollutants listed in Table II; the pollutants listed in Table III (toxic metals, cyanide, and total phenols) of Appendix D of 40 CFR*/, p/*Part 122 and for the following pollutants:

(a) TSS;
(b) Total dissolved solids (TDS);
(c) COD;
(d) *[(]*BOD_5*[)]*;
(e) Oil and grease;
(f) Fecal coliform;
(g) Fecal streptococcus;
(h) pH;
(i) Total Kjeldahl nitrogen;
(j) Nitrate plus nitrite;
(k) Dissolved phosphorus;
(l) Total ammonia plus organic nitrogen; and
(m) Total phosphorus; and

(IV) Additional limited quantitative data required by the director for determining permit conditions. The director may require that quantitative data shall be provided for additional parameters and may establish sampling conditions such as the location, season of sample collection, form of precipitation (snow melt, rainfall) and other parameters necessary to ensure representativeness.

B. Estimates of the annual pollutant load of the cumulative discharges to waters of the state from all identified municipal outfalls or field screening points and the event mean concentration of the cumulative discharges to waters of the state from all identified municipal outfalls or field screening points during a storm event as described under paragraphs (4)(A)3. and (4)(B)2. for BOD_5, COD, TSS, dissolved solids, total nitrogen, total ammonia plus organic nitrogen, total phosphorus, dissolved phosphorus, cadmium, copper, lead and zinc. Estimates shall be accompanied by a description of the procedures for estimating constituent loads and concentrations, including any modeling, data analysis and calculation methods;

C. A proposed schedule to provide estimates for each major outfall or field screening point identified in either paragraph (4)(A)3. or (4)(B)2. of this rule of the seasonal pollutant load and of the event mean concentration of a representative storm for any constituent detected in any sample required under subparagraph (4)(B)3.A. of this rule; and

D. A proposed monitoring program for representative data collection for the term of the permit that describes the location of outfalls or field screening points to be sampled (or the location of instream stations), why the location is representative, the frequency of sampling, parameters to be sampled and a description of sampling equipment;

4. Proposed management program. A proposed management program covers the duration of the permit. It shall include a comprehensive planning process which involves public participation and where necessary intergovernmental coordination to reduce the discharge of pollutants to the maximum extent practicable using BMPs, control techniques and system, design and engineering methods and other provisions which are appropriate. The program shall also include a description of staff and equipment available to

implement the program. Separate proposed programs may be submitted by each copetitioner. Proposed programs may impose controls on a system-wide basis, a watershed basis, a jurisdiction basis or on individual outfalls. Proposed programs will be considered by the director when developing permit conditions to reduce pollutants in discharges to the maximum extent practicable. Proposed management programs shall describe priorities for implementing controls. These programs shall be based on—

A. A description of structural and source control measures to reduce pollutants from runoff from commercial and residential areas that are discharged from the municipal storm sewer system that are to be implemented during the life of the permit, accompanied with an estimate of the expected reduction of pollutant loads and a proposed schedule for implementing the controls. At a minimum, the description shall include:

(I) A description of maintenance activities and a maintenance schedule for structural controls to reduce pollutants (including floatables) in discharges from municipal separate storm sewers;

(II) A description of planning procedures including a comprehensive master plan to develop, implement and enforce controls to reduce the discharge of pollutants from municipal separate storm sewers which receive discharges from areas of new development and significant redevelopment. The plan shall address controls to reduce pollutants in discharges from municipal separate storm sewers after construction is completed;

(III) A description of practices for operating and maintaining public streets, roads and highways and procedures for reducing the impact on receiving waters of discharges from municipal storm sewer systems, including pollutants discharged as a result of deicing activities;

(IV) A description of procedures to assure that flood management projects assess the impacts on the water quality of receiving water bodies and that existing structural flood control devices have been evaluated to determine if retrofitting the device to provide additional pollutant removal from storm water is feasible;

(V) A description of a program to monitor pollutants in runoff from operating or closed municipal landfills or other treatment, storage or disposal facilities for municipal waste which shall identify priorities and procedures for inspections and establishing and implementing control measures for the discharges. This program can be coordinated with the program developed under subparagraph (4)(B)4.D. of this rule; and

(VI) A description of a program to reduce to the maximum extent practicable pollutants in discharges from municipal separate storm sewers associated with the application of pesticides, herbicides and fertilizer which will include, as appropriate, controls such as educational activities, permits, certifications and other measures for commercial applicators and distributors and controls for application in public right-of-ways and at municipal facilities;

B. A description of a program, including a schedule, to detect and remove (or require the discharger to the municipal separate storm sewer to obtain a separate state operating permit) illicit discharges and improper disposal into the storm sewer. The proposed program shall include:

(I) A description of a program including inspections, to implement and enforce an ordinance, orders or similar means to prevent illicit discharges to the municipal separate storm sewer system. This program description shall address all types of illicit discharges, however the following categories of nonstorm water discharges or flows shall be addressed where the discharges are identified by the municipality as sources of pollutants to waters of the state: water line flushing, landscape irrigation, diverted stream flows, rising groundwaters, uncontaminated groundwater infiltration to separate storm sewers, uncontaminated pumped groundwater, discharges from potable water sources, foundation drains, air-conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges and street wash water. Program descriptions shall address discharges or flows from fire fighting only where the discharges or flows are identified as significant sources of pollutants to waters of the state;

(II) A description of procedures to conduct ongoing field screening activities during the life of the permit, including areas or locations that will be evaluated by field screens;

(III) A description of procedures to be followed to investigate portions of the separate storm sewer system that, based on the results of the field screen, or other appropriate information, indicate a reasonable potential of containing illicit discharges or other sources of nonstorm water. These procedures may include: sampling procedures for constituents such as fecal coliform, fecal streptococcus, surfactants (MBAS), residual chlorine, fluorides and potassium; and testing with fluorometric dyes or conducting in-storm sewer inspections where safety and other considerations allow. The description shall include the location of storm sewers that have been identified for the evaluation;

(IV) A description of procedures to prevent, contain and respond to spills that may discharge into the municipal separate storm sewer;

(V) A description of a program to promote, publicize and facilitate public reporting of the presence of illicit discharges or water quality impacts associated with discharges from municipal separate storm sewers;

(VI) A description of educational activities, public information activities and other appropriate activities to facilitate the proper management and disposal of used oil and toxic materials; and

(VII) A description of controls to limit infiltration of seepage from municipal sanitary sewers to municipal separate storm sewer systems where necessary;

C. A description of a program to monitor and control pollutants in storm water discharges to municipal systems from municipal landfills, hazardous waste treatment, disposal and recovery facilities, industrial facilities that are subject to Section 313 of Title III of SARA and industrial facilities that the municipal permit applicant determines are contributing a substantial pollutant loading to the municipal storm sewer system. The program shall—

(I) Identify priorities and procedures for inspections and establishing and implementing control measures for the discharges; and

(II) Describe a monitoring program for storm water discharges associated with the industrial facilities identified in this part to be implemented during the term of the permit, including the submission of quantitative data on the following constituents: any pollutants limited in effluent guidelines subcategories, where applicable; any pollutant listed in an existing state operating permit for a facility; oil and grease, COD, pH, BOD_5, TSS, total phosphorus, total Kjeldahl nitrogen, nitrate plus nitrite nitrogen and any information on parameters that are believed to be present listed on Clean Water Commission Application Form 105D; and

D. A description of a program to implement and maintain structural and nonstructural *[best management practices]* **BMPs** to reduce pollutants in storm water runoff from construction sites to the municipal storm sewer system which shall include:

(I) A description of procedures for site planning which incorporate consideration of potential water quality impacts;

(II) A description of requirements for nonstructural and structural BMPs;

(III) A description of procedures for identifying priorities for inspecting sites and enforcing control measures which consider the nature of the construction activity, topography and the characteristics of soils and receiving water quality; and

(IV) A description of appropriate educational and training measures for construction site operators;

5. Assessment of controls. Estimated reductions in loadings of pollutants from discharges of municipal storm sewer constituents from municipal storm sewer systems expected as the result of the municipal storm water quality management program. The assessment also shall identify known impacts of storm water controls on groundwater;

6. Fiscal analysis. For each fiscal year to be covered by the permit, a fiscal analysis of the necessary capital and operation and maintenance expenditures necessary to accomplish the activities of the programs under paragraphs (4)(B)3. and 4. of this rule. The analysis shall include a description of the source of funds that is proposed to meet the necessary expenditures, including legal restrictions on the use of the funds;

7. Where more than one (1) legal entity submits an application, the application shall contain a description of the roles and responsibilities of each legal entity and procedures to ensure effective coordination;

8. Where requirements under paragraphs (4)(A)3. and 4. and (4)(B)2. and 3. of this rule are not practicable or are not applicable, the director may exclude any operator of a discharge from a municipal separate storm sewer which is designated under paragraph (1)(C)10. or 14. of this rule from these requirements. The director shall not exclude Independence, Kansas City, Springfield and St. Louis from any of the permit application requirements under this paragraph except where authorized under section (4) of this rule;

9. Petitions.

A. Any operator of a municipal separate storm sewer system may petition the director to require a separate state operating permit for any discharge into the municipal separate storm sewer system.

B. Any person may petition the director to require a state operating permit for a discharge which is composed entirely of storm water which contributes to a violation of a water quality standard or is a significant contributor of pollutants to waters of the state.

C. The owner or operator, or both, of a municipal separate storm sewer system may petition the director to reduce the census estimates of the population served by the separate system to account for storm water discharged to combined sewers that is treated in a publicly-owned treatment works. In municipalities in which combined sewers are operated, the census estimates of population may be reduced proportional to the fraction of the length of combined sewers over the sum of the length of combined sewers and municipal separate storm sewers and an applicant has submitted the state operating permit number associated with each discharge point and a map indicating areas served by combined sewers and the location of any combined sewer overflow discharge point.

D. Any person may petition the director for the designation of a large or medium municipal separate storm sewer system as defined by paragraph (1)(C)10. or 14. of this rule.

E. The director shall make a final determination on any petition received under subparagraph (4)(B)9.C. within ninety (90) days after receiving the petition; and

10. Municipal separate storm sewer system reports. The operator of *[a large or medium]* municipal separate storm sewer system or a municipal separate storm sewer that has been designated by the director under paragraph (1)(C)10., or 14. must submit an annual report by the anniversary of the date of the issuance of the permit for the system. The report shall include:

A. The status of implementing the components of the storm water management program that are established as permit conditions;

B. Proposed changes to the storm water management programs that are established as permit conditions;

C. Revisions, if necessary, to the assessment of controls and the fiscal analysis reported in the permit application;

D. A summary of data, including monitoring data, that is accumulated throughout the reporting year;

E. Annual expenditures during reporting period and budget for year following each annual report;

F. A summary describing the number and nature of enforcement actions, inspections and public education programs; and

G. Identifications of water quality improvements or degradation.

(5) Application Requirements for Small Municipal Separate Storm Sewer (Small MS4) Discharges.

(A) General Permit Option. Applicants seeking coverage under a general permit for small MS4 discharges shall submit the department's most recent version of Application For General Permit Form E and must develop and submit descriptions of storm water management programs designed to reduce pollutants in storm water runoff to protect water quality of receiving waters. The application must include program descriptions for at least the following six (6) minimum control measures:

1. Public education and outreach on storm water impacts. The public education program should inform individuals and households about impacts of storm water discharges on water bodies and steps which can be taken to reduce or prevent storm water pollution.

2. Public involvement/participation process. A program must be developed which at a minimum complies with state and local public notice requirements.

3. Illicit discharge detection and elimination. Discharges to MS4s of wastewater other than those consisting entirely of storm water are considered "illicit discharges" except for discharges permitted under other state operating permits or directly from fire fighting activities. A program to detect and eliminate such discharges must be developed.

4. Construction site storm water runoff control. A program to control discharges of storm water and sediment from construction sites and activities must be developed. The program must be designed to protect receiving waters from sediment and other pollutants such as petroleum products, solid wastes, fertilizers, pesticides, and other construction related chemicals.

5. Post-construction storm water management in new development and redevelopment. A program must be developed to address storm water runoff from new development and redevelopment projects that result in land disturbance of greater than or equal to one (1) acre, including projects less than one (1) acre that are part of a larger common plan of development or sale, and discharge into the MS4.

6. Pollution prevention/good housekeeping for municipal operations. A program must be developed which addresses pollution prevention and good housekeeping from municipal operations. The program must include a training component and have the ultimate goal of preventing or reducing impacts from storm water runoff from all municipal operations including those not currently required to be permitted as storm water associated with industrial activities.

A. Implementation and enforcement of these six (6) minimum measures will be a requirement of the general permit when issued. Guidance on the content of these programs is available in the "EPA Phase II Storm Water Regulations" dated December 8, 1999.

B. Site Specific Option. Applicants who do not wish to be covered under a general permit for small MS4 discharges can apply for a site-specific permit by submitting the most recent version of Application for Discharge Permit Form A and

by submitting program descriptions of the six (6) minimum measures as outlined in paragraphs (5)(A)1.–6. Additional information regarding issues to be addressed in the site-specific permit shall accompany the application. Implementation and enforcement of the six (6) minimum measures will be one of the requirements of any issued permit.

C. Co-permittee Option.

1. The department encourages cooperation between potential small MS4 applicants when addressing application requirements and in the development, implementation and enforcement of the six (6) minimum measures under issued permits. Applicants within one (1) urbanized area, or within a common watershed, or in an area served in common by one (1) service provider should consider applying as coapplicants to share the financial and administrative responsibilities of the application process and to become copermittees under an issued permit.

2. Applications from co-permittees shall include the requirements of either subsection (5)(A) or (B) and in addition shall contain information designating responsibilities of each co-applicant in regard to development, implementation and enforcement of the six (6) minimum measures.

[(5)] **(6)** Permit Requirements.

(A) The director may issue a general permit for storm water discharges in accordance with the following:

1. The general permit shall be written to cover a category of discharges described in the permit except those covered by individual permits within a geographic area. The area shall correspond to existing geographic or political boundaries, such as—

A. Designated planning areas under Sections 208 and 303 of the Federal Clean Water Act;

B. City, county or state political boundaries or special sewer districts chartered by the state;

C. State highway systems; and

D. Any other appropriate division or combination of boundaries;

2. The general permit shall be written to regulate a category of point sources if the sources all—

A. Involve the same or substantially similar types of operations;

B. Discharge the same types of wastes;

C. Require the same operating conditions;

D. Require the same or similar monitoring; and

E. In the opinion of the director, are more appropriately controlled under a general permit than under individual permits;

3. General permits may be issued, modified, revoked and reissued or terminated in accordance with applicable requirements of this rule and the permit. To be included under a general permit, a permittee must submit an application on forms supplied by the department;

4. The director may require any person authorized by a general permit to apply for and obtain an individual operating permit. Any interested person may petition the director to require a permittee to apply for an individual permit. Cases where an individual operating permit may be required include, but are not limited to the following:

A. Effluent limitation guidelines are promulgated for point sources covered by a general state operating permit;

B. The discharge(s) is a significant contributor of pollutants. In making this determination, the director may consider the following factors:

(I) The location of the discharge with respect to waters of the state;

(II) The size of the discharge;

(III) The quantity and nature of the pollutants discharged to waters of the state; and

(IV) Other relevant factors;

C. The discharge(s) is a significant contributor of pollution which impairs the beneficial uses of the receiving stream;

D. The discharger is not in compliance with the conditions of the general operating permit; or

E. A water quality management plan containing requirements applicable to point sources is approved;

5. Any owner or operator authorized by a general permit may request to be excluded from the coverage of the general permit by applying for an individual permit. The owner or operator shall submit an application with reasons supporting the request to the director. The request shall be granted by issuing an individual permit if the reasons cited by the owner or operator are adequate to support the request.

A. When an individual operating permit is issued to an owner or operator otherwise subject to a general operating permit, the applicability of the general permit to the individual operating permittee is automatically terminated on the effective date of the individual permit.

B. A source excluded from a general permit solely because it already has an individual permit may request that the individual permit be revoked and that it be issued a general permit. Upon revocation of the individual permit and issuance of the general permit to the permittee, the general permit shall apply to the source. The source shall be included under the general permit only if it meets all the requirements for coverage under the general permit;

6. Petitions may be submitted to the director requesting the development of a general permit for a group of facilities or activities meeting the criteria listed in paragraph (5)(A)1.

A. Information required in a petition must include:

(I) A full description of the group including names, addresses and locations and the industrial activities conducted by group members;

(II) Any significant materials stored, used, loaded, unloaded, treated or disposed outdoors at these facilities;

(III) The existence and permit status of any other wastewater discharges from the group;

(IV) Analytical data which exists for any group members' storm water runoff;

(V) A summary of the history of spills, leaks and complaints relating to significant materials used, stored, treated or disposed of on these facilities; and

(VI) Management practices used to prevent or minimize materials contacting storm water.

B. Within ninety (90) days of receipt of the petition, the director shall notify applicant that—

(I) A general permit will be developed;

(II) A general permit will not be developed and reason; or

(III) Further information is required to make a decision; and

C. If the director has indicated that a general permit will be developed for specific facilities/activities, application for general permit as indicated in 10 CSR 20-6.010(13) may be submitted in lieu of an individual industrial storm water runoff permit application.

7. General permits shall contain BMP requirements and/or monitoring and reporting requirements to keep the storm water from becoming contaminated;

8. A general permit will be issued to cover the geographical area of any city or county government that has a land disturbance program in place that has been approved by the department. The general permit will require that the person(s) disturbing the land comply with the conditions of the locally-approved land disturbance program. Permittees who wish to be covered by this general permit and who comply with the locally-approved program must submit a state general permit and a one hundred fifty dollar ($150) permit fee to the department. Receipt of the application and fee

shall fulfill the state permit requirements for the applicant. In the event the approval of the land disturbance program is withdrawn by the department, all activities started after the withdrawal must be permitted under either a site specific permit or a statewide general permit that covers the activity if one exists; and

9. A general permit will be issued to cover the geographical area of any city, county or state government agency that performs or contracts for land disturbance activities, if the agency has a storm water control program approved by the department. The general permit will be issued for all activities that are conducted within the geographic area under contract by, or performed by, the city, county or state agency. The applicant will need only to secure one (1) general permit for all activities that occur during the life of the permit. In the event the approval of the land disturbance program is withdrawn by the department, all activities started after the withdrawal must be permitted under either a site specific permit or a statewide general permit that covers the activity if one exists.

(B) Site specific industrial permits issued pursuant to this rule shall contain the following:

1. Identification of the permit holder; and

2. Effluent limitation if necessary to protect waters of the state. The limitation shall be based on one (1) or more of the following:

A. The application and information filed by the permittee;

B. Effluent guidelines promulgated by the department or Environmental Protection Agency for the facility;

C. Best professional judgment of the permit writer;

D. A water quality determination made by the department; or

E. BMP requirements that are proposed in city-wide management programs;

3. Monitoring and reporting requirements; and

4. A schedule of compliance and interim limitations allowing up to three (3) years from permit issuance to gain compliance with the effluent limitation.

(C) Site specific permits for system-wide or jurisdiction-wide separate storm sewers shall contain the following:

1. Identification of the permit holder;

2. BMP requirements that are proposed and approved in the city-wide management program; and

3. Monitoring and reporting requirements.

(D) Terms and Conditions of Permits.

1. All storm water discharges shall be consistent with the terms and conditions of the storm water permits.

2. For the purpose of inspecting, monitoring or sampling the point source, water contaminant source or storm water treatment facility for compliance with the Clean Water Law and these rules, the owner or operator of the land disturbance site shall allow authorized representatives of the department upon presentation of credentials and at reasonable times to—

A. Enter upon the premises in which a point source, water contaminant source or storm water treatment facility is located, or in which any records are required to be kept under terms and conditions of the storm water permit;

B. Have access to or copy any records required to be kept under terms and conditions of the storm water permit;

C. Inspect any monitoring equipment or monitoring method required in the storm water permit;

D. Inspect any collection, treatment or land application facility covered under the storm water permit; and

E. Sample any storm water at any point in the collection system or treatment process.

3. Any expansions or modifications which will result in new or different characteristics must be reported sixty (60) days before the storm water modification begins. Notification may be accomplished by application for a new storm water permit, or if the change will not significantly alter limitations specified in the permit, by submission of notice to the department of the change.

4. All reports required by the department shall be signed by a person designated in 10 CSR 20-6.010 or a duly authorized representative under 10 CSR 20-6.010.

5. Other terms and conditions shall be incorporated into the storm water permits if the department determines they are necessary to assure compliance with the Clean Water Law and regulations.

*AUTHORITY: section 644.026[, RSMo Supp. 1990] and 644.036, RSMo [1986] **2000**. Original rule filed July 15, 1991, effective Oct. 1, 1992. Amended: Filed Sept. 14, 2001.*

PUBLIC COST: This proposed amendment will cost state agencies or political subdivision $1,290,000 in FY 2002 and two hundred forty thousand dollars ($240,000) in FY 2003. For the years after FY 2003, the total annualized aggregate cost is two hundred forty thousand dollars ($240,000) for the life of the rule. Note attached fiscal note for assumptions that apply.

PRIVATE COST: This proposed amendment will cost $1,500,000 in FY 2002 and three hundred thousand dollars ($300,000) in FY 2003. For the years after FY 2003, the total annualized aggregate cost is three hundred thousand dollars ($300,000) for the life of the rule. Note attached fiscal note for assumptions that apply.

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: The Missouri Clean Water Commission will hold a public hearing on this proposed amendment beginning at 9:00 a.m. November 28, 2001. The public hearing will be held at the Governor Office Building, 200 Madison Street, Jefferson City, Missouri. Those wishing to speak at the public hearing should send a written request to speak to the Secretary, Missouri Clean Water Commission, PO Box 176, Jefferson City, MO 65102, or by fax at (573) 526-1146, by 5:00 p.m., November 21, 2001. Written comments will also be accepted until 5:00 p.m., December 5, 2001.

FISCAL NOTE
PUBLIC ENTITY COST

I. RULE NUMBER

Title: 10

Division: 20

Chapter: 6

Type of Rulemaking: Proposed Amendment

Rule Number and Name: 10 CSR 20-6.200 Stormwater Regulations

II. SUMMARY OF FISCAL IMPACT

Affected Agency or Political Subdivision	Estimated Cost of Compliance in the Aggregate
Public entities operating a municipal separate storm sewer system in an incorporated place with a population of less than 100,000. This rule will also require the Department of Natural Resources to expand its Water Pollution Control Program staff to process the new storm water permits and to follow-up with compliance inspections.	This rule is the result of a federal mandate. No cost will be imposed above that already imposed by the federal requirements. State permit fees on public entities are outlined below. These fees are considered to be at or below what the federal government would charge to implement a stormwater permitting program. Also estimated below are costs for administering the Phase II storm water program.

III. WORKSHEET

Cost to Department
First Year:

4 FTEs x $60,000 =	$ 240,000
Consultant 15,000 Hours x $70 =	$1,050,000
	$1,290,000

Subsequent Years:

4 FTEs x $60,000 =	$ 240,000

IV. ASSUMPTIONS

1. Approximately 5,275 permits will be issued. We estimate that 28 will be issued site-specific permits, the rest general permits.

2. Each general permit will require an average of 3 hours to review. A consultant will be hired to review 5,000 general permit applications.

3. The department's administration of Phase II will require four employees (one for permitting, three for inspection/enforcement).

FISCAL NOTE
PRIVATE ENTITY COST

I. RULE NUMBER

Title: 10

Division: 20

Chapter: 6

Type of Rulemaking: Proposed Amendment

Rule Number and Name: 10 CSR 20-6.200 Stormwater Regulations

II. SUMMARY OF FISCAL IMPACT

Estimate of the number of entities by class which would likely be affected by the adoption of the (Propose Rule, Proposed Amendment):	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:
	Developers that disturb areas of less than five acres but equal to or greater than one acre.	This rule is the result of a federal mandate. No cost will be imposed above that already imposed by the federal requirement. State permit fees are outlined below. These fees are considered to be at or below what the federal government would charge to implement a stormwater permitting program.

III. WORKSHEET

Year One (2002) - 5000 x $300 = $1,500,000
Subsequent Years - 1000 x $300 = $ 300,000

IV. ASSUMPTIONS

1. General permits for these activities are expected to be $300 per site.

2. Approximately 5000 additional sites are expected to require permits for the first year (2002), with 1000 new sites developed each year thereafter

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 20—Clean Water Commission
Chapter 15—Aboveground Storage Tanks—Release Response

PROPOSED RULE

10 CSR 20-15.010 Applicability and Definitions

PURPOSE: The Missouri Clean Water Commission is responsible for adopting rules necessary to prevent, control and abate potential discharge of contaminants to the waters of the state. Releases of petroleum and other regulated substances from aboveground storage tanks and associated piping, primarily from ASTs located at service stations, marinas, bulk plants, and fleet fueling facilities, have been documented throughout the state. While the applicable Department of Agriculture regulations focus on prevention of such releases, there are currently no specific requirements for release response measures that must be taken to protect the environment and the waters of the state. The commission has determined release response measures to be necessary because, once a release has occurred, the nature of the contaminants is such that, without appropriate release response measures, there is a substantial threat that the discharged contaminants will pollute the waters of the state. The intent of the release response measures required by the rules in this chapter is to prevent any discharged contaminants from polluting the waters of the state. This rule specifies which aboveground storage tanks must comply with the technical requirements set forth in this chapter and defines specific words used in this chapter so that the meaning of these terms, and their application in the rules of this chapter, is easily understood.

(1) The requirements in this chapter apply to the owner or operator of any facility on which one or more aboveground storage tanks (AST), as the term is defined in this rule, is located.

(2) "Aboveground storage tank (AST)" or "AST System" means any one or a combination of tanks, including pipes connected thereto, used to contain an accumulation of regulated substances and the volume of which, including the volume of the aboveground pipes connected thereto, is more than ninety percent (90%) above the surface of the ground, and is utilized for the sale of products regulated by Chapter 414, RSMo. The term does not include those tanks listed below or aboveground storage tanks at petroleum pipeline terminals. The following are not considered aboveground storage tanks:

(A) Underground storage tanks (USTs) as defined in 319.100 RSMo;

(B) Farm or residential tanks of one thousand one hundred (1,100) gallons or less used for storing motor fuel for noncommercial purposes;

(C) Tanks used for storing heating oil for consumptive use on the premises where stored;

(D) Septic tanks;

(E) Pipeline facilities, including gathering lines, regulated under:

1. The federal Natural Gas Pipeline Safety Act of 1968 (P.L. 90-481), as amended; or

2. The federal Hazardous Liquid Pipeline Act of 1979 (P.L. 96-129), as amended;

(F) Pipeline facilities regulated under state laws comparable to the provisions of law referred to in subsection (E) of this section;

(G) Surface impoundments, pits, ponds, or lagoons;

(H) Storm water or waste water collection systems;

(I) Flow-through process tanks;

(J) Liquid traps or associated gathering lines directly related to oil or gas production and gathering operations;

(K) Storage tanks 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; and

(L) Transformers, circuit breakers or other equipment or machinery that contain regulated substances for operational purposes.

(3) "Beneath the surface of the ground" means beneath the ground surface or otherwise covered with earthen materials.

(4) "Department," unless otherwise stated, means the Missouri Department of Natural Resources.

(5) "Free product" refers to a regulated substance that is present as a non-aqueous phase liquid (for example, pools of regulated substances at the surface or perched in the subsurface on top of an impermeable rock stratum or on top of groundwater).

(6) "Pipe" or "piping" means a hollow cylinder or tubular conduit constructed of non-earthen materials.

(7) "Regulated substance" means:

(A)"Petroleum," which is crude oil or any fraction thereof that is liquid at standard conditions of temperature and pressure (sixty degrees Fahrenheit (60°F) and 14.7 pounds per square inch absolute); or

(B) Other substances stored and approved for use as an alternative motor vehicle fuel by the United States Environmental Protection Agency, the Missouri Department of Agriculture, or the Missouri Department of Natural Resources, including, but not limited to:

1. Nonpetroleum or petroleum/nonpetroleum blended fuels such as biomass fuels, soydiesel or other biodiesels;

2. Neat alcohols (such as ethanol or methanol);

3. Alcohol-blended fuels;

4. Innovative or advanced technology petroleum fuels that are liquid at standard conditions of temperature or pressure (sixty degrees Fahrenheit (60°F) and 14.7 pounds per square inch absolute).

(8) "Release" includes, but is not limited to, any spilling, leaking, emitting, discharging, escaping, leaching, or disposing of regulated substances from an AST onto the ground surface or into groundwater, surface water, or subsurface soils.

(A) A release is "confirmed," for purposes of the rules in this chapter, upon discovery or observation by any person of regulated substances on the ground surface or in groundwater, surface water, or subsurface soils.

(B) A release is "suspected," for purposes of the rules in this chapter, anytime there is any indication of the presence of regulated substances on the ground surface or in groundwater, surface water, or subsurface soils. Factors indicating the presence of regulated substances in the environment include, but are not limited to, erratic behavior of dispensing equipment, unexplained loss of product, notification by a third party of a potential release, or some reason other than discovery or observation of environmental contamination.

(9) "Tank" is a stationary device designed to contain an accumulation of regulated substances and constructed of non-earthen materials (for example, concrete, steel, or fiberglass-reinforced plastic) that provide structural support.

AUTHORITY: sections 319.137 and 644.026, RSMo 2000. Original rule filed Sept. 13, 2001.

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

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

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: The Missouri Clean Water Commission will hold a public hearing on this rule action and others beginning at 9:00 a.m. on November 28, 2001 in Room 450 of the Governor Office Building, 200 Madison Street, Jefferson City, Missouri. Any person wishing to speak at the hearing shall send a written request to the Secretary of the Clean Water Commission at PO Box 176, Jefferson City, MO 65102-0176. To be accepted, written requests to speak shall be postmarked by midnight on November 14, 2001. Faxed or e-mailed correspondence will not be accepted.

Any person may submit written comments on this rule action. Written comments shall be sent to the Director of the Hazardous Waste Program at PO Box 176, Jefferson City, MO 65102-0176. To be accepted, written comments shall be postmarked by midnight on Wednesday, December 5, 2001. Faxed or e-mailed correspondence will not be accepted.

Please direct all inquiries to the Rules Coordinator of the Hazardous Waste Program at (573) 751-3176.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 20—Clean Water Commission
Chapter 15—Aboveground Storage Tanks—Release Response

PROPOSED RULE

10 CSR 20-15.020 Release Reporting and Initial Release Response Measures

PURPOSE: The Missouri Clean Water Commission is responsible for adopting rules necessary to prevent, control and abate potential discharge of contaminants to the waters of the state. Releases of petroleum and other regulated substances from aboveground storage tanks and associated piping, primarily from ASTs located at service stations, marinas, bulk plants, and fleet fueling facilities, have been documented throughout the state. While the applicable Department of Agriculture regulations focus on prevention of such releases, there are currently no specific requirements for release response measures that must be taken to protect the environment and the waters of the state. The commission has determined release response measures to be necessary because, once a release has occurred, the nature of the contaminants is such that, without appropriate release response measures, there is a substantial threat that the discharged contaminants will pollute the waters of the state. The intent of the release response measures required by the rules in this chapter is to prevent any discharged contaminants from polluting the waters of the state. Specifically, this rule establishes procedures for reporting suspected releases, responding to releases and the subsequent steps necessary to ensure that a release is properly investigated and cleaned up. This rule also establishes requirements for verification of a release, and for conducting off-site investigations following reported or suspected releases if off-site migration is suspected.

(1) Reporting Releases and Suspected Releases. Unless otherwise provided in this rule, owners and operators of aboveground storage tanks (ASTs) shall report any suspected or confirmed release of a regulated substance to the Department of Natural Resources' Emergency Spill Line at (573) 634-2436 at the earliest practical moment within twenty-four (24) hours of discovery of the suspected or confirmed release. Immediately upon the discovery or observation of regulated substances on the ground surface or in groundwater, surface water, or subsurface soils, the owner or operator shall complete the following:

(A) The initial release response measures described in section (7) of this rule;

(B) If necessary, the free product recovery measures described in section (8) of this rule.

(2) System Test. For any suspected release that has not been confirmed by discovery or observation of regulated substances on the ground surface or in groundwater, surface water, or subsurface soils, the owner or operator of the AST shall take measures as necessary to determine whether a leak exists in either any portion of the tank or piping that routinely contains product or in the attached delivery piping, or in both. Measures that satisfy this requirement include, but are not limited to, hydrostatic testing of the AST system in accordance with API Standard 650, F-4 to F-7.6, air testing of the AST system, or a visual inspection of the tank bottom.

(A) Upon confirmation of a release, the owner or operator of the AST shall initiate the initial release response actions described in section (7) of this rule.

(B) If it is determined that no release has occurred, and there is no other indication of regulated substances on the ground surface or in groundwater, surface water, or subsurface soil, further investigation is not required.

(3) Exceptions. Following are exceptions to the requirement to report any suspected or confirmed release of a regulated substance to the environment.

(A) No further action is necessary for any release or spill of twenty-five (25) gallons or less, provided the release or spill is immediately contained and cleaned up.

(B) No further action is necessary for any release or spill that is completely contained within secondary containment structures, provided the secondary containment structure is functionally liquid-tight, and has the ability to contain any released product until the release or spill is cleaned up.

(4) Presumption of Release. A release is presumed upon discovery or observation by any person of the presence of regulated substances on the ground surface or in groundwater, surface water, or subsurface soil, or any indication that a release to the environment has occurred at the AST site or in the surrounding area. Examples include the presence of free product or vapors in soils, basements, sewer lines, utility lines and nearby surface or drinking water.

(5) Investigation Due To Off-Site Impacts. The department may require an owner or operator of an AST to measure for the presence of contamination as described in subsection (7)(E) of this rule when, in the judgment of the department, it is necessary to establish whether an AST is the source of off-site contamination. The department's judgment shall be based upon documented physical evidence of a release at the AST site, including, but not limited to, the discovery of free product or vapors in soils, basements, sewer lines, utility lines or nearby surface waters or drinking water supplies.

(6) Investigation Due to Closure.

(A) Upon closure of an AST in accordance with applicable rules of the Department of Agriculture, the department may require an owner or operator of an AST to measure for the presence of contamination as described in subsection (7)(E) of this rule when, in the judgment of the department, it is necessary to establish whether there has previously been a release at the former AST site or to establish whether potential contamination from any buried piping left in place poses a current or potential threat to cause pollution to waters of the state. The department's judgment shall be based upon documented physical evidence of a release at the AST site, including, but not limited to, the discovery of free product or

vapors in soils, basements, sewer lines, utility lines or nearby surface waters or drinking water supplies.

(B) The department may require the owner or operator of an AST permanently closed prior to the effective date of this rule to measure for the presence of contamination at the former tank site if, in the judgment of the department, releases from the AST and/or its buried piping pose a current or potential threat to cause pollution to the waters of the state. The department's judgment shall be based upon documented physical evidence of a release at the former AST site, including, but not limited to, the discovery of free product or vapors in soils, basements, sewer lines, utility lines or nearby surface waters or drinking water supplies.

(7) Initial Release Response Measures. Owners or operators of ASTs shall:

(A) Remove as much of the regulated substances from the AST as is necessary to prevent further release to the environment;

(B) Visually inspect any released substances and prevent further migration of the release into surrounding soils and groundwater;

(C) Monitor and mitigate any environmental hazards posed by vapors or free product that have migrated from the AST site and entered subsurface structures such as sewers, basements or subsurface utility conduits or trenches;

(D) Remedy hazards posed by excavated or exposed contaminated soils that result from initial release response activities. Any treatment or disposal of contaminated soils shall be in compliance with applicable state and local requirements;

(E) Collect and analyze at least one (1) soil or groundwater sample as necessary to establish the presence of contamination. The sample(s) must be collected in a location where contamination is most likely to be present at the AST site. In selecting the location of the sample(s), the owner or operator shall consider the nature of the stored substance, the type of backfill around the release if outside the secondary containment, or the secondary containment if the secondary containment is not constructed of impermeable material, depth to groundwater, and all other factors appropriate for identifying the presence and source of the release; and

(F) Investigate the site to determine whether free product is present. If free product is present, then free product removal activities shall begin immediately.

(8) Free Product Removal. The owner or operator of the AST shall immediately remove as much free product as practicable. Any actions initiated or required under this section shall be continued until the department determines otherwise. Upon discovery of free product, the owner or operator shall, at a minimum:

(A) Remove free product to minimize the spread of contamination into previously uncontaminated zones. The recovery and disposal techniques shall be appropriate to the hydrogeologic conditions at the site. Recovered by-products shall be treated, discharged or disposed of in compliance with applicable local, state and federal regulations;

(B) Use abatement of free product migration as a minimum objective for free product removal;

(C) Handle all flammable products and/or wastes in a safe manner to prevent fires or explosions;

(D) Include information about free product recovery in the report submitted to the department, as required by section (9) of this rule. The report shall provide at least the following information:

1. The name of the person(s) responsible for implementing the free product removal measures;

2. The estimated quantity, type and thickness of free product observed or measured in wells, boreholes and excavations;

3. The type of free product recovery system used;

4. Whether any discharge will take place on-site or off-site during the recovery operation and the location of this discharge;

5. The type of treatment applied to, and the effluent quality expected from, any discharge;

6. The steps that have been or are being taken to obtain necessary permits for any discharge;

7. The quantity and disposition of the recovered free product; and

8. The location and the appearance of the free product; and

(E) Upon completion of the activities required by this section, the owner or operator of the AST shall continue with the initial release response measures described in section (7) of this rule.

(9) Written Report. The owner or operator of the AST shall submit a written report on all activities required by this rule to the department within thirty (30) days of the date of discovery of the release. The report shall demonstrate compliance with all applicable requirements of this rule. Upon request, the department may allow another reasonable period of time for submission of the report. Upon review of this report, the department will determine whether the owner or operator must conduct a site characterization, as described in 10 CSR 20-15.050. If, in the judgment of the department, the information in the report is insufficient to adequately make this determination, the department may request additional information.

AUTHORITY: sections 319.137 and 644.026, RSMo 2000. Original rule filed Sept. 13, 2001.

PUBLIC COST: This proposed rule is estimated to cost affected state agencies and political subdivisions thirty-two thousand eight hundred nineteen dollars ($32,819) in Fiscal Year 2002 and every year thereafter for administration of and compliance with the new rule. A detailed fiscal note has been filed with the secretary of state.

PRIVATE COST: This proposed rule is expected to cost private entities $2,575,482 in Fiscal Year 2002 and every year thereafter for compliance with the requirements of the new rule. A detailed fiscal note has been filed with the secretary of state.

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: The Missouri Clean Water Commission will hold a public hearing on this rule action and others beginning at 9:00 a.m. on November 28, 2001 in Room 450 of the Governor Office Building, 200 Madison Street, Jefferson City, Missouri. Any person wishing to speak at the hearing shall send a written request to the Secretary of the Clean Water Commission at PO Box 176, Jefferson City, MO 65102-0176. To be accepted, written requests to speak shall be postmarked by midnight on November 14, 2001. Faxed or e-mailed correspondence will not be accepted.

Any person may submit written comments on this rule action. Written comments shall be sent to the Director of the Hazardous Waste Program at PO Box 176, Jefferson City, MO 65102-0176. To be accepted, written comments shall be postmarked by midnight on Wednesday, December 5, 2001. Faxed or e-mailed correspondence will not be accepted.

Please direct all inquiries to the Rules Coordinator of the Hazardous Waste Program at (573) 751-3176.

FISCAL NOTE
PUBLIC ENTITY COST

I. RULE NUMBER

Title: Department of Natural Resources

Division: Clean Water Commission

Chapter: Aboveground Storage Tank - Release Response

Type of Rulemaking: Proposed Rule

Rule Number and Name: 10 CSR 20-15.020 Release Reporting and Initial Release Response Measures

II. SUMMARY OF FISCAL IMPACT

Affected Agency or Political Subdivision	Number affected[1]	Item	Itemized Cost
Publicly-owned AST facilities storing petroleum products or other regulated substances for resale purposes and having a release or suspected release of regulated substances to the environment	3	Release Reporting	$20
		System Test	$450
		Initial Release Response Measures	$24,420
		Free Product Removal	$3,200
		Total Compliance Cost	**$28,090**
Missouri Department of Natural Resources[2]	1	Documenting release reports	$1,698
		Documenting System Tests	$425
		Documenting Site Investigation Reports	$934
		Review Initial Release Response Measures Reports	$1,375
		Review Free Product Recovery Reports	$297
		Total Administration Cost	**$4,729**
		Total Annual Cost to Public Entities to Administer and Comply with the requirements of 10 CSR 20-15.020	**$32,819[3]**

[1]All publicly-owned AST facilities storing petroleum products or other regulated substances for resale purposes are potentially affected by this rule. As of July 2001, the Missouri Department of Agriculture has 8 publicly-owned marinas and 66 publicly-owned airports registered in their database of facilities with ASTs statewide. It is assumed for the purposes of this fiscal note that marinas and airports constitute the entire universe of publicly-owned AST facilities potentially subject to the requirements of this rule. Of this entire universe, it is assumed for the purpose of this fiscal note that only 3 publicly-owned AST facilities will have a reportable release within a year of the effective date of this rule.
[2]The Missouri Department of Natural Resources is the agency responsible for administering the release reporting and initial release response measures requirements contained in this rule.
[3]This is an annualized cost. Because the duration of the rule cannot be estimated, an annualized aggregate is provided. All

numbers from the worksheet below have been rounded off to the nearest whole dollar.

III. WORKSHEET

1. Personnel Costs for Merit Employees are calculated using step "O" of the state fiscal year 2001 merit schedule produced by the Missouri Commission on Management and Productivity (COMAP). Monthly salaries are multiplied by 12 to obtain an annual cost. The annual cost is multiplied by a factor of 27.5% with the additional amount added to the annual salary to account for fringe benefits. $8045 is added for equipment and expenses. This sum is then multiplied by 22.15% and the additional amount added to account for indirect costs. Hourly costs are found by dividing the adjusted annual costs by 2080, the number of hours in a Full-Time Equivalent (FTE) All adjustment factors are based on current information provided by the hazardous waste program budget staff. Calculations for estimating the personnel costs of county and municipal employees are based on the same assumptions as for merit employees. Using this formula and the appropriate salaries, the following hourly rates are assumed to be the most accurate for purposes of this fiscal note:

   Hourly rate for Clerk Typist II = $20.88
   Hourly rate for Environmental Specialist III = $33.96
   Hourly rate for Environmental Specialist IV = $37.80
   Hourly rate for Environmental Section Chief = $42.29

2. **Reporting releases and suspected releases.** All releases greater than 25 gallons from a regulated AST that are not immediately contained and cleaned up are required to be reported to the department's Environmental Emergency Response line, unless the spill is completely contained within a secondary containment structure that is functionally liquid-tight and immediately cleaned up. It is assumed that all releases will be greater than 25 gallons. The total estimated cost attributed to the requirement for affected public entities to report releases or suspected releases is calculated based upon the experience of department staff who estimate that the department can expect a reportable release from 3 publicly-owned AST facilities per year. Public entity costs for purposes of this fiscal note include both the costs the Department of Natural Resources is assumed to incur to administer this portion of the rule (administration cost) and the costs incurred by the 3 affected public entities to comply with the requirements of the rule (compliance cost). Private entity compliance costs are counted in the private entity fiscal note for the same rule.

   A. **Department of Natural Resources administration costs.** It is assumed that the Department of Natural Resources will incur costs necessary to administer this portion of the rule. These costs include the cost of the services of an Environmental Specialist III responsible for receiving and documenting the phone call that notifies the department of the release or suspected release. It is expected to take 0.25 hours to receive and document the call. The department estimates that 3 publicly-owned AST facilities and 197 privately-owned AST facilities will be required to call the Environmental Emergency Response line, for a total of 200 calls received and processed.

      Environmental Specialist III hourly rate = $33.96 per hour

      $33.96 / 4 = $8.49 for 0.25 of an hour

      $8.49 x 200 calls processed by department = $1,698 estimated annual cost to the Missouri Department of Natural Resources to process telephone calls reporting a release or suspected release from a privately-owned or publicly-owned AST facility

   B. Public entity compliance costs. The number of publicly-owned active AST facilities in the state assumed to be subject to the release reporting and initial release response measures requirements is based upon the experience of Department staff who estimate a total of 200 reported releases or suspected releases in the year following the effective date of these rules. Currently, the Department receives an estimated 3 reports per week of releases at AST sites. This is assumed to increase somewhat once the requirement to report releases and suspected releases is promulgated as a result of this rulemaking. Of the 200 reported releases or suspected releases, the Department assumes that 3 will be at publicly-owned AST facilities. This estimate is based on the percentage of the total universe of AST facilities that are publicly-owned.

The cost for a regulated public entity to report a release to the Missouri Department of Natural Resource's Environmental Emergency Response line is estimated at an average of 0.25 hours per phone call. It is assumed that the phone call will be placed by an individual equivalent to an Environmental Specialist III, with an appropriate hourly rate.

Environmental Specialist III salary = $33.96 per hour

$33.96 x 0.20 = $6.79 estimated cost to report one release to the department's Environmental Emergency Response line

$6.79 x 3 publicly-owned AST facilities required to report = $20.37

Total public entity compliance cost for requirement to report releases = $20.37

3. **System test.** For any suspected release the owner or operator of a publicly-owned AST is required to take measures as necessary to determine whether a leak exists in either any portion of the tank or piping that routinely contains product or in the attached delivery piping, or in both. There are various measures that satisfy this requirement, but for the purposes of this fiscal note, it is assumed that a tightness test of the pressurized piping will be the selected method of system test. Costs incurred by public entities regulated by this rule to comply with this requirement are estimated by assuming that the cost of the tightness test will be contracted out. The estimated cost to conduct and document a system test is $450.00 per facility. This estimate is based on current local contractor pricing for a tightness test on a tank of 10,000 gallons or less. Although on average, there are 3 or 4 ASTs per facility, it is assumed that the test will only be required of the individual AST suspected of leaking. Public entity costs for purposes of this fiscal note include both the costs the Department of Natural Resources is assumed to incur to administer this portion of the rule (administration cost) and the costs incurred by any affected public entities to comply with the requirements of the rule (compliance cost). Private entity compliance costs are counted in the private entity fiscal note for the same rule.

A. Department of Natural Resources administration costs. It is assumed that the Department of Natural Resources will incur costs necessary to administer this portion of the rule. Of the 3 reportable releases from publicly-owned AST facilities, as estimated for the purposes of this fiscal note, it is assumed that 1 will be a suspected release, rather than a confirmed release. Therefore, it is assumed that one public entity will be required to conduct a tightness test to satisfy the system test requirement. Of the 197 reportable releases from privately-owned AST facilities, it is assumed that 49 will be suspected releases, rather than confirmed releases. Therefore it is assumed that 49 private entities will be required to conduct a tightness test to satisfy the system test requirement. Therefore, it is assumed that the Missouri Department of Natural Resources will receive, document, and analyze the results of a total of 50 system tests. The department's costs include the cost of the services of an Environmental Specialist III responsible for receiving and reviewing the results of the system test. It is expected to take 0.25 hours to review the results of the tightness test. The total administration cost of the Missouri Department of Natural Resources for the system test requirement is assumed to be as follows:

Environmental Specialist III salary = $33.96 per hour

$33.96 / 4 = $8.49 for 0.25 of an hour

$8.49 x 50 system test reports reviewed by department = $424.50

Department's estimated annual administration cost to administer the system test requirement = $424.50

B. Public entity compliance costs. It is assumed that a tightness test of the pressurized piping will be the selected method of system test. The estimated cost to conduct and document a system test is $450.00 per facility. The $450.00 price also includes preparation of the results into a report that is submitted to the Department of Natural Resources. As noted above, it is assumed that only one publicly-owned AST facility will be required to conduct a system test. It is further assumed that, based upon the results of the system test, Initial Release Response Measures will not be required.

$450 x 1 public entity required to conduct a system test = A total cost of $450 for the affected public entity to conduct the required system test

Total public entity compliance cost for system test requirement = $450

4. **Investigation due to off-site impacts or upon closure.** Public entity costs for purposes of this fiscal note include both the costs the Department of Natural Resources is assumed to incur to administer this portion of the rule (administration cost) and the costs incurred by any affected public entities to comply with the requirements of the rule (compliance cost). However, because the department has no documentation establishing that publicly-owned AST facilities present an environmental problem other than releases already reported to the department, it is assumed for the purposes of this fiscal note that no publicly-owned AST facilities will be required to conduct an investigation to determine whether there has been a release at the facility. Therefore, it is assumed that no public entity will incur costs to comply with this requirement. Private entity compliance costs are counted in the private entity fiscal note for the same rule.

A. Department of Natural Resources administration costs. It is assumed that the Department of Natural Resources will incur costs necessary to administer this portion of the rule. These costs include the cost of the services of an Environmental Specialist III responsible for receiving and reviewing the results of the sampling activities performed to determine whether a specific privately-owned AST or AST facility is the source of off-site contamination. The AST or AST facility may either be a previously-closed AST facility or an active AST facility. It is assumed to take 2.5 hours for an Environmental Specialist III to review the sampling results and report submitted in accordance with this requirement. It is estimated that 0 publicly-owned AST facilities and 11 privately-owned AST facilities will be required to measure for the presence of contamination to determine whether a specific AST or AST facility is the source of off-site contamination.

Environmental Specialist III salary = $33.96 per hour

$33.96 x 2.5 hours = $84.90

Cost to department to review one site investigation report = $84.90

11 private entities required to conduct a site investigation x $84.90 = $933.90

Estimated annual cost to the department to review site investigation reports = $933.90

4. **Initial release response measures.** Initial release response measures are required when contamination of the environment due to a release from a regulated AST is confirmed. Initial release response measures include removal of regulated substances from the AST, visual inspection of the area, monitoring environmental or other hazards posed by vapors or free product, and collection and analysis of necessary samples. The total estimated cost attributed to the requirement to conduct Initial Release Response (IRR) Measures is calculated based upon department records which indicate that the department can expect 75% of facilities with reportable releases to be required to conduct initial release response measures. This amounts to an estimated total of 2 publicly-owned AST facilities and 148 privately-owned AST facilities required to conduct the IRR measures. It is assumed that an additional 12 private entities will be required to conduct IRR measures after conducting a system test for a total of 162 private or public entities required to conduct IRR measures. Public entity costs for purposes of this fiscal note include both the costs the Department of Natural Resources is assumed to incur to administer this portion of the rule (administration cost) and the costs incurred by any affected public entities to comply with the requirements of the rule (compliance cost). Private entity compliance costs are counted in the private entity fiscal note for the same rule.

A. Department of Natural Resources administration costs. It is assumed that the Department of Natural Resources will incur costs necessary to administer this portion of the rule. These costs include the cost of the services of an Environmental Specialist III responsible for receiving and reviewing the IRR Report. It is expected to take 0.25 hours to review each report. It is estimated that 2 publicly-owned AST facilities and 160

privately-owned AST facilities will be required to conduct the IRR and submit the report.

Environmental Specialist III salary = $33.96 per hour

$33.96 / 4 = $8.49 for 0.25 of an hour

$8.49 x 162 total number of reports reviewed by department = $1,375.38

Department's estimated annual administration cost to administer the Initial Release Response Measures requirement = $1,375.38

B. Public entity compliance costs. It is assumed that 2 publicly-owned AST facilities will be required to conduct Initial Release Response measures. Based on past sampling activities at underground storage tank, the estimated cost to complete all initial release response measures is as follows:

a. Emptying of the AST

Vacuum truck = $100 per hour x 2 hours =	$200
Drum disposal = $165 x 2 drums of sludge =	$330
Fluid disposal = $0.28 per gallon x 500 gallons =	$140
Project manager = $75 per hour x 2 hours =	$150
Labor = $60 per hour x 2 hours =	$120
Hauling fee = $85 per hour x 2 hours =	$170
Total cost to empty the AST	**$1110**

b. Initial sampling

3 samples (product dispenser, beneath the tank, product line) x $100 per sample =	$300
Total cost for initial sampling	**$300**

c. Soil excavation

Soil sampling = $100 per sample x 12 samples =	$1200
Dig and haul = $60 per ton x 150 tons =	$9000
Project manager = $75 per hour x 8 hours =	$600
Total cost of soil excavation	**$10800**

d. Total cost of Initial Release Response Measures

Emptying of the AST	$1110
Initial sampling	$300
Soil excavation	$10800
Total cost of IRR requirements	**$12210**
$12210 x 2 public entities required to perform IRR =	**$24420**
Total public entity compliance cost for IRR measures =	**$24420**

5. **Free product removal.** The total estimated cost attributed to the requirement to conduct free product removal activities is based upon the department's best judgment as to how many publicly-owned or privately-owned AST

facilities will have a release where free product removal is necessary. Public entity costs for purposes of this fiscal note include both the costs the Department of Natural Resources is assumed to incur to administer this portion of the rule (administration costs) and the costs incurred by any affected public entities to comply with the requirements of the rule (compliance costs). Private entity compliance costs are counted in the private entity fiscal note for the same rule.

A. Department of Natural Resources administration costs. It is assumed that the Department of Natural Resources will incur costs necessary to administer this portion of the rule. These costs include the cost of the services of an Environmental Specialist III responsible for receiving and reviewing the results of the free product recovery report. It is expected to take 0.25 hours to review this report. It is estimated that 1 publicly-owned AST facilities and 34 privately-owned AST facilities will be required to submit a free product recovery report.

Environmental Specialist III salary = $33.96 per hour
$33.96 x 0.25 hours = $8.49 to review one report
$8.49 x 35 reports reviewed by department = $297.15
Estimated annual cost to the department to review and process free product recovery reports = $297.15

B. Public entity compliance costs. It is assumed that 1of the 3 publicly-owned AST facilities expected to report a release or suspected release will be required to conduct free product recovery measures, including removal of free product, necessary abatement measures, and preparation and submittal of a free product recovery report. The cost of these measures is estimated to be $3200 based on cost information from similar activities at leaking underground storage tank sites, as follows:

Project manager:	**$75 per hour x 8 hours =**	**$1600**
Labor:	**$50 per hour x 16 hours =**	**$800**
Blower:	**$150 per day x 2 days =**	**$300**
Trenching:	**$1500 per day x 1 day =**	**$1500**
Total cost of free product recovery:		**$3200**

$3200 x 1 facility required to conduct free product recovery measures = $3200

Total public entity compliance cost for free product recovery measures = $3200

IV. ASSUMPTIONS

1. Because the duration of the rule cannot be estimated, an annualized aggregate cost is provided. The annualized aggregate cost is expected to remain constant for the duration of the rule.
2. The universe of affected entities is based upon the experience of staff of the Missouri Department of Natural Resources. Entities affected are AST facilities storing regulated substances for resale purposes and having a reportable release or suspected release to the environment. Department staff assume that the current rate of approximately 3 reports per week of spills at AST facilities will increase slightly due to the requirement in this rule to report releases or suspected releases. It is assumed that this information provides a fair and accurate estimate of the universe of regulated ASTs subject to the requirements of this rule.
3. Fiscal year 2001 dollars are used to estimate the costs.
4. Estimates assume a constant regulatory context, which requires no reporting standards beyond those currently required or imposed by this rulemaking.
5. Estimates assume there will be no new or sudden changes in technology, which would influence costs.
6. This fiscal note is not in lieu of the requirements or a model for compliance with this rule. The examples used for cost calculations are good faith estimates and averages using the department's professional judgement.
7. Affected entities are assumed to be in compliance with all applicable environmental laws and regulations.

FISCAL NOTE
PRIVATE ENTITY COST

I. RULE NUMBER

Title: Department of Natural Resources

Division: Clean Water Commission

Chapter: Aboveground Storage Tanks – Release Response

Type of Rulemaking: Proposed Rule

Rule Number and Name: 10 CSR 20-15.020 Release Reporting and Initial Release Response Measures

II. SUMMARY OF FISCAL IMPACT

Classification by types of the business entities which would likely be affected:	Number likely to be affected[1]	Item	Itemized Cost*
Privately-owned AST facilities storing petroleum products or other regulated substances for resale purposes and having a release or suspected release of regulated substances to the environment	197	Release Reporting	$1,698
		System Test	$22,050
		Initial Release Response Measures	$2,442,000
		Free Product Removal	$108,800
Active or previously-closed facilities required to conduct a site investigation due to off-site impacts	11	Site investigation	$934
		Total annual compliance cost in the aggregate for private entities	**$2,575,482[2]**

[1]All privately-owned AST facilities storing petroleum products or other regulated substances for resale purposes are potentially affected by this rule. As of July 2001, the Missouri Department of Agriculture has 2109 privately-owned AST facilities registered in their database of ASTs statewide. Of this entire universe, it is assumed for the purpose of this fiscal note that only 197 privately-owned AST facilities will have a reportable release within a year of the effective date of this rule.

[2]This is an annualized cost. Because the duration of the rule cannot be estimated an annualized aggregate is provided. All numbers from the worksheet below have been rounded off to the nearest whole dollar.

III. WORKSHEET

1. Personnel Costs for Merit Employees are calculated using step "O" of the state fiscal year 2001 merit schedule produced by the Missouri Commission on Management and Productivity (COMAP). Monthly salaries are multiplied by 12 to obtain an annual cost. The annual cost is multiplied by a factor of 27.5% with the additional amount added to the annual salary to account for fringe benefits. $8045 is added for equipment and expenses. This sum is then multiplied by 22.15% and the additional amount added to account for indirect costs. Hourly costs are found by dividing the adjusted annual costs by 2080, the number of hours in a Full-Time Equivalent (FTE) All adjustment factors are based on current information provided by the hazardous waste program budget staff. Calculations for estimating the personnel costs of county and municipal employees are based on the same assumptions as for merit

employees. Using this formula and the appropriate salaries, the following hourly rates are assumed to be the most accurate for purposes of this fiscal note:

Hourly rate for Clerk Typist II = $20.88
Hourly rate for Environmental Specialist III = $33.96
Hourly rate for Environmental Specialist IV = $37.80
Hourly rate for Environmental Section Chief = $42.29

2. The universe of affected entities is based upon the experience of staff of the Missouri Department of Natural Resources. Entities affected are AST facilities storing regulated substances for resale purposes and having a reportable release or suspected release to the environment. Department staff assume that the current rate of approximately 3 reports per week of spills at AST facilities will increase slightly due to the requirement in this rule to report releases or suspected releases. It is assumed that this information provides a fair and accurate estimate of the universe of regulated ASTs subject to the requirements of this rule.

3. **Reporting releases and suspected releases.** All releases greater than 25 gallons that are not immediately contained and cleaned up are required to be reported to the department's Environmental Emergency Response line, unless the spill is completely contained within a secondary containment structure that is functionally liquid-tight and immediately cleaned up. It is assumed that all releases will be greater than 25 gallons, and therefore required to be reported to the department. The total estimated cost attributed to the requirement to report releases or suspected releases is calculated based upon department records which indicate that the department can expect a reportable release from approximately 200 facilities per year. It is assumed that 197 of these facilities are privately-owned and that 49 will be required to conduct a system test and 148 will be required to implement Initial Release Response Measures. Private entity costs for purposes of this fiscal note include the costs incurred by the affected private entity to comply with the requirements of the rule. The administration costs of the department to process and document the phone call are counted in the public entity fiscal note for the same rule.

A. Private entity compliance costs. The cost for a regulated private entity to report a release to the Missouri Department of Natural Resource's Environmental Emergency Response line is estimated at an average of 0.25 hours per phone call. It is assumed that the phone call will be placed by an individual equivalent to an Environmental Specialist III, with an appropriate hourly rate.

Environmental Specialist III hourly rate = $33.96 per hour

$33.96 x 0.25 = $8.49 estimated cost to report one release to the department's Environmental Emergency Response line

$8.49 x 197 number of reportable releases from regulated private entities = $1,698

Total cost of compliance for private entities = $1,698

4. **System test.** For any suspected release the owner or operator of a privately-owned AST is required to take measures as necessary to determine whether a leak exists in either any portion of the tank or piping that routinely contains product or in the attached delivery piping, or in both. There are various measures that satisfy this requirement, but for the purposes of this fiscal note, it is assumed that a tightness test of the pressurized piping will be the selected method of system test. Costs incurred by private entities regulated by this rule to comply with the system test requirement are estimated based on current local contractor pricing per facility to conduct a system test. It is assumed that a tightness test of the pressurized piping will be the selected method of system test. The estimated cost to conduct and document a system test is $450.00 per facility. This estimate is based on current local contractor pricing for a tightness test on a tank of 10,000 gallons or less. Although on average, there are 3 or 4 ASTs per facility, it is assumed that the test will only be required of the individual AST suspected of leaking. Of the 197 reportable releases at privately-owned AST facilities known to the Department of Natural Resources, it is assumed that 75% or 49 facilities will be required to conduct a system test to determine whether a release has actually occurred when a suspected release is reported. Additionally, based upon the results of the system test, it is assumed that 25% or 12 of these 49 facilities will

subsequently be required to implement the Initial Release Response Measures, itemized below in Number 7 of this worksheet. These facilities will incur additional costs and those costs are included below.

49 privately-owned AST facilities required to conduct a system test x $450.00 = $22,050

Total private entity compliance cost for the system test requirement = $22,050

5. **Investigation due to off-site impacts.** Based upon documented physical evidence of contamination off-site, the department may request the owner or operator of an active AST facility to take measures as necessary to determine whether a release has occurred. It is assumed for the purposes of this fiscal note that it will take 2.5 hours for the equivalent of an Environmental Specialist III to conduct the activities necessary to complete a site investigation, compile the results, and submit to the department. Based on the experience of department staff, it is assumed for the purposes of this fiscal note that 11 private entities will be required to conduct a site investigation.

Environmental Specialist III hourly rate = $33.96

$33.96 x 2.5 hours = $84.90

Compliance cost to conduct a site investigation = $84.90

11 facilities required to conduct a site investigation x $84.90 = $933.90

Total compliance cost for requirement that active or previously-closed AST facilities conduct a site investigation due to off-site impacts = $933.90

6. **Investigation due to closure.** Based upon documented physical evidence of contamination at a previously closed AST site, the department may request the owner or operator of the previously closed facility to take measures as necessary to determine whether a release has occurred. It is assumed for the purposes of this fiscal note that it will take 2.5 hours for the equivalent of an Environmental Specialist III to conduct the activities necessary to complete a site investigation, compile the results, and submit to the department. As noted above, based on the experience of department staff, it is assumed for the purposes of this fiscal note that 11 active or previously-closed AST facilities will be required to conduct a site investigation.

7. **Initial release response measures.** It is assumed that 75% of the 197 reportable releases or 148 privately-owned AST facilities will be immediately required to perform initial release response measures. Additionally, of the 49 private entities assumed to report a suspected release and subsequently conduct a system test, 25% or 12 entities will subsequently be required to conduct implement IRR measures, for a total of 160 private entities assumed to be required to conduct IRR measures. IRR measures include removal of regulated substances from the AST, visual inspection of the area, monitoring environmental or other hazards posed by vapors or free product, collection and analysis of necessary samples, and an investigation of the site. Based upon records of similar activities at underground storage tank sites, the estimated cost to complete all initial release response measures is as follows:

A. Emptying of the AST

Vacuum truck = $100 per hour x 2 hours =	$200
Drum disposal = $165 x 2 drums of sludge =	$330
Fluid disposal = $0.28 per gallon x 500 gallons =	$140
Project manager = $75 per hour x 2 hours =	$150
Labor = $60 per hour x 2 hours =	$120
Hauling fee = $85 per hour x 2 hours =	$170
Total cost to empty the AST	**$1110**

b. Initial sampling

3 samples (product dispenser, beneath the tank, product line) x $100 per sample =	$300
Total cost for initial sampling	**$300**

c. Soil excavation

Soil sampling = $100 per sample x 12 samples =	$1200
Dig and haul = $60 per ton x 150 tons =	$9000
Project manager = $75 per hour x 8 hours =	$600
Total cost of soil excavation	**$10800**

d. Total cost of Initial Release Response Measures

Emptying of the AST	$1110
Initial sampling	$300
Soil excavation	$10800
Total cost of IRR requirements	**$12210**
Total compliance cost = $12210 x 160 =	**$1,953,600**

8. Free product removal

It is assumed that 23% or 34 of the 148 privately-owned AST facilities reporting a release will be required to conduct free product recovery measures, including removal of free product, necessary abatement measures, and preparation and submittal of a free product recovery report. The cost of these measures is estimated to be $3200 based on cost information from similar activities at leaking underground storage tank sites. The department's cost to document and review the report is counted in the public entity fiscal note for the same rule.

Project manager: $75 per hour x 8 hours =		**$1600**
Labor:	**$50 per hour x 16 hours =**	**$800**
Blower:	**$150 per day x 2 days =**	**$300**
Trenching:	**$1500 per day x 1 day =**	**$1500**
Total cost of free product recovery:		**$3200**

$3200 x 34 private entities required to conduct free product removal activities = $108,800

Total private entity compliance cost = $108,800

IV. ASSUMPTIONS

1. Because the duration of the rule cannot be estimated, an annualized aggregate cost is provided. The annualized aggregate cost is expected to remain constant for the duration of the rule.
2. Fiscal year 2001 dollars are used to estimate the costs.
3. Estimates assume a constant regulatory context, which requires no reporting standards beyond those currently required or imposed by this rulemaking.
4. Estimates assume there will be no new or sudden changes in technology, which would influence costs.
5. This fiscal note is not in lieu of the requirements or a model for compliance with this rule. The examples used for cost calculations are good faith estimates and averages using the department's professional judgement.
6. Affected entities are assumed to be in compliance with all applicable environmental laws and regulations.