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MATT BLUNT

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MISSOURI REGISTER

April 15, 2003 Vol. 28 No. 8 **Pages 701–840**

IN THIS ISSUE:

Register Filing Deadlines	Register Publication Date	Code Publication Date	Code Effective Date
February 3, 2003	**March 3, 2003**	March 31, 2003	April 30, 2003
February 18, 2003	**March 17, 2003**	March 31, 2003	April 30, 2003
March 3, 2003	**April 1, 2003**	April 30, 2003	May 30, 2003
March 17, 2003	**April 15, 2003**	April 30, 2003	May 30, 2003
April 1, 2003	**May 1, 2003**	May 31, 2003	June 30, 2003
April 15, 2003	**May 15, 2003**	May 31, 2003	June 30, 2003
May 1, 2003	**June 2, 2003**	June 30, 2003	July 30, 2003
May 15, 2003	**June 16, 2003**	June 30, 2003	July 30, 2003
June 2, 2003	**July 1, 2003**	July 31, 2003	August 30, 2003
June 16, 2003	**July 15, 2003**	July 31, 2003	August 30, 2003
July 1, 2003	**August 1, 2003**	August 31, 2003	September 30, 2003
July 15, 2003	**August 15, 2003**	August 31, 2003	September 30, 2003
August 1, 2003	**September 2, 2003**	September 30, 2003	October 30, 2003
August 15, 2003	**September 15, 2003**	September 30, 2003	October 30, 2003
September 2, 2003	**October 1, 2003**	October 31, 2003	November 30, 2003
September 15, 2003	**October 15, 2003**	October 31, 2003	November 30, 2003
October 1, 2003	**November 3, 2003**	November 30, 2003	December 30, 2003
October 15, 2003	**November 17, 2003**	November 30, 2003	December 30, 2003
November 3, 2003	**December 1, 2003**	December 31, 2003	January 30, 2004
November 17, 2003	**December 15, 2003**	December 31, 2003	January 30, 2004

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

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HOW TO CITE RULES AND RSMo

RULES—Cite material in the *Missouri Register* by volume and page number, for example, Vol. 26, *Missouri Register*, page 27. The approved short form of citation is 26 MoReg 27.

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

Title	***Code of State Regulations***	**Division**	**Chapter**	**Rule**
1	CSR	10-	1.	010
Department		Agency, Division	General area regulated	Specific area regulated

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

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

RSMo—Cite material in the RSMo by date of legislative action. The note in parentheses gives the original and amended legislative history. The Office of the Revisor of Statutes recognizes that this practice gives users a concise legislative history.

The Secretary of State shall publish all executive orders beginning January 1, 2003, pursuant to section 536.035.2, RSMo Supp. 2002.

Executive Order
03-11

WHEREAS, it is the desire of the Department of Corrections to operate at the highest professional level; and

WHEREAS, the Department endeavors to provide the state's inmates with an objective and impartial source for the timely resolution of grievances and concerns; and

WHEREAS, federal statutes require inmates to exhaust administrative remedies as a pre-requisite to litigation.

NOW THEREFORE, I, Bob Holden, Governor of the State of Missouri, by virtue of the authority vested in me by the Constitution and Laws of the State of Missouri, do hereby reestablish the Citizens Advisory Committee on Corrections (CAC). The CAC is assigned to the Department of Corrections and shall aid and assist the Department as requested and as set out in this Order.

The purpose of the CAC is to consider offender grievances referred by the director of the Department of Corrections and to make recommendations to that director for the resolution of these grievances as specified in the Department of Corrections' Inmate Grievance Procedure. The CAC shall submit recommendations for grievance resolution to the director in a timely manner. The CAC shall work with and through the DOC and shall use its investigative staff for the committee's work. Additional duties may be assigned to the committee by the director of the Department of Corrections. Additional investigative staff may be requested by the chair from the Department of Public Safety as necessary.

The CAC shall consist of no less than thirteen and no more than one member for each correctional center as determined and appointed by the Governor. Each CAC member shall serve for a period of three years and may be re-appointed at the conclusion of the term. Appointments shall be made so that one-third of the membership of the committee shall terminate each year.

The members of the CAC shall elect a chairperson who shall serve for a period of two years and may be retained for subsequent term(s) by CAC vote. The chairperson shall represent the CAC to the public and to the media after consultation with the director of the Department of Corrections. Such representation may include majority and minority opinions of the committee members.

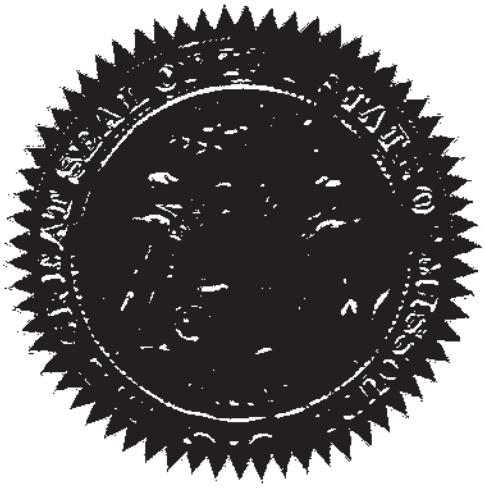
Members of the CAC shall serve without compensation, but may be reimbursed for reasonable and necessary expenses relating to their performance of duties, according to the rules and regulations of travel issued by the Office of Administration.

Members will be required to submit an expense account form in order to obtain reimbursement for expenses incurred.

All CAC members will meet collectively or as subcommittees on a regular basis. At least one meeting annually will be held in a central location in conjunction with a program for committee training.

Meetings of the CAC may be called by the chairperson of the committee or the director of the Department of Corrections. All meetings will be conducted in accordance with the Sunshine Law, including closed sessions. Notice will be posted and will be provided to the chair of the Joint Committee on Corrections. Minutes of the meeting shall be provided to all members, the office of the Governor, the director of the Department of Corrections and the chair of the Joint Committee on Corrections.

This Order supersedes and is in lieu of all previous Executive Orders pertaining to this subject.



IN WITNESS WHEREOF, I have hereunto set my hand and caused to be affixed the Great Seal of the State of Missouri in the City of Jefferson on this 1st day of April, 2003.

Bob Holden
Governor

ATTEST:

Matt Blunt
Secretary of State

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 2—DEPARTMENT OF AGRICULTURE
Division 30—Animal Health
Chapter 2—Health Requirements for Movement of Livestock, Poultry and Exotic Animals

PROPOSED AMENDMENT

2 CSR 30-2.010 Health Requirements Governing the Admission of Livestock, Poultry and Exotic Animals Entering Missouri. The director is amending sections (7) and (8).

PURPOSE: The proposed changes to sections (7) and (8) are designed to bring Missouri's interstate requirements into compliance with recently revised USDA regulations on scrapie and to protect Missouri's livestock industry.

(7) Sheep. *[Sheep must be accompanied by a Certificate of Veterinary Inspection, except farm of origin sheep consigned directly to approved markets or slaughter establishments. Official dipping or treatment is required within ten (10) days prior to entry on sheep originating from scabies infected areas or eradication areas.]*

(A) Sheep must be accompanied by a Certificate of Veterinary Inspection showing official individual identification (eartag or registration tattoo accompanied by registration paper) of all breeding sheep, regardless of age, and all sheep eighteen (18) months of age and over.

(B) Farm-of-origin sheep consigned directly to a licensed Missouri market/sale or slaughter must have official individual identification identifying them to the farm-of-origin but will not require a Certificate of Veterinary Inspection.

(C) Sheep originating from scabies infected area or eradication area are required to have official dipping or treatment within ten (10) days prior to entry.

(D) No tests are required on sheep entering Missouri.

(8) Goats. *[Goats must be accompanied by a Certificate of Veterinary Inspection, except farm of origin goats consigned directly to approved markets or slaughter establishments. No tests are required on goats entering Missouri.]*

(A) Goats must be accompanied by a Certificate of Veterinary Inspection showing official individual identification (eartag, microchip or registration tattoo accompanied by registration paper) of all bucks and does. If microchips are used for identification, owner/manager must travel with microchip reader to access this identification.

(B) Farm-of-origin goats consigned directly to a licensed Missouri market/sale must have official individual identification identifying them to the farm-of-origin but will not require a Certificate of Veterinary Inspection. Farm-of-origin goats consigned directly to slaughter are not required to have official individual identification nor a Certificate of Veterinary Inspection

(C) No tests are required on goats entering Missouri.

AUTHORITY: section 267.645, RSMo 2000. This version of rule filed Jan. 24, 1975, effective Feb. 3, 1975. For intervening history, please consult the ***Code of State Regulations****. Amended: Filed Jan. 30, 2003. Amended: Filed March 17, 2003.*

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 Department of Agriculture, Division of Animal Health, Bretaigne Jones, D.V.M., Veterinarian II, PO Box 630, Jefferson City, MO 65102. To be considered, comments must be received within thirty (30) days after publication of this notice in the ***Missouri Register.*** *No public hearing is scheduled.*

Title 2—DEPARTMENT OF AGRICULTURE
Division 30—Animal Health
Chapter 2—Health Requirements for Movement of Livestock, Poultry and Exotic Animals

PROPOSED AMENDMENT

2 CSR 30-2.020 Movement of Livestock, Poultry and Exotic Animals Within Missouri. The director is amending section (3).

PURPOSE: The proposed changes to section (3) are designed to bring Missouri's intrastate requirements into compliance with recently revised USDA regulations on scrapie and protect Missouri's livestock industry.

(3) Sheep and Goats. *[All sheep and goats exchanged, bartered or sold within Missouri must be free of symptoms of infectious or contagious disease, or both. All suspected or confirmed cases of scrapie in Missouri must be reported immediately to the state veterinarian. All sheep and goats from infected or source flocks will be quarantined.]*

(A) All sheep and goats exchanged, bartered or sold within Missouri must be free of symptoms of infectious or contagious diseases, or both.

(B) All breeding sheep, plus all sheep eighteen (18) months of age and over, and all goat bucks and does, must have official identification (eartag or registration tattoo accompanied by registration papers) identifying them to the flock of origin.

(C) All suspected or confirmed cases of scrapie in Missouri must be reported immediately to the state veterinarian.

(D) All sheep and goats from scrapie infected or source flocks will be quarantined.

AUTHORITY: section 267.645, RSMo 2000. Original rule filed April 18, 1975, effective April 28, 1975. For intervening history, please consult the ***Code of State Regulations****. Amended: Filed Jan. 30, 2003. Amended: Filed March 17, 2003.*

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 Department of Agriculture, Division of Animal Health, Bretaigne Jones, D.V.M., Veterinarian II, PO Box 630 Jefferson City, MO 65102. To be considered, comments must be received within thirty (30) days after publication of this notice in the ***Missouri Register****. No public hearing is scheduled.*

Title 2—DEPARTMENT OF AGRICULTURE
Division 30—Animal Health
Chapter 2—Health Requirements for Movement of Livestock, Poultry and Exotic Animals

PROPOSED AMENDMENT

2 CSR 30-2.020 Movement of Livestock, Poultry and Exotic Animals Within Missouri. The director is amending subsection (6)(D).

PURPOSE: The proposed change to subsection (6)(D) changes Missouri's Chronic Wasting Disease Surveillance program from voluntary to mandatory. This change is intended to protect Missouri's elk industry and enhance the value of their livestock to compete in interstate commerce.

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.

(6) Miscellaneous and Exotic Animals. All exotic animals must be accompanied by an official Certificate of Veterinary Inspection showing an individual listing of the common and scientific name(s) of the animal(s) and appropriate descriptions of animal(s) such as sex, age, weight, coloration and the permanent tag number, brand or tattoo identification.

(D) Elk and deer may move within Missouri in compliance with the *[Cervidae Uniform Methods and Rules for Brucellosis and the Cervidae Uniform Methods and Rules for Tuberculosis. Elk, red deer, reindeer, fallow deer and sika deer six (6) months of age and over must have one (1) approved negative brucellosis test within thirty (30) days prior to shipment. Cervidae originating from certified brucellosis-free herds may move on the current herd number and test date. All cervidae six (6) months of age and over must have a negative tuberculosis test using the single cervical method or BTB test within ninety (90) days prior to shipment. Cervidae originating from accredited TB cervidae herds may move on the current herd number and test date. All suspected or confirmed cases of chronic wasting disease (CWD) must be reported immediately to the state veterinarian. All cervids from infected or source herds will be quarantined.]* **guidelines as incorporated by reference to the *Bovine Tuberculosis Eradication Uniform Methods and Rules, Effective January 22, 1999* and *Brucellosis in Cervidae; Uniform Methods and Rules, Effective September 30, 1998*.**

1. All sexually intact animals six (6) months of age or older, not under quarantine and not affected with brucellosis, must test negative for brucellosis within thirty (30) days prior to shipment.

A. Cervidae originating from a certified brucellosis-free herd as defined by the *Brucellosis in Cervidae; Uniform Methods and Rules, Effective September 30, 1998*, may move on the current herd number and test date.

2. All cervidae six (6) months of age and over must have a negative tuberculosis test using the single cervical method within ninety (90) days prior to shipment.

A. Cervidae originating from an accredited tuberculosis-free cervid herd as defined by the *Bovine Tuberculosis Eradication Uniform Methods and Rules, Effective January 22, 1999*, may move on the current herd number and test date.

3. All elk moving within Missouri must originate from an herd that is enrolled in a chronic wasting disease (CWD) surveillance program as outlined by the Missouri Department of Agriculture.

A. All suspected or confirmed cases of CWD must be reported immediately to the state veterinarian.

B. All cervids from infected or source herds will be quarantined.

AUTHORITY: section 267.645, RSMo 2000. Original rule filed April 18, 1975, effective April 28, 1975. For intervening history, please consult the ***Code of State Regulations****. Amended: Filed Jan. 30, 2003. Amended: Filed March 17, 2003. Amended: Filed March 17, 2003.*

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 may cost private entities more than five hundred dollars ($500) in the aggregate. This estimate is based on the transition from a voluntary surveillance program to a mandatory program. The number of herds and animals noted in the fiscal note reflect what is currently enrolled in the Voluntary Chronic Wasting Disease Surveillance program. There is no possible avenue by which to estimate the number of samples that are not collected from herds not participating in the voluntary surveillance program or the cost to the producer.

NOTICE TO SUBMIT COMMENTS: Anyone may file a statement in support of or in opposition to this proposed amendment with the Missouri Department of Agriculture, Division of Animal Health, Bretaigne Jones, D.V.M., Veterinarian II, PO Box 630, Jefferson City, MO 65102. To be considered, comments must be received within thirty (30) days after publication of this notice in the ***Missouri Register****. No public hearing is scheduled.*

FISCAL NOTE
PRIVATE COST

I. RULE NUMBER

Rule Number and Name:	2 CSR 30-2.020 Movement of Livestock, Poultry and Exotic Animals Within Missouri.
Type of Rulemaking:	Proposed Amendment

II. SUMMARY OF FISCAL IMPACT

Estimate of the number of entities by class which would likely be affected by the adoption of the proposed rule:	Classification by types of the business entities which would likely be affected:	Estimate in the aggregate as to the cost of compliance with the rule by the affected entities:
Approximately 80 elk herds	Elk producers	$15 to $35 per sample

III. WORKSHEET

1. Veterinarian collecting sample	-	$15.00
Cost of test completed at private laboratories	-	$20.00
COST TO PRODUCER PER SAMPLE	-	**$35.00**
2. Veterinarian collecting sample	-	$15.00
Cost of test completed at a federal diagnostic laboratory	-	$ 0.00
COST TO PRODUCER PER SAMPLE	-	**$15.00**

IV. ASSUMPTIONS

This proposed amendment will require every elk herd in the state of Missouri to participate in a Chronic Wasting Disease Surveillance program.

Surveillance will be maintained on each herd by collecting and submitting appropriate samples from all cases of mortality, including slaughter, in animals over twelve (12) months of age. The average mortality rate in an elk herd is 3%. There are approximately 34 herds with a population of 1,656 animals participating in the existing Voluntary Chronic Wasting Disease Surveillance program. Based on the number of animals/herds, the average herd has a population of 48 animals and at an average mortality rate of 3%; the producer would be required to sample approximately 1.4 animals per year.

These samples must be collected by an accredited veterinarian or regulatory personnel and be sent to an approved laboratory for testing. Federal diagnostic laboratories do not currently charge to perform tests on these samples whereas private laboratories charge for these services. Charges for veterinary services and private laboratories vary from veterinarian to veterinarian throughout the state and from laboratory to laboratory. There may be additional charges if the veterinarian has to make a farm-trip to collect the sample on site. Figures shown are based upon costs for animals transported to the veterinarian's office for sample collection.

Title 2—DEPARTMENT OF AGRICULTURE
Division 30—Animal Health
Chapter 2—Health Requirements for Movement of Livestock, Poultry and Exotic Animals

PROPOSED AMENDMENT

2 CSR 30-2.040 Animal Health Requirements for Exhibition. The director is amending sections (4) and (5).

PURPOSE: The proposed changes to sections (4) and (5) are designed to bring Missouri's interstate requirements into compliance with recently revised USDA regulations on scrapie and to protect Missouri's livestock industry.

(4) Exhibition Requirements for Sheep in Missouri.

(A) Intrastate (sheep in Missouri being exhibited only in Missouri).

1. Sheep that are to be exhibited **including market class sheep** must be free of clinical signs of an infectious or contagious disease **and are required to have a Certificate of Veterinary Inspection**. *[Sheep must be identified and listed on a health certificate.*

2. Scabies.

A. Sheep from a scabies-quarantined area must be dipped or treated by an officially approved method within ten (10) days prior to exhibition.

B. A prior permit number must be obtained and recorded on a health certificate if the sheep are from a scabies-quarantined area.]

2. Sheep (except castrated males) must be identified to flock of origin using official identification (eartag or registration tattoo accompanied by registration papers) and listed on the Certificate of Veterinary Inspection.

3. Scabies.

A. Sheep from a scabies-quarantined area must be dipped or treated by an officially approved method within ten (10) days prior to exhibition.

B. A prior permit number must be obtained and recorded on the Certificate of Veterinary Inspection if the sheep are from a scabies-quarantined area.

(5) Exhibition Requirements for Goats in Missouri.

(A) Intrastate (goats in Missouri being exhibited only in Missouri).

1. All goats that are to be exhibited must be free of clinical signs of an infectious or contagious disease. *[Goats must be identified and listed on a health certificate.]*

2. *[No tests are required.]* **Goats must be identified with bucks and does bearing official identification to flock of origin, and listed individually on a Certificate of Veterinary Inspection.**

3. No tests are required.

AUTHORITY: section 267.645, RSMo 2000. Emergency rule filed June 28, 1977, effective July 8, 1977, expired Nov. 5, 1977. Original rule filed June 28, 1977, effective Oct. 13, 1977. For intervening history, please consult the ***Code of State Regulations****. Amended: Filed Jan. 30, 2003. Amended: Filed March 17, 2003.*

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 Department of Agriculture, Division of Animal Health, Bretaigne Jones, D.V.M., Veterinarian II, PO Box 630, Jefferson City, MO 65102. To be considered, comments must be received within thirty (30) days after publication of this notice in the ***Missouri Register****. No public hearing is scheduled.*

Title 4—DEPARTMENT OF ECONOMIC DEVELOPMENT
Division 240—Public Service Commission
Chapter 20—Electric Utilities

PROPOSED RULE

4 CSR 240-20.065 Net Metering

PURPOSE: This rule implements the Consumer Clean Energy Act (section 386.887, RSMo Supp. 2002) and establishes standards for interconnection of qualified net metering units (generating capacity of one hundred kilowatts (100 kW) or less) with retail electric power suppliers.

(1) Definitions.

(A) Commission means the Public Service Commission of the state of Missouri.

(B) Customer-generator means a consumer of electric energy who purchases electric energy from a retail electric power supplier and is the owner of a qualified net metering unit.

(C) Local distribution system means facilities for the distribution of electric energy to the ultimate consumer thereof.

(D) Qualified net metering unit means an electric generation unit which—

1. Is owned by a customer-generator;

2. Is a hydrogen fuel cell or is powered by sun, wind or biomass;

3. Has an electrical generating system with a capacity of not more than one hundred kilowatts (100 kW);

4. Is located on premises that are owned, operated, leased or otherwise controlled by the customer-generator;

5. Is interconnected with, and operates in parallel and in synchronization with a retail electric power supplier; and

6. Is intended primarily to offset part or all of the customer-generator's own electric power requirements.

(E) Retail electric power supplier means any entity that sells electric energy to the ultimate consumer thereof.

(F) Value of electric energy means the total resulting from the application of the appropriate rates, which may be time-of-use rates at the option of the retail electric power supplier, to the quantity of electric energy delivered to the retail electric power supplier from a qualified net metering unit or to the quantity of electric energy sold to a customer-generator.

(2) Applicability.

(A) This rule applies to retail electric power suppliers and customer-generators.

(3) Retail Electric Power Supplier Obligations.

(A) Each retail electric power supplier shall develop a tariff or rate schedule applicable to net metering customer-generators that shall—

1. Be made available to qualifying customer-generators upon request; and

2. Shall be posted with any other tariffs or rate schedules on the retail electric power supplier's website.

(B) Each retail electric power supplier shall provide net metering service on a first-come, first-served basis, until the total rated generating capacity used by customer-generators is equal to or in excess of the lesser of ten thousand kilowatts (10,000 kW) or one-tenth of one percent (0.1%) of the capacity necessary to meet the retail electric power supplier's aggregate customer peak demand for the preceding calendar year.

(C) Each retail electric power supplier shall notify the commission when total generating capacity of customer-generators is equal to or in excess of the lesser of ten thousand kilowatts (10,000 kW) or one-tenth of one percent (0.1%) of the capacity necessary to meet the retail electric power supplier's aggregate customer peak demand for the preceding calendar year.

(D) Each retail electric power supplier shall maintain and make available to the public, records of the total generating capacity of customer-generators, the type of generating systems and the energy sources used.

(E) The retail electric power supplier's tariff, tariff rider, or rate schedule used to provide service to the customer-generator shall be identical in rate structure, all retail rate components, and any monthly charges, to the tariff or rate schedule provisions to which the same customer would be assigned if that customer were not a customer-generator.

1. Time-of-use rates, which may be applied at the option of the retail electric power supplier, shall be the time-of-use rates applicable to the customer-generator's assigned rate classification, absent the output of the net metering unit.

(F) No retail electric power supplier's tariff or rate schedule for net metering shall require customer-generators to—

1. Perform or pay for additional tests or analysis beyond those required to determine the effect of the operation of the net metering system on the local distribution system; or

2. Purchase additional liability insurance beyond that required by section (4) of this rule.

(4) Customer-Generator Liability Insurance Obligation.

(A) The customer-generator shall carry no less than one hundred thousand dollars ($100,000) of liability insurance that provides for coverage of all risk of liability for personal injuries (including death) and damage to property arising out of or caused by the operation of the net metering unit. Insurance may be in the form of an existing policy or an endorsement on an existing policy.

(5) Determination of Net Value of Energy.

(A) Each retail electric power supplier shall calculate the net value of energy for a customer-generator in the following manner—

1. The retail electric power supplier shall individually measure both—

A. The electric energy delivered by the customer-generator to the retail electric power supplier; and

B. The electric energy provided by the retail electric power supplier to the customer-generator during each billing period by using metering capable of such function—either by a single meter capable of registering the flow of electricity in two (2) directions, or by using two (2) meters. The customer-generator is responsible for the costs of the metering described in this subsection beyond those a retail electric power supplier would incur in providing electric service to a customer in the same rate class as the customer-generator but who is not a customer-generator.

2. If the value of the electric energy supplied by the retail electric power supplier exceeds the value of the electric energy delivered by the customer-generator to the retail electric power supplier during a billing period, then the customer-generator shall be billed for the net value of the electric energy supplied by the retail electric power supplier in accordance with the rates, terms and conditions established by the retail electric power supplier for customer-generators.

3. If the value of the electric energy delivered by the customer-generator to the retail electric power supplier exceeds the value of the electric energy supplied by the retail electric power supplier, then the customer-generator—

A. Shall be billed for the appropriate customer charges for that billing period; and

B. Shall be credited for the net value of the electric energy delivered to the retail electric power supplier during the billing period, calculated using the retail electric power supplier's avoided cost (time of use or non-time of use), with this credit appearing on the customer-generator's bill no later than the following billing period.

(B) The retail electric power supplier, at its own expense, may install additional special metering (e.g. load research meter) to monitor the flow of electricity in each direction, not to include meters needed to comply with subsection (5)(A) of this rule.

(6) Interconnection Agreement.

(A) Each customer-generator and retail electric power supplier shall enter into the interconnection agreement included herein.

(7) Retail Electric Power Supplier Reporting Requirements.

(A) Each retail electric power supplier shall—

1. Supply the commission staff with a copy of the standard information regarding net metering and interconnection requirements provided to customers or posted on the retail electric power supplier's website; and

2. Supply the commission staff with a description of additional requirements, if these additional requirements are applicable to all net metering customers and not specific to individual interconnection situations, beyond those needed to meet the specific requirements outlined in section C of the interconnection agreement included herein.

(8) Customer-Generator Testing Requirements.

(A) Each customer-generator shall, at least once every year, conduct a test to confirm that the net metering unit automatically ceases to energize the output (interconnection equipment output voltage goes to zero) within two (2) seconds of being disconnected from the retail electric power supplier's system. Disconnecting the net metering unit from the retail electric power supplier's electric system at the visible disconnect switch and measuring the time required for the unit to cease to energize the output shall satisfy this test.

(B) The customer-generator shall maintain a record of the results of these tests and, upon request, shall provide a copy of the test results to the retail electric supplier.

1. If the customer-generator is unable to provide a copy of the test results upon request, the retail electric power supplier shall notify the customer-generator by mail that the customer-generator has thirty (30) days from the date the customer-generator receives the request to provide the results of a test to the retail electric power supplier.

2. If the customer-generator's equipment ever fails this test, the customer-generator shall immediately disconnect the net metering unit.

3. If the customer-generator does not provide the results of a test to the retail electric power supplier within thirty (30) days of receiving a request from the retail electric power supplier or the results of the test provided to the retail electric power supplier show that the unit is not functioning correctly, the retail electric power supplier may immediately disconnect the net metering unit.

4. The net metering unit shall not be reconnected to the retail electric power supplier's electrical system by the customer-generator until the net metering unit is repaired and operating in a normal and safe manner.

INTERCONNECTION APPLICATION/AGREEMENT FOR NET METERING SYSTEMS WITH CAPACITY OF 100 kW OR LESS

For Customers Applying for Interconnection:

If you are interested in applying for interconnection to [Utility Name]'s electrical system, you should first contact [Utility Name] and ask for information related to interconnection of parallel generation equipment to [Utility Name]'s system and you should understand this information before proceeding with this Application. If you wish to apply for interconnection to [Utility Name]'s electrical system, please complete sections A, B, C, and D, and attach the plans and specifications describing the net metering, parallel generation, and interconnection facilities (hereinafter collectively referred to as the "Customer-Generator's System") and submit them to [Utility Name] at:

[Utility Mailing Address]

You will be provided with an approval or denial of this Application within ninety (90) days of receipt by [Utility Name]. If this Application is denied, you will be provided with the reason(s) for the denial. If this Application is approved and signed by both you and [Utility Name], it shall become a binding contract and shall govern your relationship with [Utility Name].

For Customers Who Have Received Approval of Customer-Generator System Plans and Specifications:

After receiving approval of your Application, it will be necessary to construct the Customer-Generator System in compliance with the plans and specifications described in the Application, complete sections E and F of this Application, and forward this Application to [Utility Name] for review and completion of section G at:

[Utility Mailing Address]

[Utility Name] will complete the utility portion of section G and, upon receipt of a completed Application/Agreement form and payment of any applicable fees, permit interconnection of the Customer-Generator System to [Utility Name]'s electrical system within fifteen (15) days of receipt by [Utility Name] if electric service already exists to the premises, unless the Customer-Generator and [Utility Name] agree to a later date. Similarly, upon receipt of a completed Application/Agreement form and payment of any applicable fees, if electric service does not exist to the premises, [Utility Name] will permit interconnection of the Customer-Generator System to [Utility Name]'s electrical system no later than fifteen (15) days after service is established to the premises, unless the Customer-Generator and [Utility Name] agree to a later date.

For Customers Who Are Assuming Ownership or Operational Control of an Existing Customer-Generator System:

If no changes are being made to the existing Customer-Generator System, complete sections A, D and F of this Application/Agreement and forward to [Utility Name] at:

[Utility Mailing Address]

[Utility Name] will review the new Application/Agreement and shall approve such, within fifteen (15) days of receipt by [Utility Name] if the new Customer-Generator has satisfactorily completed Application/Agreement, and no changes are being proposed to the existing Customer-Generator System. There are no fees or charges for the Customer-Generator who is assuming ownership or operational control of an existing Customer-Generator System if no modifications are being proposed to that System.

A. Customer-Generator's Information

Name: _____
Mailing Address: _____
City: _____ State: _____ Zip Code: _____
Service/Street Address (if different from above): _____
City: _____ State: _____ Zip Code: _____
Daytime Phone: _____ Fax: _____ E-Mail: _____
Emergency Contact Phone: _____
[Utility Name] Account No. (from Utility Bill): _____

B. Customer-Generator's System Information

Manufacturer Name Plate (if applicable) AC Power Rating: _____ kW Voltage: _____ Volts
System Type: Solar __ Wind __ Biomass __ Fuel Cell __ Other (describe) _____
Service/Street Address: _____
Inverter/Interconnection Equipment Manufacturer: _____
Inverter/Interconnection Equipment Model No.: _____
Are Required System Plans & Specifications Attached? Yes__ No __
Inverter/Interconnection Equipment Location (describe): _____
_____
Outdoor Manual/Utility Accessible & Lockable Disconnect Switch Location (describe):
_____
Existing Electrical Service Capacity: _____ Amperes Voltage: _____ Volts
Service Character: Single Phase __ Three Phase __

C. Installation Information/Hardware and Installation Compliance

Person or Company Installing: _____
Contractor's License No. (if applicable): _____
Approximate Installation Date: _____
Mailing Address: _____
City: _____ State: _____ Zip Code: _____
Daytime Phone: _____ Fax: _____ E-Mail: _____
Person or Agency Who Will Inspect/Certify Installation: _____

The Customer-Generator's proposed System hardware complies with all applicable National Electrical Safety Code (NESC), National Electric Code (NEC), Institute of Electrical and Electronics Engineers (IEEE) and Underwriters Laboratories (UL) requirements for electrical equipment and their installation. As applicable to System type, these requirements include, but are not limited to, UL 1741 and IEEE 929-2000. The proposed installation complies with all applicable local electrical codes and all reasonable safety requirements of [Utility Name]. The proposed System has a lockable, visible disconnect device, accessible at all times to [Utility Name] personnel. The System is only required to include one lockable, visible disconnect device, accessible to [Utility Name]. If the interconnection equipment is equipped with a visible, lockable, and accessible disconnect, no redundant device is needed to meet this requirement.

The Customer-Generator's proposed System has functioning controls to prevent voltage flicker, DC injection, overvoltage, undervoltage, overfrequency, underfrequency, and overcurrent, and to provide for System

synchronization to [Utility Name]'s electrical system. The proposed System does have an anti-islanding function that prevents the generator from continuing to supply power when [Utility Name]'s electric system is not energized or operating normally. If the proposed System is designed to provide uninterruptible power to critical loads, either through energy storage or back-up generation, the proposed System includes a parallel blocking scheme for this backup source that prevents any backflow of power to [Utility Name]'s electrical system when the electrical system is not energized or not operating normally.
Signed (Installer): _____ Date: _____
Name (Print): _____

D. Additional Terms and Conditions
In addition to abiding by [Utility Name]'s other applicable rules and regulations, the Customer-Generator understands and agrees to the following specific terms and conditions:

1) Operation/Disconnection
If it appears to [Utility Name], at any time, in the reasonable exercise of its judgment, that operation of the Customer-Generator's System is adversely affecting safety, power quality or reliability of [Utility Name]'s electrical system, [Utility Name] may immediately disconnect and lock-out the Customer-Generator's System from [Utility Name]'s electrical system. The Customer-Generator shall permit [Utility Name]'s employees and inspectors reasonable access to inspect, test, and examine the Customer-Generator's System.

2) Liability
The Customer-Generator agrees to carry no less than $100,000 of liability insurance that provides for coverage of all risk of liability for personal injuries (including death) and damage to property arising out of or caused by the operation of the Customer-Generator's System. Insurance may be in the form of an existing policy or an endorsement on an existing policy.

3) Interconnection Costs
The Customer-Generator shall, at the Customer-Generator's cost and expense, install, operate, maintain, repair, and inspect, and shall be fully responsible for the Customer-Generator's System. The Customer-Generator further agrees to pay or reimburse to [Utility Name] all of [Utility Name]'s Interconnection Costs. Interconnection Costs are the reasonable costs incurred by [Utility Name] for: (1) additional tests or analyses of the effects of the operation of the Customer-Generator's System on [Utility Name]'s local distribution system, (2) additional metering, and (3) any necessary controls. These Interconnection Costs must be related to the installation of the physical facilities necessary to permit interconnected operation of the Customer-Generator's System with [Utility Name]'s system and shall only include those costs, or corresponding costs, which would not have been incurred by [Utility Name] in providing service to the Customer-Generator solely as a consumer of electric energy from [Utility Name] pursuant to [Utility Name]'s standard cost of service policies in effect at the time the Customer-Generator's System is first interconnected with [Utility Name]'s system. Upon request, [Utility Name] shall provide the Customer-Generator with a non-binding estimate of [Utility Name]'s Interconnection Costs based upon the plans and specifications provided by the Customer-Generator to [Utility Name].

4) Energy Pricing and Billing
Section 386.887, RSMo Supp. 2002 sets forth the valuation and billing of electric energy provided by [Utility Name] to the Customer-Generator and to [Utility Name] from Customer-Generator. The value of the electric energy delivered to the Customer-Generator shall be billed in accordance with rate schedule(s)

Utility's Applicable Rate Schedules]. The value of the electric energy delivered by the Customer-Generator to [Utility Name] shall be credited in accordance with rate schedule(s) [Utility's Applicable Rate Schedules].

5) Terms and Termination Rights

This Agreement becomes effective when signed by both the Customer-Generator and [Utility Name], and shall continue in effect until terminated. After fulfillment of any applicable initial tariff or rate schedule term, the Customer-Generator may terminate this Agreement at any time by giving [Utility Name] at least thirty (30) days prior written notice. In such event, the Customer-Generator shall, no later than the date of termination of Agreement, completely disconnect the Customer-Generator's System from parallel operation with [Utility Name]'s system. Either party may terminate this Agreement by giving the other party at least thirty (30) days prior written notice that the other party is in default of any of the terms and conditions of this Agreement, so long as the notice specifies the basis for termination, and there is an opportunity to cure the default. This Agreement may also be terminated at any time by mutual agreement of the Customer-Generator and [Utility Name]. This agreement may also be terminated, by approval of the Commission, if there is a change in statute that is determined to be applicable to this contract and necessitates its termination.

6) Transfer of Ownership

If operational control of the Customer-Generator's System transfers to any other party than the Customer-Generator, a new Application/Agreement must be completed by the person or persons taking over operational control of the existing Customer-Generator System. [Utility Name] shall be notified no less than thirty (30) days before the Customer-Generator anticipates transfer of operational control of the Customer-Generator's System. The person or persons taking over operational control of Customer-Generator's System must file a new Application/Agreement, and must receive authorization from [Utility Name], before the existing Customer-Generator System can remain interconnected with [Utility Name]'s electrical system. The new Application/Agreement will only need to be completed to the extent necessary to affirm that the new person or persons having operational control of the existing Customer-Generator System completely understand the provisions of this Application/Agreement and agrees to them. If no changes are being made to the Customer-Generator's System, completing sections A, D and F of this Application/Agreement will satisfy this requirement. If no changes are being proposed to the Customer-Generator System, [Utility Name] will assess no charges or fees for this transfer. [Utility Name] will review the new Application/Agreement and shall approve such, within fifteen (15) days if the new Customer-Generator has satisfactorily completed the Application/Agreement, and no changes are being proposed to the existing Customer-Generator System. [Utility Name] will then complete section G and forward a copy of the completed Application/Agreement back to the new Customer-Generator, thereby notifying the new Customer-Generator that the new Customer-Generator is authorized to operate the existing Customer-Generator System in parallel with [Utility Name]'s electrical system. If any changes are planned to be made to the existing Customer-Generator System that in any way may degrade or significantly alter that System's output characteristics, then the Customer-Generator shall submit to [Utility Name] a new Application/Agreement for the entire Customer-Generator System and all portions of the Application/Agreement must be completed.

7) Dispute Resolution

If any disagreements between the Customer-Generator and [Utility Name] arise that cannot be resolved through normal negotiations between them, the disagreements may be brought to the Missouri Public Service Commission by either party, through an informal or formal complaint. Procedures for filing and processing these complaints are described in 4 CSR 240-2.070. The complaint procedures described in 4 CSR 240-2.070 apply only to retail electric power suppliers to the extent that they are regulated by the Missouri Public Service Commission.

8) Testing Requirement

The Customer-Generator must, at least once every year, conduct a test to confirm that the Customer-Generator's net metering unit automatically ceases to energize the output (interconnection equipment output voltage goes to zero) within two (2) seconds of being disconnected from [Utility Name]'s electrical system. Disconnecting the net metering unit from [Utility Name]'s electrical system at the visible disconnect switch and measuring the time required for the unit to cease to energize the output shall satisfy this test. The Customer-Generator shall maintain a record of the results of these tests and, upon request by [Utility Name], shall provide a copy of the test results to [Utility Name]. If the Customer-Generator is unable to provide a copy of the test results upon request, [Utility Name] shall notify the Customer-Generator by mail that Customer-Generator has thirty (30) days from the date the Customer-Generator receives the request to provide to [Utility Name], the results of a test. If the Customer-Generator's equipment ever fails this test, the Customer-Generator shall immediately disconnect the Customer-Generator's System from [Utility Name]'s system. If the Customer-Generator does not provide results of a test to [Utility Name] within thirty (30) days of receiving a request from [Utility Name] or the results of the test provided to [Utility Name] show that the Customer-Generator's net metering unit is not functioning correctly, [Utility Name] may immediately disconnect the Customer-Generator's System from [Utility Name]'s system. The Customer-Generator's System shall not be reconnected to [Utility Name]'s electrical system by the customer generator until the Customer-Generator's System is repaired and operating in a normal and safe manner.

I have read, understand, and accept the provisions of Section D, subsections 1 through 8 of this Application/Agreement.

Signed (Customer-Generator): _____ Date: _____

E. Electrical Inspection

The Customer-Generator System referenced above satisfies all requirements noted in Section C.
Inspector Name (print): _____
Inspector Certification: I am a Licensed Engineer in Missouri ___ or I am a Licensed Electrician in Missouri ___ License No._____
Signed (Inspector): _____ Date: _____

F. Customer-Generator Acknowledgement

I am aware of the Customer-Generator System installed on my premises and I have been given warranty information and/or an operational manual for that system. Also, I have been provided with a copy of [Utility Name]'s parallel generation tariff or rate schedule (as applicable) and interconnection requirements. I am familiar with the operation of the Customer-Generator System.

I agree to abide by the terms of this Application/Agreement and I agree to operate and maintain the Customer-Generator System in accordance with the manufacturer's recommended practices as well as [Utility Name]'s interconnection standards. If, at any time and for any reason, I believe that the Customer-Generator System is operating in an unusual manner that may result in any disturbances on [Utility Name]'s electrical system, I shall disconnect the Customer-Generator System and not reconnect it to [Utility Name]'s electrical system until the Customer-Generator System is operating normally after repair or inspection. Further, I agree to notify [Utility Name] no less than thirty (30) days prior to modification of the components or design of the Customer-Generator System that in any way may degrade or significantly alter that System's output characteristics. I acknowledge that any such modifications will require submission of a new Application/Agreement to [Utility Name].

I agree not to operate the Customer-Generator System in parallel with [Utility Name]'s electrical system until this Application/Agreement has been approved by [Utility Name].

Signed (Customer-Generator): _____ Date: _____

G. Utility Application Approval (*completed by* [Utility Name])

[Utility Name] does not, by approval of this Application/Agreement, assume any responsibility or liability for damage to property or physical injury to persons due to malfunction of the Customer-Generator's System or the Customer-Generator's negligence.

This Application is approved by [Utility Name] on this _____day of _____(month), _____(year).

[Utility Name] Representative Name (print): _____

Signed [Utility Name] Representative: _____

AUTHORITY: sections 386.887, RSMo Supp. 2002 and 386.250, RSMo 2000. Original rule filed March 11, 2003.

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

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

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: Anyone may file comments in support of or in opposition to this proposed rule with the Missouri Public Service Commission, Dale Hardy Roberts, Secretary of the Commission, PO Box 360, Jefferson City, MO 65102. To be considered, comments must be received at the commission's offices on or before May 15, 2003, and should include a reference to commission Case No. EX-2003-0230. If comments are submitted via a paper filing, an original and eight (8) copies of the comments are required. Comments may also be submitted via a filing using the commission's electronic filing and information system at <http://www.psc.state.mo.us/efis.asp>. A public hearing regarding this proposed rule is scheduled for May 19, 2003, at 10:00 a.m. in Room 310 of the Governor Office Building, 200 Madison Street, Jefferson City, Missouri. Interested persons may appear at this hearing to submit additional comments and/or testimony in support of or in opposition to this proposed rule, and may be asked to respond to commission questions. Any persons with special needs as addressed by the Americans with Disabilities Act should contact the Missouri Public Service Commission at least ten (10) days prior to the hearing at one (1) of the following numbers: Consumer Services Hotline 1-800-392-4211 or TDD Hotline 1-800-829-7541.

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 10-6.020 Definitions and Common Reference Tables. The commission proposes to amend subsections (2)(C), (2)(N), (2)(O), (2)(P), (2)(R), (2)(S), and (2)(V). 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. The evidence supporting the need for this proposed rulemaking is available for viewing at the Missouri Department of Natural Resources' Air Pollution Control Program at the address and phone number listed in the Notice of Public Hearing at the end of this rule.

PURPOSE: This amendment provides definitions for several key words and expressions used in chapters 1 through 6, including several definitions needed for changes made to clarify 10 CSR 10-6.060. The rulemaking also defines "portable equipment installation" that will be used to exempt these plants from the requirement to obtain operating permits. The evidence supporting the need for this proposed rulemaking, per section 536.016, RSMo, is the February 20, 2002 Recommendations from the "Managing For Results" presentation and the Air Program Advisory Forum 2001 and 2002 Recommendations.

(2) Definitions.

(C) All terms beginning with "C."

1. Can coating—A surface coating applied to a cylindrical steel or aluminum container. The container can be two (2) pieces (made by a drawn and wall-ironed shallow cup with only one (1) end) or three (3) pieces (made by a rectangular material rolled into a cylinder and the attachment of two (2) end pieces).

2. Carbon adsorption system—A device containing adsorbent material (for example, activated carbon, aluminum, silica gel); an inlet and outlet for exhaust gases; and a system to regenerate the saturated adsorbent. The carbon adsorption system must provide for the proper disposal or reuse of all volatile organic compounds (VOC) adsorbed.

3. Carbon bed breakthrough—A concentration of VOC in the carbon adsorption device exhaust that exceeds ten percent (10%) by weight of the inlet VOC concentration.

4. Catalytic incinerator—A control device using a catalyst to allow combustion to occur at a lower temperature.

5. Category I nonfriable ACM—Asbestos-containing packings, gaskets, resilient floor covering and asphalt roofing products containing more than one percent (1%) asbestos as determined using the method specified in 40 CFR part 763, subpart F, Appendix A, section 1, Polarized Light Microscopy.

6. Category II nonfriable ACM—Any material, excluding category I nonfriable ACM, containing more than one percent (1%) asbestos as determined using the method specified in 40 CFR part 763, subpart F, Appendix A, section 1, Polarized Light Microscopy that, when dry, cannot be crumbled, pulverized or reduced to powder by hand pressure.

7. Circumvention—Building, erecting, installing or using any article, machine, equipment, process or method which, when used, would conceal an emission that would otherwise constitute a violation of an applicable standard or requirement. That concealment includes, but is not limited to, the use of gaseous adjutants to achieve compliance with a visible emissions standard, and the piecemeal carrying out of an operation to avoid coverage by a standard that applies only to operations larger than a specific size.

8. Clean room—An uncontaminated area or room which is a part of the worker decontamination enclosure system.

9. Clear coat—A coating which lacks color and opacity or is transparent and uses the undercoat as a reflectant base or undertone color. This term also includes corrosion preventative coatings used for the interior of drums or pails.

10. Closed container—A container with a cover fastened in place so that it will not allow leakage or spilling of the contents.

11. Coating applicator—An apparatus used to apply a surface coating.

12. Coating line—One (1) or more apparatus or operations which include a coating applicator, flash-off area and oven where a surface coating is applied, dried or cured, or a combination of these.

13. Coil coating—The coating of any flat metal sheet or strip that comes in rolls or coils.

14. Cold cleaner—*[A type of degreaser which consists of a tank of organic solvent used for cleaning or degreasing metal parts at or near room temperature.]* **Any device or piece of equipment that contains and/or uses liquid solvent, into which parts are placed to remove soils from the surfaces of the parts or to dry the parts. Cleaning machines that contain and use heated nonboiling solvent to clean the parts are classified as cold cleaning machines.**

15. Commenced—An owner or operator has undertaken a continuous program of construction or modification or that an owner or operator has entered into a binding agreement or contractual obligation to undertake and complete within a reasonable time, a continuous program of construction or modification.

16. Commenced operation—The initial setting into operation of any air pollution control equipment or process equipment.

17. Commercial vehicle—A motor vehicle designed or regular-

ly used for carrying freight and merchandise or more than eight (8) passengers.

18. Commission—The Missouri Air Conservation Commission established pursuant to section 643.040, RSMo.

19. Condensate (hydrocarbons)—A hydrocarbon liquid separated from natural gas which condenses due to changes in the temperature or pressure, or both, and remains liquid at standard conditions.

20. Condenser—Any heat transfer device used to liquefy vapors by removing their latent heats of vaporization including, but not limited to, shell and tube, coil, surface or contact condensers.

21. Conservation vent—Any valve designed and used to reduce evaporation losses of VOC by limiting the amount of air admitted to, or vapors released from, the vapor space of a closed storage vessel.

22. Construction—Fabricating, erecting, reconstructing or installing a source operation. Construction shall include installation of building supports and foundations, laying of underground pipe work, building of permanent storage structures and other construction activities related to the source operation.

23. Containment—The area where an asbestos abatement project is conducted. The area must be enclosed either by a glove bag or plastic sheeting barriers.

24. Control curtain—Any of the three (3) following types of closure devices that are to be constructed of not less than four (4) mil thick plastic sheeting material and installed in an entryway of an area that is considered to be contaminated with free asbestos fibers.

A. A ventilation curtain that allows unrestricted air flow movement into a contaminated area when it is being ventilated with an exhaust fan. This curtain consists of a single flap that opens into the contaminated area and is securely fastened across the top of the entryway framework so that it overlaps both sides of the entryway by not less than twelve inches (12") and the base of the entryway by not less than three inches (3");

B. A confinement curtain that restricts the movement of air into, and from, an unventilated and contaminated area. This curtain consists of three (3) constructed baffles that cover the entire area of the entryway and are securely fastened along the top of the entryway framework and along alternate sides of locations in a manner that will allow two (2) of the curtains to fully cover the entryway opening while a person passes through the third curtain. An airlock arrangement consisting of two (2) confinement curtain entryways that are located at least three feet (3') apart may be substituted for the triple baffle arrangement; or

C. A closure device for which written department approval is required.

25. Conveyorized degreaser—A type of degreaser in which the parts are loaded continuously.

26. Criteria pollutant—Air pollutants for which air quality standards have been established in 10 CSR 10-6.010.

27. Crude oil—A naturally occurring mixture which consists of hydrocarbons and sulfur, nitrogen or oxygen derivatives, or a combination of these, of hydrocarbons which is a liquid at standard conditions.

28. Custody transfer—The transfer of produced crude oil or condensate, or both, after processing or treating, or both, in the producing operations, from storage tanks or automatic transfer facilities to pipelines or any other forms of transportation.

29. Cutback asphalt—Any asphaltic cement that has been liquefied by blending with VOC liquid diluents.

(N) All terms beginning with "N."

1. Nearby—Nearby as used in the definition GEP stack height in subparagraph (2)(G)2.B. is defined for a specific structure or terrain feature—

A. For purposes of applying the formula provided in subparagraph (2)(G)3.B., nearby means that distance up to five (5) times the lesser of the height or the width dimension of a structure, but not greater than one-half (1/2) mile; and

B. For conducting fluid modeling or field study demonstrations under subparagraph (2)(G)3.C., nearby means not greater than one-half (1/2) mile, except that the portion of a terrain feature may be considered to be nearby which falls within a distance of up to ten (10) times the maximum height of the feature, not to exceed two (2) miles if feature achieves a height one-half (1/2) mile from the stack that is at least forty percent (40%) of the GEP stack height determined by the formula provided in subparagraph (2)(G)3.B. or twenty-six meters (26m), whichever is greater, as measured from the ground level elevation at the base of the stack. The height of the structure or terrain feature is measured from the ground level elevation at the base of the stack.

2. Net emissions increase—This term is defined in 40 CFR 51.166(b)(3) and is incorporated by reference.

3. New tepee burner—One not in existence as of September 18, 1970.

4. NIOSH—National Institute of Occupational Safety and Health.

5. Nonattainment area—*[The areas of Missouri identified as follows:]* **Those geographic areas in Missouri that have officially been designated by the U.S. Environmental Protection Agency in 40 CFR part 81.**

[A. A moderate nonattainment area for ozone consists of Franklin, Jefferson, St. Charles and St. Louis Counties and the City of St. Louis; and

B. Nonattainment areas for lead include the city of Herculaneum in Jefferson County, and the Dent, Liberty and Arcadia townships in Iron County.]

(O) All terms beginning with "O."

1. Offset—A decrease in actual emissions from a source operation or installation that is greater than the amount of emissions anticipated from a modification or construction of a source operation or installation. The decrease must be of the same pollutant and have substantially similar environmental and health effects on the impacted area. Any ratio of decrease to increase greater than one to one (1:1) constitutes offset. The exception to this are ozone nonattainment areas where VOC and NO_X emissions will require an offset ratio of actual emission reduction to new emissions according to the following schedule: marginal area = 1.1:1; moderate area = 1.15:1; serious area = 1.2:1; severe area = 1.3:1; and extreme area = 1.5:1.

2. Offtake—Any set of piping (for example, standpipes, goosenecks) that interconnects a coke oven with a collecting main which is common to all systems. The offtake system extends from the connection on top of the coke oven to the connection on the collecting main.

3. **Opacity—The extent to which airborne material obstructs the transmission of incident light and obscures the visual background. Opacity is stated as a percentage of light obstructed and can be measured by a continuous opacity monitoring system or a trained observer. An opacity of one hundred percent (100%) represents a condition in which no light is transmitted, and the background is completely obscured.**

*[3.]***4.** Open burning—The burning of any materials where air contaminants resulting from combustion are emitted directly into the ambient air without passing through a stack or chimney from an enclosed chamber. For purposes of this definition, a chamber shall be regarded as enclosed, when, during the time combustion takes place, only those apertures, ducts, stacks, flues or chimneys as are necessary to provide combustion air and to permit the escape of exhaust gases are open.

*[4.]***5.** Open-top vapor degreaser—A type of degreaser which consists of a tank where solvent is heated to its boiling point which creates a zone of solvent vapor contained by a set of cooling coils.

Condensation of the hot solvent vapor cleans or degreases the colder metal parts.

*[5.]***6.** Outside air—Air outside the containment area.

*[6.]***7.** Owner or operator—Any person who owns, leases, operates, controls or supervises an air contaminant source.

(P) All terms beginning with "P."

1. Pail—Any nominal cylindrical container of one to twelve (1–12) gallon capacity.

2. Paint—A pigmented surface coating using VOCs as the major solvent and thinner which converts to a relatively opaque solid film after application as a thin layer.

3. Part 70—Environmental Protection Agency regulations, codified at 40 CFR part 70, setting forth requirements for state operating permit programs pursuant to Title V of the Act.

4. Particulate matter—Any material, except uncombined water, that exists in a finely divided form as a liquid or solid at standard conditions and as specifically defined as follows:

A. PM—any airborne, finely divided solid or liquid material with an aerodynamic diameter smaller than one hundred (100) micrometers as measured in stacks by EPA Method 5, or sampled in the ambient air as specified in 10 CSR 10-6.040(4)(B); and

B. PM_{10}—particulate matter with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers as measured in stacks by EPA Methods 201/201A and 202; or sampled in the ambient air as specified in 10 CSR 10-6.040(4)(J).

5. Permanent shutdown—The permanent cessation of operation of any air pollution control equipment or process equipment, not to be placed back into service or have a start-up.

6. Permitting authority—Either the administrator or the state air pollution control agency, local agency or other agency authorized by the administrator to carry out a permit program as intended by the Act.

7. Person—Any individual, partnership, association, corporation including the parent company of a wholly-owned subsidiary, municipality, subdivision or agency of the state, trust, estate or other legal entity either public or private. This shall include any legal successor, employee or agent of the previous entities.

8. Petroleum liquid—Petroleum, condensate and any finished or intermediate products manufactured in a petroleum refinery with the exception of Numbers 2–6 fuel oils as specified in ASTM D(396-69), gas turbine fuel oils Number 2-GT—4-GT, as specified in ASTM D(2880-71), and diesel fuel oils Number 2-D and 4-D, as specified in ASTM D(975-68).

9. Petroleum refinery—Any facility which produces gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants or other products through distillation, cracking, extraction or reforming of unfinished petroleum derivatives.

10. Pharmaceutical—Any compound or preparation included under the Standard Industrial Classification Codes 2833 (Medicinal Chemicals and Botanical Products) and 2834 (Pharmaceutical Preparations), excluding products formulated by fermentation, extraction from vegetable material or animal tissue or formulation and packaging of the final product.

11. Pilot plants—The installations which are of new type or design which will serve as a trial unit for experimentation or testing.

12. Plant-mix—A mixture produced in an asphalt mixing plant that consists of mineral aggregate uniformly coated with asphalt cement, cutback asphalt or emulsified asphalt.

13. Pollutant—An air contaminant listed in 10 CSR 10-6.020(3)(A), Table 1 without regard to levels of emission or air quality impact.

14. Polyethylene bag sealing operation—Any operation or facility engaged in the sealing of polyethylene bags, usually by the use of heat.

15. Polystyrene resin—The product of any styrene polymerization process, usually involving heat.

16. Portable equipment—Any equipment that is designed and maintained to be movable, primarily for use in noncontinuous operations. Portable equipment includes rock crushers, asphaltic concrete plants and concrete batching plants.

17. Portable equipment installation—An installation made up solely of portable equipment, meeting the requirements of or having been permitted according to 10 CSR 10-6.060(4).

*[17.]***18.** Positive crankcase ventilation system—Any system or device which prevents the escape of crankcase emissions to the ambient air.

*[18.]***19.** Potential to emit—The emission rates of any pollutant at maximum design capacity. Annual potential shall be based on the maximum annual-rated capacity of the installation assuming continuous year-round operation. Federally enforceable permit conditions on the type of materials combusted or processed, operating rates, hours of operation or the application of air pollution control equipment shall be used in determining the annual potential. Secondary emissions do not count in determining annual potential.

*[19.]***20.** Potroom—A building unit which houses a group of electrolytic cells in which aluminum is produced.

*[20.]***21.** Potroom group—An uncontrolled potroom, a potroom which is controlled individually or a group of potrooms or potroom segments ducted to a common or similar control system.

*[21.]***22.** Primary aluminum reduction installation—Any facility manufacturing aluminum by electrolytic reduction of alumina.

*[22.]***23.** Primer—The first surface coating applied to the surface.

*[23.]***24.** Primer-surfacer—The surface coatings applied over the primer and beneath the topcoat.

*[24.]***25.** Process weight—The total weight of all materials introduced into a source operation including solid fuels, but excluding liquids and gases used solely as fuels and excluding air introduced for purposes of combustion.

*[25.]***26.** Production equipment exhaust system—A device for collecting and directing out of the work area fugitive emissions from reactor openings, centrifuge openings and other vessel openings and equipment for the purpose of protecting workers from excessive exposure.

*[26.]***27**. Publication rotogravure printing—Rotogravure printing upon paper which is subsequently formed into books, magazines, catalogues, brochures, directories, newspaper supplements and other types of printed materials.

*[27.]***28.** Pushing operation—The process of removing coke from the coke oven. The coke pushing operation begins when the coke-side oven door is removed and is completed when the hot car enters the quench tower and the coke-side oven door is replaced.

(R) All terms beginning with "R."

1. Reactor—A vat or vessel, which may be jacketed to permit temperature control, designed to contain chemical reactions.

2. Reconstruction—Where the fixed capital cost of the new components exceeds fifty percent (50%) of the fixed capital cost of a comparable entirely new source of operation or installation; the use of an alternative fuel or raw material by reason of an order in effect under Sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974, by reason of a natural gas curtailment plan in effect pursuant to the Federal Power Act, or by reason of an order or rule under Section 125 of the Clean Air Act, shall not be considered reconstruction. In determining whether a reconstruction will occur, the provisions of 40 CFR 60.15, December 1, 1979, shall be considered by the director.

3. Refinery fuel gas—Any gas which is generated by a petroleum refinery process unit and which is combusted including any gaseous mixture of natural gas and fuel gas.

4. Refuse—The garbage, rubbish, trade wastes, leaves, salvageable material, agricultural wastes or other wastes.

5. Regulated air pollutant—All air pollutants or precursors for which any standard has been promulgated.

6. Regulated asbestos-containing material (RACM)—friable asbestos material; category I nonfriable asbestos-containing material (ACM) that has become friable; category I nonfriable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or category II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations regulated by this rule.

7. Regulated pollutant—Any regulated air pollutant except carbon monoxide and pollutants regulated exclusively under section 112(r) or Title VI of the Act.

8. Reid vapor pressure (RVP)—The absolute vapor pressure of a petroleum liquid as determined by "Tests for Determining Reid Vapor Pressure (RVP) of Gasoline and Gasoline-Oxygenate Blends" 40 CFR part 80, Appendix E as in effect July 1, 1990.

9. Renewal—The process by which an operating permit is reissued at the end of its term.

10. Repair—The restoration of asbestos material that has been damaged. Repair consists of the application of rewettable glass cloth, canvas, cement or other suitable material. It may also involve filling damaged areas with nonasbestos substitutes and reencapsulating or painting previously encapsulated materials.

11. Residual fuel oil—The fuel oil variously known as Bunker C, PS 400 and Number 6 as defined in ASTM D(396-487) (1959).

12. Responsible official—Includes one (1) of the following:

A. The president, secretary, treasurer or vice-president of a corporation in charge of a principal business function, any other person who performs similar policy and decision-making functions for the corporation or a duly authorized representative of this person if the representative is responsible for the overall operation of one (1) or more manufacturing, production or operating facilities applying for or subject to a permit and either—

(I) The facilities employ more than two hundred and fifty (250) persons or have a gross annual sales or expenditures exceeding twenty-five (25) million dollars (in second quarter 1980 dollars); or

(II) The delegation of authority to this representative is approved in advance by the permitting authority;

B. A general partner in a partnership or the proprietor in a sole proprietorship;

C. Either a principal executive officer or ranking elected official in a municipality, state, federal or other public agency. For the purpose of this part, a principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency; or

D. The designated representative of an affected source insofar as actions, standards, requirements or prohibitions under Title IV of the Act or the regulations promulgated under the Act are concerned and the designated representative for any other purposes under part 70.

13. Retail outlet—Any establishment where gasoline is sold, offered for sale or used as a motor vehicle fuel.

[14. Ringelmann Chart—The Ringelmann's Scale for Grading the Density of Smoke as published in United States Bureau of Mines Information Circular 8333.]

*[15.]***14.** Road-mix—An asphalt course produced by mixing mineral aggregate and cutback or emulsified asphalt at the road site by means of travel plants, motor graders, drags or special road-mixing equipment.

*[16.]***15.** Roll printing—The application of words, designs and pictures to a substrate usually by means of a series of hard rubber or steel rolls each with only partial coverage.

*[17.]***16.** Roller spreader—The device used for the application of a coating material to a substrate by means of hard rubber or steel rolls.

*[18.]***17.** Rotogravure printing—The application of words, designs and pictures to a substrate by means of a roll printing technique which involves an intaglio or recessed image areas in the form of cells.

(S) All terms beginning with "S."

1. Salvage operation—Any business, trade, industry or other activity conducted in whole or in part for the purpose of salvaging or reclaiming any product or material.

2. Sealing material—A liquid substance that does not contain asbestos which is used to cover a surface that has previously been coated with a friable asbestos-containing material for the intended purpose of preventing any asbestos fibers remaining on the surface from being disbursed into the air. This substance shall be distinguishable from the surface to which it is applied.

3. Secondary emissions—The emissions which occur or would occur as a result of the construction or operation of an installation or major modification but do not come from the installation or major modification itself. Secondary emissions must be specific, well-defined, quantifiable and impact the same general area as the installation or modification which causes the secondary emissions. Secondary emissions may include, but are not limited to:

A. Emissions from trucks, ships or trains coming to or from the installation or modification; and

B. Emissions from any off-site support source which would not be constructed or increase its emissions except as a result of the construction or operation of the major stationary source or major modification.

4. Section 502(b)(10) changes—Changes that contravene an express permit term. These changes do not include those that would violate applicable requirements or contravene federally-enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting or compliance certification requirements.

5. Sheet basecoat—The roll coated primary interior surface coating applied to surfaces for the basic protection of buffering filling material from the metal can surface.

6. Shower room—A room between the clean room and the equipment room in the worker decontamination enclosure. This room shall be equipped with running hot and cold water that is suitably arranged for complete showering during decontamination.

7. Shutdown—The cessation of operation of any air pollution control equipment or process equipment, excepting the routine phasing out of process equipment.

8. Shutdown, permanent—See permanent shutdown.

9. Side seam coating (three (3)-piece)—A can surface coating to seal the connecting edge of a formed metal sheet in the manufacture of a three (3)-piece can.

10. Significant—A net emissions increase or potential to emit at a rate equal to or exceeding the *de minimis* levels or create an ambient air concentration at a level greater than those listed in 10 CSR 10-6.060(11)(D) Table 4, or any emissions rate or any net emissions increase associated with an installation subject to 10 CSR 10-6.060 which would be constructed within ten kilometers (10 km) of a Class I area and have an air quality impact on the area equal to or greater than one microgram per cubic meter (1 $\mu g/m^3$) (twenty-four (24)-hour average). **For purposes of new source review under 10 CSR 10-6.060 sections (7) and (8), net emission increases of hazardous air pollutants exceeding the *de minimis* levels are not considered significant.**

11. Smoke—Small gas-borne particles resulting from combustion, consisting of carbon, ash and other material.

12. Solvent—Organic materials which are liquid at standard conditions and which are used as dissolves, viscosity reducers or cleaning agents.

13. Solvent metal cleaning—The process of cleaning soils from metal surfaces by cold cleaning or open-top vapor degreasing or conveyorized degreasing.

14. Solvent volatility—Reid vapor pressure.

15. Source gas volume—The volume of gas arising from a process or other source operation.

16. Source operation—See emission unit.

17. Springfield-Greene County area—The geographical area contained within Greene County.

18. St. Louis metropolitan area—The geographical area comprised of St. Louis, St. Charles, Jefferson and Franklin Counties and the City of St. Louis.

19. Stack—Any spatial point in an installation designed to emit air contaminants into ambient air. An accidental opening such as a crack, fissure, or hole is a source of fugitive emissions, not a stack.

20. Stack in existence—The owner or operator had—1) begun, or caused to begin, a continuous program of physical on-site construction of the stack; or 2) entered into binding agreements or contractual operations, which could not be cancelled or modified without substantial loss to the owner or operator, to undertake a program of construction of the stack to be completed in a reasonable time.

21. Staff director—Director of the Air Pollution Control Program of the Department of Natural Resources.

22. Standard conditions—A gas temperature of seventy degrees Fahrenheit (70°F) and a gas pressure of 14.7 pounds per square inch absolute (psi).

23. Start-up—The setting into operation of any air pollution control equipment or process equipment, except the routine phasing in of process equipment.

24. State—Any nonfederal permitting authority, including any local agency, interstate association or statewide program. When clear from its context, state shall have its conventional territorial definition.

25. State implementation plan—A series of plans adopted by the commission, submitted by the director, and approved by the administrator, detailing methods and procedures to be used in attaining and maintaining the ambient air quality standards in Missouri.

26. Storage tank—Any tank, reservoir or vessel which is a container for liquids or gases, where no manufacturing process or part of it, takes place.

27. Structural item—Roofs, walls, ceilings, floors, structural supports, pipes, ducts, fittings and fixtures that have been installed as an integral part of any structure.

28. Submerged fill pipe—Any fill pipe the discharge opening of which is entirely submerged when the liquid level is six inches (6") above the bottom of the tank. Submerged fill pipe when applied to a tank which is loaded from the side is defined as any fill pipe, the discharge opening of which is entirely submerged when the liquid level is eighteen inches (18") or twice the diameter of the fill pipe, whichever is greater, above the bottom of the tank.

29. Synthesized pharmaceutical manufacturing—Manufacture of pharmaceutical products by chemical synthesis.

(V) All terms beginning with "V."

1. Vacuum producing system—Any reciprocating, rotary or centrifugal blower or compressor or any jet ejector device that takes suction from a pressure below atmospheric on a system containing volatile hydrocarbons.

2. Vapor recovery system—A vapor gathering system capable of collecting the hydrocarbon vapors and gases discharged and a vapor disposal system capable of processing the hydrocarbon vapors and gases so as to limit their emission to the atmosphere.

3. Vapor-mounted seal—A primary seal mounted so there is an annular vapor space underneath the seal. The annular vapor space is bounded by the bottom of the primary seal, the tank wall, the liquid surface and the floating roof.

4. Vapor tight—When applied to a delivery vessel or vapor recovery system as one that sustains a pressure change of no more than seven hundred fifty (750) pascals (three inches (3") of H_2O) in five (5) minutes when pressurized to a gauge pressure of four thousand five hundred (4,500) pascals (eighteen inches (18") of H_2O) or evacuated to a gauge pressure of one thousand five hundred (1,500) pascals (six inches (6") of H_2O).

5. Varnish—An unpigmented surface coating containing VOC and composed of resins, oils, thinners and driers used to give a glossy surface to wood, metal, etc.

6. Vehicle—Any mechanical device on wheels, designed primarily for use on streets, roads or highways, except those propelled or drawn by human or animal power or those used exclusively on fixed rails or tracks.

7. Vinyl coating—The application of a decorative or protective topcoat, or printing or vinyl coated fabric or vinyl sheet.

8. Visible emission—Any discharge of an air contaminant**,** ***[into the atmosphere which is darker in shade as that designated No. 0 on the Ringelmann Chart, as published by the United States Bureau of Mines, or is of an opacity as to obscure an observer's view to a degree greater than Ringelmann No. 0]*** **including particulate matter or other condensibles, which reduce the transmission of light or obscure the view of an object in the background**.

9. Volatile organic compounds (VOC)—For all areas in Missouri VOC means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, that participates in atmospheric photochemical reactions to produce ozone. The following compounds will not be considered VOCs because of their known lack of participation in the atmospheric reactions to produce ozone:

1,1,1,2,3,4,4,5,5,5-decafluoropentane(HFC 43-10mee);
1,1,1,3,3,3-hexafluoropropane (HFC-236fa);
1,1,2,2,3-pentafluoropropane (HFC-245ca);
1,1,2,3,3-pentafluoropropane (HFC-245ea);
1,1,1,2,3-pentafluoropropane (HFC-245eb);
1,1,1,3,3-pentafluoropropane (HFC-245fa);
1,1,1,2,3,3-hexafluoropropane (HFC-236ea);
1,1,1,3,3-pentafluorobutane (HFC-365mfc);
3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca);
1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb);
1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a);
1-chloro-1-fluorethane (HCFC-151a);
1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxybutane (C4FOCH3);
2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF3) 2CFCF2OCH3);
1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluoro-butane (C4F9OC2H5);
2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF3) 2CFCF2OC2H5);
1,1,1-trichloroethane (methyl chloroform);
acetone;
chlorodifluoroethane (HCFC-142b);
chlorodifluoromethane (HCFC-22);
chlorofluoromethane (HCFC-31);
chloropentafluoroethane (CFC-115);
chlorotetrafluoroethane (HCFC-124);
dichlorodifluoromethane (CFC-12);
dichlorofluoroethane (HCFC-141b);
dichlorotetrafluoroethane (CFC-114);
dichlorotrifluoroethane (HCFC-123);
difluoroethane (HFC-152a);
difluoromethane (HFC-32);
ethane;

ethylfluoride (HFC-161);
methane;
methyl acetate;
methylene chloride (dichloromethane);
parachlorobenzotrifluoride (PCBTF);
pentafluoroethane (HFC-125);
perchloroethylene;
tetrafluoroethane (HFC-134);
tetrafluoroethane (HFC-134a);
trichlorofluoromethane (CFC-11);
trichlorotrifluoroethane (CFC-113);
trifluorodichloroethane (HCFC-123);
trifluoroethane (HFC-143a);
trifluoromethane (HFC-23);
cyclic, branched or linear, completely fluorinated alkanes;
cyclic, branched or linear, completely fluorinated ethers with no unsaturations;
cyclic, branched or linear, completely methylated siloxanes;
cyclic, branched or linear, completely fluorinated tertiary amines with no unsaturations; and
sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorines.

VOC may be measured by a reference method, an equivalent method, an alternative method or by procedures specified in either 10 CSR 10-6.030 or 40 CFR 60. These methods and procedures may measure nonreactive compounds so an owner or operator must exclude these nonreactive compounds when determining compliance.

*AUTHORITY: sections 643.050 and 643.055, RSMo [Supp. 1998] **2000**. Original rule filed Aug. 16, 1977, effective Feb. 11, 1978. For intervening history, please consult the **Code of State Regulations**. Amended: Filed March 5, 2003.*

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., May 29, 2003. The public hearing will be held at the Harry S Truman State Office Building, Room 400, 301 W. High Street, Jefferson City, 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 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., June 5, 2003. 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 subsections (1)(A), (1)(B), (1)(D), (7)(A), (7)(B), (7)(C), (8)(A) and (8)(C); and delete subsections (1)(E) and (1)(F). 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. The evidence supporting the need for this proposed rulemaking is available for viewing at the Missouri Department of Natural Resources' Air Pollution Control Program at the address and phone number listed in the Notice of Public Hearing at the end of this rule.

PURPOSE: The purpose of this amendment is to simplify the applicability section of the rule by removing the exemption, excluded activities, and exceptions subsections. These sections are being reproduced and expanded in a new rule 10 CSR 10-6.061 Construction Permit Exemptions. This amendment will also incorporate references to a new rule 10 CSR 10-6.062 Construction Permits By Rule that will allow installations to construct and operate new air pollution sources without going through the case-by-case review. This rule amendment will also clarify language in section (7). The evidence supporting this proposed rulemaking, per section 536.016, RSMo, is the February 20, 2002, Recommendations from the "Managing For Results" presentation and the Air Program Advisory Forum 2001 and 2002 Recommendations.

(1) Applicability.

(A) Definitions.

1. Major operation—Any installation which has the potential to emit one hundred (100) tons per year or more of criteria pollutants, fifty (50) tons per year of volatile organic compound (VOC) or oxides of nitrogen in serious nonattainment areas; twenty-five (25) tons per year of VOC or oxides of nitrogen in severe nonattainment areas; or ten (10) tons per year of VOC or oxides of nitrogen in extreme nonattainment areas.

2. Definitions for key words or phrases used in this rule**, other than those defined in this rule section,** may be found in 10 CSR 10-6.020(2).

(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**, unless permitted under rule 10 CSR 10-6.062**.

(D) Exempt Emissions Units. **This rule does not apply to the construction or modification of installations that are exempted or excluded by 10 CSR 10-6.061 or are permitted under rule 10 CSR 10-6.062.**

[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) per hour heat input; or

B. Any combustion equipment with a capacity of less than one (1) million 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 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;

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 incinerations 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.

(E) Excluded Activities. This rule does not apply to—

1. Routine maintenance, parts replacement or relocation of emissions units within the same installation which do not involve either any appreciable change either in the quality or nature, or any increase in either the potential to emit or the effect on air quality, of the emissions of any air contaminant. Solely for the purpose of illustrating this category of excluded activities without limiting the generality of the preceding liberal sentence, the following examples are given:

A. Replacing the bags in a baghouse;

B. Replacing wires, plates, rappers, controls or electric circuitry in an electrostatic precipitator which does not measurably decrease the design efficiency of the unit;

C. Replacement of fans, pumps or motors which does not alter the operation of a source or performance of a control device;

D. Boiler tubes;

E. Piping, hoods and ductwork; or

F. Replacement of engines, compressors or turbines as part of a normal maintenance program.

2. Changes in a process or process equipment which do not involve installing, constructing or reconstructing an emissions unit or associated air cleaning devices, and that do not involve either any appreciable change either in the quality or nature, or any increase in either the potential to emit or the effect on air quality of the emissions of any air contaminant. Solely for the purpose of illustrating this category of excluded activities and without limiting the generality of the preceding liberal sentence, the following examples are given:

A. Change in the supplier or formulation of similar raw materials, fuels, paints and other coatings;

B. Change in the sequence of the process;

C. Change in the method of raw material addition;

D. Change in the method of product packaging;

E. Change in the process operating parameters;

F. Replacement of an identical or more efficient cyclone precleaner which is used as a precleaner in a fabric filter control system;

G. Installation of a floating roof on an open top petroleum storage tank;

H. Replacement of a fuel burner in a boiler with a more thermally efficient burner;

I. Lengthening a paint drying oven to provide additional curing time; or

J. Changes in the location, within the storage area, or configuration of a material storage pile or material handling equipment.

3. Replacement of like-kind emission units that do not involve either any appreciable change either in the quality or nature, or any increase either in the potential to emit or the effect on air quality, of the emissions of any air contaminant.

4. The exempt activities in paragraphs (1)(E)1.–3. of this rule reflect a presumption that existing emissions units which are changed or replaced by like-kind units shall be treated as having begun normal operation for purposes of the definition of actual emissions in 10 CSR 10-6.020.

5. Permit-by-rule. (Reserved)

(F) Exceptions to Excluded Activities. The exclusion provisions of subsection (1)(E) of this rule notwithstanding, this rule shall apply to any construction, reconstruction, alteration or modification which—

1. Is expressly required by an operating permit; or

2. Is subject to federally-mandated construction permitting requirements set forth in sections (7), (8) or (9), or any combination of these, of this rule.]

(7) Nonattainment Area Permits.

(A) *[Exemptions. Installations and modifications which have the potential to emit one hundred (100) tons or more solely because fugitive emissions are]* **Solely for the purpose of determining applicability with section (7) of this rule, fugitive emissions shall not be** counted when calculating potential to emit *[are exempt from the requirements of this section]* **for construction and modification**, provided that the installations are not named in 10 CSR 10-6.020(3)(B), Table 2.

(B) A permit shall not be issued for the construction *[or major modification of an installation with the potential to emit the nonattainment pollutant in amounts equal to or greater than the de minimis levels; for an installation or modification with the potential to emit one hundred (100) tons or more or other nonattainment pollutants; or for a major modification of an installation with the potential to emit one hundred (100) tons or more of the nonattainment pollutant]* **of a major operation for the nonattainment pollutants, or for a major modification for the nonattainment pollutant of an existing major operation**, unless the following requirements, in addition to section (6) are met:

1. By the time the source is to commence operation, sufficient *[offsetting emissions reductions have been]* **emissions offsets shall be** obtained*[, such that, the total allowable emission from existing sources in the nonattainment area, from new or modified sources which are not major emitting facilities, and from existing sources prior to the application for that permit to construct or modify represent annual incremental reductions in emissions of the nonattainment pollutant]* as *[are]* required to ensure **reasonable further progress toward** attainment of the applicable national ambient air quality standard *[by the applicable date]*;

2. In the case of a new or modified installation which is located in a zone (within the nonattainment area) identified by the administrator, in consultation with the Secretary of Housing and Urban Development, as a zone to which economic development should be targeted, emissions of that pollutant resulting from the proposed new or modified installation will not cause or contribute to emissions levels which exceed the allowance permitted for that pollutant for that zone from new or modified installations;

3. Offsets have been obtained in accordance with the offset and banking procedures in 10 CSR 10-6.410;

4. The administrator has not determined that the state implementation plan is not being adequately implemented for the nonattainment area in which the proposed source is to be constructed or modified; *[and]*

5. Temporary installation and portable sources shall be exempt from this subsection provided that the source applies BACT for each pollutant emitted in a significant amount*[.]***;**

[(C) A permit for the construction or major modification of an installation with the potential to emit annually one hundred (100) tons or more of a nonattainment pollutant, or a permit for a modification with the potential to emit annually one hundred (100) tons or more of a nonattainment pollutant, shall not be issued unless the following requirements, in addition to section (6) of this rule, are met:]

*[1.]***6.** The applicant must provide documentation establishing that all installations in Missouri which are owned or operated by the applicant (or by any entity controlling, controlled by or under common control with the applicant) are subject to emission limitations and are in compliance, or are on a schedule for compliance, with all applicable requirements;

*[2.]***7.** The applicant shall document that the provisions in its application for the installation and operation of pollution control equipment or processes will meet the lowest achievable emission rate (LAER) for the nonattainment pollutant. Temporary installations and portable equipment shall be exempt from LAER, provided the installation applies BACT for each pollutant emitted in a significant amount;

*[3.]***8.** For phased construction projects, the determination of LAER shall be reviewed and modified as appropriate at the latest reasonable time prior to commencement of construction of each independent phase of construction;

*[4.]***9.** The applicant must provide an alternate site analysis; and

*[5.]***10.** The applicant shall provide an analysis of impairment to visibility in any Class I area (those designated in subsection (12)(I) of this rule) that would occur as a result of the installation or major modification and as a result of the general, commercial, residential, industrial and other growth associated with the installation or major modification.

(8) Attainment and Unclassified Area Permits.

(A) Applicability.

1. Applicants *[for permits]* for construction or major modification of installations which are in a category named in 10 CSR 10-6.020(3)(B), Table 2, **excluding category number 27,** and have the potential to emit one hundred (100) tons or more of any pollutant shall adhere to the requirements of this section, in addition to the requirements of section (6) of this rule.

[2. Applicants for permits for construction or modification with the potential to emit one hundred (100) tons or more of any pollutant at an installation in a category named in 10 CSR 10-6.020(3)(B), Table 2 shall comply with the requirements of this section, in addition to the requirements of section (6) of this rule.]

*[3.]***2.** Applicants *[for permits]* for construction or major modification of installations with the potential to emit two hundred and fifty (250) tons or more of any pollutant shall comply with the requirements of this section, in addition to the requirements of section (6); unless the potential to emit would be less than two hundred and fifty (250) tons if fugitive emissions were not counted in calculating the potential to emit and the installation is not in a category named in 10 CSR 10-6.020(3)(B), Table 2.

[4. Applicants for permits for construction or modification with the potential to emit two hundred and fifty (250) tons or more of any pollutant shall comply with the requirements of this section, in addition to the requirements of section (6), unless the potential to emit would be less than two hundred and fifty (250) tons if fugitive emissions were not counted in calculating the potential to emit and the installation is not in a category named in 10 CSR 10-6.020(3)(B), Table 2.]

3. Applicants in the St. Louis Metropolitan Ozone Maintenance Area for construction of major operations of VOC or oxides of nitrogen or for the major modification of a major operation where the net emission increase exceeds forty (40) tons or more per year of VOC or oxides of nitrogen shall obtain offsets and shall adhere to the requirements of this section, in addition to the requirements of section (6) of this rule. These offsets shall be obtained in accordance with the offset and banking procedures in 10 CSR 10-6.410. By the time the source is to commence operation, sufficient emissions offsets shall be as required to maintain the applicable national ambient air quality standard by the applicable date. In the event that the contingency measures of the St. Louis Metropolitan Maintenance Plan are triggered, construction or major modification of a major operation of VOC

or oxides of nitrogen shall adhere to the requirements of subsections (7)(A)–(E) of this rule.

(C) Air Quality Impacts.

1. Preapplication modeling and monitoring.

A. Each application shall contain an analysis of ambient air quality or ambient concentrations in the significantly impacted area of the installation for each pollutant specified in 10 CSR 10-6.020(3)(A), Table 1, which the installation would emit in significant amounts. The analysis shall follow the guidelines of subsection (12)(F).

B. The analysis required under this paragraph shall include continuous air quality monitoring data for any pollutant, except VOC, emitted by the installation, for which an ambient air quality standard exists. The owner or operator of a proposed installation or major modification emitting VOC who satisfies all the conditions of 40 CFR part 51, Appendix S, section IV.A. may provide post-construction monitoring data for ozone in lieu of providing preconstruction data for ozone.

C. The continuous air monitoring data required in this paragraph shall relate to, and shall have been gathered over, a period of one (1) year and shall be representative of the year preceding receipt of the complete application, unless the permitting authority determines that a complete and adequate analysis may be accomplished in a shorter period (but not less than four (4) months). Continuous, as used in this subparagraph, refers to frequency of monitoring operation as required by 40 CFR part 58, Appendix B.

D. For pollutants emitted in a significant amount for which no ambient air quality standards exist, the analysis required under this paragraph shall contain whatever air quality monitoring data the permitting authority determines is necessary to assess ambient air quality for that pollutant in any area that the emissions of that pollutant would affect.

2. Operation of monitoring stations. The owner or operator shall meet the requirements of 40 CFR part 58, Appendix B during the operation of monitoring stations for the purposes of paragraphs (8)(C)1. or 7. of this rule at the time the station is put into operation.

3. Modeling. The owner or operator of the installation to which this section applies shall provide modeling data, following the requirements of subsection (12)(F), to demonstrate that potential and secondary emission increases from the installation, in conjunction with all other applicable emissions increases or reductions in the baseline area since the baseline date, will not cause or contribute to ambient air concentrations in excess of any ambient air quality standard or any applicable maximum allowable increase over the baseline concentration in any area, in the amounts listed in subsection (11)(A), Table 1 of this rule. The permitting authority will track the consumption of allowable increment in accordance with subsection (12)(G) of this rule.

4. Emission reductions. The applicant must show that it has obtained emission reductions of a comparable air quality impact for the nonattainment pollutant if its planned emissions of the pollutant will affect a nonattainment area in excess of the air quality impact for that pollutant listed in subsection (11)(D), Table 4 of this rule. These reductions shall be obtained through binding agreement prior to the commencement of operations of the installation or major modification and shall be subject to the offset conditions set forth in 10 CSR 10-6.410.

5. Impact on visibility. The owner or operator shall provide an analysis of the impairment to visibility, soils and vegetation that would occur as a result of the installation or major modification and general commercial, residential, industrial and other growth associated with the installation or major modification. The owner or operator need not provide an analysis of the impact on vegetation having no significant commercial or recreational value.

6. Projected air quality impacts. The owner or operator shall provide, following the requirements of subsection (12)(F), Appendix F of this rule, an analysis of the air quality impact projected for the area as a result of general commercial, residential and industrial growth, as well as growth associated with the installation or major modification.

7. Post-construction monitoring. After construction of the installation or major modification, the applicant shall conduct ambient monitoring as the permitting authority determines may be necessary to determine the effect emissions from the installation or major modification may have, or are having, on air quality in any area.

8. Exemptions.

A. The requirements of subsection (8)(C) shall not apply unless otherwise determined to be needed by the permitting authority, if—

(I) The increase in potential emissions of that pollutant from the installation would impact no Class I area and no area where an applicable increment is known to be violated; and

(II) The duration of the emissions of the pollutant will not exceed two (2) years.

B. The requirements of subsection (8)(C) as they relate to any maximum allowable increase for a Class II area shall not apply unless otherwise determined to be needed by the permitting authority, if—

(I) The application is for a major modification of an installation which was in existence on March 1, 1978;

(II) Any such increase would cause or contribute to no exceedance of any ambient air quality standard; and

(III) The new increase in allowable emissions of each air pollutant after the application of BACT would be less than fifty (50) tons per year.

C. The requirements of subsection (8)(C) shall not apply, if the ambient air quality effect is less than the air quality impact of subsection (11) *[(B), Table 2]* **(D) Table 4**, or if the pollutant is not listed in subsection (11) *[(B), Table 2]* **(D) Table 4**, unless otherwise determined to be needed by the permitting authority. The ambient air quality impact must be determined using either of the following methods:

(I) The screening technique set forth in Guidelines for Air Quality Maintenance and Planning Analysis Vol. III (Revised); Procedures for Evaluating Air Quality Impact of New Stationary Sources (United States EPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711); or

(II) A more sophisticated modeling technique as indicated in subsection (12)(F).

AUTHORITY: section 643.050, RSMo 2000. Original rule filed Dec. 10, 1979, effective April 11, 1980. For intervening history, please consult the ***Code of State Regulations****. Amended: Filed March 5, 2003.*

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., May 29, 2003. The public hearing will be held at the Harry S Truman State Office Building, Room 400, 301 W. High Street, Jefferson City, 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 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., June 5, 2003. 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 RULE

10 CSR 10-6.061 Construction Permit Exemptions. If the commission adopts this rule action, it will be submitted to the U.S. Environmental Protection Agency for inclusion in the Missouri State Implementation Plan. The evidence supporting the need for this proposed rulemaking is available for viewing at the Missouri Department of Natural Resources' Air Pollution Control Program at the address and phone number listed in the Notice of Public Hearing at the end of this rule.

PURPOSE: This rule lists specific construction or modification projects that are not required to obtain permits to construct under 10 CSR 10-6.060. The evidence supporting the need for this proposed rulemaking, per section 536.016, RSMo, is the February 20, 2002 Recommendations from the "Managing For Results" presentation, the Air Program Advisory Forum 2001 and 2002 Recommendations and a January 28, 2003 memorandum to the department's Air Pollution Control Program recommending exemption language changes.

(1) Applicability. This rule shall apply to all installations in Missouri.

(2) Definitions. Definitions for certain terms specified in this rule may be found in 10 CSR 10-6.020.

(3) General Provisions. The following construction or modifications are not required to obtain a permit under 10 CSR 10-6.060:

(A) Exempt Emission Units.

1. The following combustion equipment is exempt from 10 CSR 10-6.060 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 gas or liquefied petroleum gas or any combination of these with a capacity of less than ten (10) million British thermal units (Btus) per hour heat input;

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

C. Drying or heat treating ovens with less than ten (10) million Btus per hour capacity provided the oven does not emit pollutants other than the combustion products and the oven is fired exclusively by natural gas, liquefied petroleum gas, or any combination thereof; and

D. Any oven with a total production of yeast leavened bakery products of less than ten thousand (10,000) pounds per operating day heated either electrically or exclusively by natural gas firing with a maximum capacity of less than ten (10) million Btus per hour.

2. The following establishments, systems, equipment and operations are exempt from 10 CSR 10-6.060:

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 per hour heat input. Incinerators operated in conjunction with these sources are not exempt unless the incinerator operations are exempt under another section of this rule;

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. Any operation associated with livestock that emits odors but no regulated air pollutant;

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

(I) Is in noncommercial use only (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;

(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; or

(III) The installation of additional grain storage capacity in which there is no increase in hourly grain handling capacity and existing grain receiving and loadout equipment are utilized;

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

G. Any wet sand and gravel production facility that obtains its material from subterranean and subaqueous beds where the deposits of sand and gravel are consolidated granular materials resulting from natural disintegration of rock and stone and whose maximum production rate is less than five hundred (500) tons per hour. All permanent in-plant roads shall be paved and cleaned, or watered, or properly treated with dust-suppressant chemicals as necessary to achieve good engineering control of dust emissions. Only natural gas shall be used as a 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, including air pollution control equipment, but not including an anaerobic lagoon, that emits odors but no 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;

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;

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;

P. The following miscellaneous activities:

(I) Use of office equipment and products, not including printing establishments or businesses primarily involved in photographic reproduction. This exemption is solely for office equipment that is not part of the manufacturing or production process at the installation;

(II) Tobacco smoking rooms and areas;

(III) Hand-held applicator equipment for hot melt adhesives with no volatile organic compound (VOC) in the adhesive formula;

(IV) Paper trimmers and binders;

(V) Blacksmith forges, drop hammers, and hydraulic presses;

(VI) Hydraulic and hydrostatic testing equipment; and

(VII) Environmental chambers, shock chambers, humidity chambers, and solar simulators provided no hazardous air pollutants are emitted by the process;

Q. The following internal combustion engines:

(I) Portable electrical generators that can be moved by hand without the assistance of any motorized or non-motorized vehicle, conveyance or device;

(II) Spark ignition or diesel fired internal combustion engines used in conjunction with pumps, compressors, pile drivers, welding, cranes, and wood chippers or internal combustion engines or gas turbines of less than two-hundred fifty (250) horsepower rating; and

(III) Laboratory engines used in research, testing, or teaching;

R. The following quarries, mineral processing, and biomass facilities:

(I) Drilling or blasting activities;

(II) Concrete or aggregate product mixers or pug mills with a maximum rated capacity of less than fifteen (15) cubic yards per hour;

(III) Rip Rap production processes consisting only of a grizzly feeder, conveyors, and storage, not including additional hauling activities associated with Rip Rap production;

(IV) Sources at biomass recycling, composting, landfill, publicly owned treatment works (POTW), or related facilities specializing in the operation of, but not limited to tub grinders powered by a motor with a maximum output rating of ten (10) horsepower, hoggers and shredders and similar equipment powered by a motor with a maximum output rating of twenty-five (25) horsepower, and other sources at such facilities with a total throughput less than five hundred (500) tons per year; and

(V) Landfarming of soils contaminated only with petroleum fuel products where the farming beds are located a minimum of three hundred feet (300') from the property boundary;

S. The following kilns and ovens:

(I) Kilns with a firing capacity of less than ten (10) million Btus per hour used for firing ceramic ware, heated exclusively by natural gas, liquefied petroleum gas, electricity, or any combination thereof; and

(II) Electric ovens or kilns used exclusively for curing or heat-treating provided no Hazardous Air Pollutants (HAPs) or VOCs are emitted;

T. The following food and agricultural equipment:

(I) Any equipment used in agricultural operations to grow crops;

(II) Equipment used exclusively to slaughter animals. This exemption does not apply to other slaughterhouse equipment such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment;

(III) Commercial smokehouses or barbecue units in which the maximum horizontal inside cross-sectional area does not exceed twenty (20) square feet;

(IV) Equipment used exclusively to grind, blend, package, or store tea, cocoa, spices or coffee;

(V) Equipment with the potential to dry, mill, blend, grind, or package less than one thousand (1,000) pounds per year of dry food products such as seeds, grains, corn, meal, flour, sugar, and starch;

(VI) Equipment with the potential to convey, transfer, clean, or separate less than one thousand (1,000) tons per year of dry food products or waste from food production operations;

(VII) Storage equipment or facilities containing dry food products that are not vented to the outside atmosphere or which have the potential to handle less than one thousand (1,000) tons per year;

(VIII) Coffee, cocoa, and nut roasters with a roasting capacity of less than fifteen (15) pounds of beans or nuts per hour, and any stoners or coolers operated with these roasters;

(IX) Containers, reservoirs, tanks, or loading equipment used exclusively for the storage or loading of beer, wine, or other alcoholic beverages;

(X) Brewing operations at facilities with the potential to produce less than three (3) million gallons of beer per year; and

(XI) Fruit sulfuring operations at facilities with the potential to produce less than ten (10) tons per year of sulfured fruits and vegetables;

U. Batch solvent recycling equipment provided the recovered solvent is used primarily on site, the maximum heat input is less than one (1) million Btus per hour, the batch capacity is less than one hundred fifty (150) gallons, and there are no solvent vapor leaks from the equipment which exceed five hundred (500) parts per million;

V. The following surface coating and printing operations:

(I) Batch mixing of inks, coatings, or paints. This exemption does not apply to ink, coatings, or paint manufacturing facilities;

(II) Any powder coating operation, or radiation cured coating operation where ultraviolet or electron beam energy is used to initiate a reaction to form a polymer network;

(III) Any surface-coating source that employs solely non-refillable handheld aerosol cans; and

(IV) Surface coating operations utilizing powder coating materials with the powder applied by an electrostatic powder spray gun or an electrostatic fluidized bed;

W. The following metal working and handling equipment:

(I) Carbon dioxide (CO_2) lasers, used only on metals and other materials that do not emit a HAP or VOC in the process;

(II) Laser trimmers equipped with dust collection attachments;

(III) Equipment used for pressing or storing sawdust, wood chips, or wood shavings;

(IV) Equipment used exclusively to mill or grind coatings and molding compounds in a paste form provided the solution contains less than one percent (1%) VOC by weight;

(V) Tumblers used for cleaning or deburring metal products without abrasive blasting;

(VI) Batch mixers with a rated capacity of fifty-five (55) gallons or less provided the process will not emit hazardous air pollutants;

(VII) Equipment used exclusively for the mixing and blending of materials at ambient temperature to make water-based adhesives provided the process will not emit hazardous air pollutants;

(VIII) Equipment used exclusively for the packaging of lubricants or greases;

(IX) Platen presses used for laminating provided the process will not emit hazardous air pollutants;

(X) Roll mills or calendars for rubber or plastics provided the process will not emit hazardous air pollutants;

(XI) Equipment used exclusively for the melting and applying of wax containing less than one percent (1%) VOC by weight;

(XII) Equipment used exclusively for the conveying and storing of plastic pellets; and

(XIII) Solid waste transfer stations that receive or load out less than fifty (50) tons per day of nonhazardous solid waste;

X. The following liquid storage and loading equipment:

(I) Storage tanks and vessels having a capacity of less than five hundred (500) gallons; and

(II) Tanks, vessels, and pumping equipment used exclusively for the storage and dispensing of any aqueous solution which contains less than one percent (1%) by weight of organic compounds. Tanks and vessels storing the following materials are not exempt:

(a) Sulfuric or phosphoric acid with an acid strength of more than ninety-nine percent (99.0%) by weight;

(b) Nitric acid with an acid strength of more than seventy percent (70.0%) by weight;

(c) Hydrochloric or hydrofluoric acid with an acid strength of more than thirty percent (30.0%) by weight; or

(d) More than one liquid phase, where the top phase contains more than one percent (1%) VOC by weight;

Y. The following chemical processing equipment or operations:

(I) Storage tanks, reservoirs, pumping, and handling equipment, and mixing and packaging equipment containing or processing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized; and

(II) Batch loading and unloading of solid phase catalysts;

Z. Body repair and refinishing of motorcycle, passenger car, van, light truck and heavy truck and other vehicle body parts, bodies, and cabs, provided—

(I) Good housekeeping is practiced; spills are cleaned up as soon as possible, equipment is maintained according to manufacturers' instructions, and property is kept clean. In addition, all waste coatings, solvents, and spent automotive fluids including, but not limited to, fuels, engine oil, gear oil, transmission fluid, brake fluid, anti-freeze, fresh or waste fuels, and spray booth filters or water wash sludge are disposed of properly. Prior to disposal, all liquid waste shall be stored in covered containers. All solvents and cleaning materials shall be stored in closed containers;

(II) All spray coating operations shall be performed in a totally enclosed filtered spray booth or totally enclosed filtered spray area with an air intake area of less than one hundred (100) square feet. All spray areas shall be equipped with a fan which shall be operated during spraying, and the exhaust air shall either be vented through a stack to the atmosphere or the air shall be recirculated back into the shop through a carbon adsorption system. All carbon adsorption systems shall be properly maintained according to the manufacturer's operating instructions, and the carbon shall be replaced at the manufacturer's recommended intervals to minimize solvent emissions; and

(III) Spray booth, spray area, and preparation area stacks shall be located at least eighty feet (80') away from any residence, recreation area, church, school, child care facility, or medical or dental facility;

AA. Sawmills processing no more than twenty-five (25) million board feet, green lumber tally of wood per year, in which no mechanical drying of lumber is performed, in which fine particle emissions are controlled through the use of properly engineered baghouses or cyclones, and which meet all of the following provisions:

(I) The mill shall be located at least five hundred feet (500') from any recreational area, school, residence, or other structure not occupied or used solely by the owner of the facility or the owner of the property upon which the installation is located;

(II) All sawmill residues (sawdust, shavings, chips, bark) from debarking, planing, saw areas, etc., shall be removed or contained to minimize fugitive particulate emissions. Spillage of wood residues shall be cleaned up as soon as possible and contained such that dust emissions from wind erosion and/or vehicle traffic are minimized. Disposal of collected sawmill residues must be accomplished in a manner that minimizes residues becoming airborne. Disposal by means of burning is prohibited unless it is conducted in a permitted incinerator; and

(III) All open-bodied vehicles transporting sawmill residues (sawdust, shavings, chips, bark) shall be covered with a tarp to achieve maximum control of particulate emissions;

BB. Internal combustion engines and gas turbine driven compressors, electric generator sets, and water pumps, used only for portable or emergency services, provided that the maximum annual operating hours shall not exceed five hundred (500) hours. Emergency generators are exempt only if their sole function is to provide back-up power when electric power from the local utility is interrupted. This exemption only applies if the emergency generators are operated only during emergency situations and for short periods of time to perform maintenance and operational readiness testing. The emergency generator shall be equipped with a non-resettable meter; and

CC. Commercial dry cleaners.

3. At installations, previously issued a permit under 10 CSR 10-6.060, construction or modification are exempt from 10 CSR 10-6.060 if they meet the requirements of subparagraphs (3)(A)3.A. or (3)(A)3.B. of this rule for criteria pollutants, except lead, and subparagraph (3)(A)3.C. for hazardous air pollutants. The director may require review of construction or modifications otherwise exempt under subparagraphs (3)(A)3.A., (3)(A)3.B., or (3)(A)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 feet (500') 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 feet (500') from the property boundary, at a maximum design capacity the proposed construction or modification shall emit 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 than one-half (0.5) pounds per hour, or the hazardous emission threshold as established in subsection (12)(J) of 10 CSR 10-6.060, whichever is less.

(B) Excluded Activities. 10 CSR 10-6.060 does not apply to—

1. Routine maintenance, parts replacement or relocation of emission units within the same installation which do not involve either any appreciable change either in the quality or nature, or any increase in either the potential to emit or the effect on air quality, of the emissions of any air contaminant. Some examples are as follows:

A. Replacing the bags in a baghouse;

B. Replacing wires, plates, rappers, controls or electric circuitry in an electrostatic precipitator which does not measurably decrease the design efficiency of the unit;

C. Replacement of fans, pumps or motors which does not alter the operation of a source or performance of a control device;

D. Replacement of boiler tubes;

E. Replacement of piping, hoods, and ductwork; and

F. Replacement of engines, compressors or turbines as part of a normal maintenance program;

2. Changes in a process or process equipment which do not involve installing, constructing or reconstructing an emissions unit or associated air cleaning devices, and that do not involve either any appreciable change either in the quality or nature, or any increase in either the potential to emit or the effect on air quality of the emissions of any air contaminant. Some examples are as follows:

A. Change in supplier or formulation of similar raw materials, fuels, paints and other coatings;

B. Change in the sequence of the process;

C. Change in the method of raw material addition;

D. Change in the method of product packaging;

E. Change in the process operating parameters;

F. Replacement of an identical or more efficient cyclone precleaner which is used as a precleaner in a fabric filter control system;

G. Installation of a floating roof on an open top petroleum storage tank;

H. Replacement of a fuel burner in a boiler with a more thermally efficient burner;

I. Lengthening a paint drying oven to provide additional curing time; and

J. Changes in the location, within the storage area, or configuration of a material storage pile or material handling equipment;

3. Replacement of like-kind emission units that do not involve either any appreciable change either in the quality or nature, or any increase either in the potential to emit or the effect on air quality, of the emissions of any air contaminant;

4. The exempt activities in paragraphs (3)(B)1.–3. of this rule reflect a presumption that existing emission units which are changed or replaced by like-kind units shall be treated as having begun normal operation for purposes of the definition of actual emissions in 10 CSR 10-6.020;

5. The following miscellaneous activities:

A. Plant maintenance, and upkeep activities such as routine cleaning, janitorial services, use of janitorial products, grounds keeping, general repairs, architectural or maintenance painting, welding repairs, plumbing, roof repair, installing insulation, using air compressors and pneumatically operated equipment, and paving parking lots, provided these activities are not conducted as part of the installation's primary business activity;

B. Batteries and battery charging stations;

C. Fire suppression equipment and emergency road flares;

D. Laundry activities, except dry-cleaning and steam boilers; and

E. Steam emissions from leaks, safety relief valves, steam cleaning operations, and steam sterilizers; and

6. The following miscellaneous surface preparation and cleaning activities:

A. Equipment and containers used for surface preparation, cleaning, or stripping by use of solvents or solutions that meet all of the following:

(I) Solvent used must have an initial boiling point of greater than three hundred two degrees Fahrenheit (302°F), and this initial boiling point must exceed the maximum operating temperature by at least one hundred eighty degrees Fahrenheit (180°F);

(II) The equipment or container has a capacity of less than thirty-five (35) gallons of liquid. For remote reservoir cold cleaners, capacity is the volume of the remote reservoir;

(III) The equipment or container has a liquid surface area less than seven (7) square feet, or for remote reservoir cold cleaners, the sink or working area has a horizontal surface less than seven (7) square feet;

(IV) Solvent flow must be limited to a continuous fluid stream type arrangement. Fine, atomized, or shower type sprays are not exempt; and

(V) All lids and closures are properly employed;

B. The exclusion in subparagraph (3)(B)6.A. of this rule does not apply to solvent wipe cleaning operations;

C. Abrasive blasting sources that have a confined volume of less than one hundred (100) cubic feet and are controlled by a particulate filter;

D. Blast cleaning equipment using a suspension of abrasive in water;

E. Portable blast cleaning equipment for use at any single location for less than sixty (60) days; and

F. Any solvent cleaning or surface preparation source that employs only non-refillable handheld aerosol cans.

(C) Exceptions to Excluded Activities. The exclusion provisions of subsection (3)(B) of this rule notwithstanding, 10 CSR 10-6.060 shall apply to any construction, reconstruction, alteration or modification which—

1. Is expressly required by an operating permit; or

2. Is subject to federally-mandated construction permitting requirements set forth in sections (7), (8), or (9), or any combination of these, of 10 CSR 10-6.060.

(4) Reporting and Record Keeping. (*Not Applicable*)

(5) Test Methods. (*Not Applicable*)

AUTHORITY: section 643.050, RSMo 2000. Original rule filed March 5, 2003.

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

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

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: A public hearing on this proposed rule will begin at 9:00 a.m., May 29, 2003. The public hearing will be held at the Harry S Truman State Office Building, Room 400, 301 W. High Street, Jefferson City, 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 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., June 5, 2003. 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 RULE

10 CSR 10-6.062 Construction Permits By Rule. If the commission adopts this rule action, it will be submitted to the U.S. Environmental Protection Agency for inclusion in the Missouri State Implementation Plan. This evidence supporting the need for this rulemaking is available for viewing at the Missouri Department of Natural Resources' Air Pollution Control Program at the address and phone number listed in the Notice of Public Hearing at the end of this rule.

PURPOSE: This rule creates a process by which sources can be exempt from 10 CSR 10-6.060 Construction Permits Required, by establishing conditions under which specific sources can construct and operate. It establishes notification requirements and standard review fees. It has been determined that these sources will not make a significant contribution of air contaminants to the atmosphere. The evidence supporting the need for this proposed rulemaking, per section 536.016, RSMo, is the February 20, 2002 Recommendations from the "Managing For Results" presentation and the Air Program Advisory Forum 2001 and 2002 Recommendations.

(1) Applicability. This rule shall apply to certain types of facilities or changes within facilities listed in this rule where construction is commenced on or after the effective date of the relevant permit-by-rule. To qualify for a permit-by-rule, the following general requirements must be met:

(A) Any installation undergoing activities that would otherwise be subject to section (7), (8), or (9) of 10 CSR 10-6.060 does not qualify for permit-by-rule under this regulation. Installations accepting the permit-by-rule emission limitations can use those limitations to determine whether the installation is subject to section (7), (8), or (9) of 10 CSR 10-6.060;

(B) The installation is not prohibited from permit-by-rule by permit conditions, by settlement agreements or by official notification from the director;

(C) All emission control equipment associated with the permit-by-rule shall be maintained and operated in accordance with the equipment specifications of the manufacturer;

(D) Obtaining a permit-by-rule under this regulation does not exempt an installation from other applicable air pollution regulations or any local air pollution control agency requirements; and

(E) The director may require an air quality analysis in addition to the general requirements listed in subsection (3)(B) of this rule if it is likely that the emissions of the proposed construction or modification will appreciably affect air quality or the air quality standards are being appreciably exceeded or complaints filed in the vicinity of the proposed construction or modification warrant an air quality analysis.

(2) Definitions. Definitions of certain terms specified in this rule may be found in 10 CSR 10-6.020.

(3) General Provisions.

(A) Registration. To qualify for a permit-by-rule, the owner or operator must notify the Missouri Department of Natural Resources' Air Pollution Control Program prior to commencement of construction. This notification will establish the permit-by-rule and become the conditions under which the facility is permitted. All representations made in the notification regarding construction plans, operating procedures, and maximum emission rates shall become conditions upon which the facility shall construct or modify. If the conditions, as represented in the notification, vary in a manner that will change the method of emission controls, the character of the emissions, or will result in an increase of emissions, a new notification or permit application must be prepared and submitted to the department's Air Pollution Control Program.

1. The director shall provide a form by which sources can submit their notifications. The notification shall include documentation of the basis of emission estimates or activity rates and be signed by a responsible official certifying that the information contained in the notification is true, accurate, and complete. The expected first date of operation shall be included in the notification. Upon notification, the source may begin construction and operation of the new source.

2. The notification shall be sent to the department's Air Pollution Control Program. Two (2) copies of the original notification shall be made. One (1) shall be sent to the appropriate regional office, and one (1) shall be maintained on-site and be provided immediately upon request by inspectors.

3. Fees. A review fee of seven hundred dollars ($700) shall accompany the notification sent to the department's Air Pollution Control Program.

4. Upon completion of an initial on-site compliance review, the permit-by-rule notification shall be approved.

(B) Permit-by-Rule.

1. Printing operations. Any printing operation (including, but not limited to, screen printers, ink-jet printers, presses using electron beam or ultraviolet light curing, and labeling operations) and supporting equipment (including, but not limited to, corona treaters, curing lamps, preparation, and cleaning equipment) which operate in compliance with the following conditions is permitted under this rule:

A. The uncontrolled emission of volatile organic compounds (VOCs) from inks and solvents (including, but not limited to, those used for printing, cleanup, or makeup) shall not exceed forty (40) tons per year rolling average for all printing operations on the property. The emissions shall be calculated using a material balance that assumes that all of the VOCs in the inks and solvents used are directly emitted to the atmosphere;

B. The uncontrolled emission of hazardous air pollutants shall not exceed ten (10) tons per year rolling average for all printing operations on the property. The emissions shall be calculated using a material balance that assumes that all hazardous air pollutants used are directly emitted to the atmosphere;

C. Copying and duplicating equipment employing the xerographic method are exempt from subparagraphs (3)(B)1.D–G. of this rule;

D. Printing presses covered by this section shall not utilize heat set, thermo set, or oven-dried inks. Heated air may be used to shorten drying time, provided the temperature does not exceed one hundred ninety-four degrees Fahrenheit (194°F);

E. Screen printing operations requiring temperatures greater than one hundred ninety-four degrees Fahrenheit (194°F) to set the ink are exempt from subparagraph (3)(B)1.D. of this rule;

F. The facility shall not be located in an ozone nonattainment area; and

G. Record keeping. The operator shall maintain records of ink and solvent usage shall be kept in sufficient detail to show compliance with subparagraphs (3)(B)1.A. and 1.B. of this rule.

2. Crematories and animal incinerators. Any crematory or animal incinerator that is used solely for the cremation of human remains, disposal of human pathological wastes, or animal carcasses and operates in compliance with the following conditions is permitted under this rule:

A. The materials to be disposed of shall be limited to noninfectious human materials removed during surgery, labor and delivery, autopsy, or biopsy including body parts, tissues and fetuses, organs, bulk blood and body fluids, blood or tissue laboratory specimens; and other noninfectious anatomical remains or animal carcasses in whole or in part. The owner or operator shall minimize the amount of packaging fed to the incinerator, particularly plastic containing chlorine. The incinerators shall not be used to dispose of other nonbiological medical wastes including, but not limited to, sharps, rubber gloves, intravenous bags, tubing, and metal parts;

B. The manufacturer's rated capacity (burn rate) shall be two hundred (200) pounds per hour or less;

C. The incinerator shall be a dual-chamber design;

D. Burners shall be located in each chamber, sized to manufacturer's specifications, and operated as necessary to maintain the minimum temperature requirements of subparagraph (3)(B)2.E. of this rule at all times when the unit is burning waste;

E. Excluding crematories, the secondary chamber must be designed to maintain a temperature of one thousand six hundred degrees Fahrenheit (1,600°F) or more with a gas residence time of one-half (1/2) second or more. The temperature shall be monitored with equipment that is accurate to plus or minus two percent ($\pm 2\%$) and continuously recorded. The thermocouples or radiation pyrometers shall be fitted to the incinerator and wired into a manual reset noise alarm such that if the temperature in either of the two (2) chambers falls below the minimum temperature above, the alarm will sound at which time plant personnel shall take immediate measures to either correct the problem or cease operation of the incinerator until the problem is corrected;

F. There shall be no obstructions to stack flow, such as by rain caps, unless such devices are designed to automatically open when the incinerator is operated. Properly installed and maintained spark arresters are not considered obstruction;

G. Each incinerator operator shall be trained in the incinerator operating procedures as developed by the American Society of Mechanical Engineers (ASME), by the incinerator manufacturer, or by a trained individual with more than one (1) year experience in the operation of the incinerator that the trainee will be operating. Minimum training shall include basic combustion control parameters of the incinerator and all emergency procedures to be followed should the incinerator malfunction or exceed operating parameters. An operator who meets the training requirements of this condition shall be on duty and immediately accessible during all periods of incinerator operation. The manufacturer's operating instructions and guidelines shall be posted at the unit and the unit shall be operated in accordance with these instructions;

H. The incinerator shall have an opacity of less than ten percent (10%) at all times;

I. Heat shall be provided by the combustion of natural gas, liquid petroleum gas, or Number 2 fuel oil with less than three-tenths percent (0.3%) sulfur by weight, or by electric power; and

J. Record keeping. The operator shall maintain a log of all alarm trips and the resultant action taken shall be maintained. A written certification of the appropriate training received by the operator, with the date of training, that includes a list of the instructor's qualifications or ASME certification school shall be maintained for each operator. The operator shall also maintain an accurate record of the monthly amount and type of waste combusted.

3. Surface coating. Any surface coating activity or stripping facility that operates in compliance with the following conditions is permitted under this rule:

A. Metalizing, spraying molten metal onto a surface to form a coating, is not permitted under this permit-by-rule. The use of coatings that contain metallic pigments is permitted;

B. All facilities shall implement good housekeeping procedures to minimize fugitive emissions, including:

(I) All spills shall be cleaned up immediately;

(II) The booth or work area exhaust fans shall be operating when cleaning spray guns and other equipment; and

(III) All new and used coatings and solvents shall be stored in closed containers. All waste coatings and solvents shall be removed from the site by an authorized disposal service or disposed of at a permitted on-site waste management facility;

C. Drying and curing ovens shall either be electric or meet the following conditions:

(I) The maximum heat input to any oven must not exceed forty (40) million British thermal units (Btus) per hour; and

(II) Heat shall be provided by the combustion of one of the following: sweet natural gas; liquid petroleum gas; fuel gas containing no more than five (5.0) grains of total sulfur compounds (calculated as sulfur) per one hundred (100) dry standard cubic foot; or Number 2 fuel oil with not more than three-tenths percent (0.3%) sulfur by weight;

D. The emissions shall be calculated using a material balance that assumes that all of the VOCs and hazardous air pollutants in the paints and solvents used are directly emitted to the atmosphere. The total uncontrolled emissions from the coating materials (as applied) and cleanup solvents shall not exceed the following for all operations:

(I) Forty (40) tons per year rolling average of VOCs for all surface coating operations on the property;

(II) A sum of twenty-five (25) tons per year rolling average of all hazardous air pollutants for all surface coating operations on the property; and

(III) Each individual hazardous air pollutant shall not exceed the emission threshold levels established in 10 CSR 10-6.060(12)(J) on an annual rolling average basis;

E. The surface coating operations shall be performed indoors, in a booth, or in an enclosed work area. The booth shall be designed to meet a minimum face velocity at the intake opening of each booth or work area of one hundred feet (100') per minute. Emissions shall be exhausted through elevated stacks that extend at least one and one-half (1 1/2") times the building height above ground level. All stacks shall discharge vertically. There shall be no obstructions to stack flow, such as rain caps, unless such services are designed to automatically open when booths are operated;

F. For spraying operations, emissions of particulate matter must be controlled using either a water wash system or a dry filter system with a ninety-five percent (95%) removal efficiency as documented by the manufacturer. The face velocity at the filter shall not exceed two hundred fifty feet (250') per minute or that specified by the filter manufacturer, whichever is less. Filters shall be replaced according to the manufacturer's schedule or whenever the pressure drop across the filter no longer meets the manufacturer's recommendation;

G. Coating operations shall be conducted at least fifty feet (50') from the property line and at least two hundred fifty feet (250') from any recreational area, residence, or other structure not occupied or used solely by the owner or operator of the facility or the owner of the property upon which the facility is located; and

H. Record keeping. The operator shall maintain the following records and reports:

(I) All material safety data sheets for all coating materials and solvents;

(II) A monthly report indicating the days the surface coating operation was in operation and the total tons emitted during the month, and the calculation showing compliance with the rolling average emission limits of subparagraph (3)(B)3.D. of this rule;

(III) A set of example calculations showing the method of data reduction including units, conversion factors, assumptions, and the basis of the assumptions; and

(IV) These reports and records shall be immediately available for inspection at the installation.

(4) Reporting and Record Keeping. In addition to the original notification required by paragraph (3)(A)2. of this rule, operators shall maintain records containing sufficient information to demonstrate compliance with all applicable permit-by-rule requirements as specified in subsection (3)(B) of this rule. These records shall be maintained at the installation for a minimum of five (5) years, and shall be made immediately available to inspectors upon their request.

(5) Test Methods (*Not Applicable*).

AUTHORITY: section 643.050, RSMo 2000. Original rule filed March 5, 2003.

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

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

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: A public hearing on this proposed rule will begin at 9:00 a.m., May 29, 2003. The public hearing will be held at the Harry S Truman State Office Building, Room 400, 301 W. High Street, Jefferson City, 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 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., June 5, 2003. 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 amend subsection (3)(C). 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. The evidence supporting the need for this proposed rulemaking is available for viewing at the Missouri Department of Natural Resources' Air Pollution Control Program at the address and phone number listed in the Notice of Public Hearing at the end of this rule.

PURPOSE: This amendment exempts certain portable equipment installations from basic operating permits requirements as part of the governor's permit streamlining efforts. Failure to adopt these amendments will allow duplicative permit requirements to continue drawing on the resources of portable equipment installations and the Missouri Department of Natural Resources' Air Pollution Control Program. The evidence supporting the need for this proposed rulemaking, per section 536.016, RSMo, is a rule comment form from operating permit section staff, a September 17, 2002 memorandum to the Missouri Air Conservation recommending a variance for portable sources from basic operating permit requirements and a January 28, 2003 memorandum to the department's Air Pollution Control Progam recommending exemption language changes.

(3) Applicability.

(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 **or intermediate** installations or are located at part 70 **or intermediate** installations. Emissions from exempt installations and emission units shall be considered when determining if the installation is a part 70 **or intermediate** 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 contaminants is odorous gas]* **Any operation associated with livestock that emits odors but no regulated air pollutant**;

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]* **including air pollution control equipment, but not including an anaerobic lagoon, that** emits odors *[unless this equipment or control equipment also emits other]* **but no** 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) 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 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 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; *[and]*

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*[.]***; and**

20. Any asphaltic concrete plant, concrete batching plant or rock quarry that can be classified as a portable equipment installation, as defined in 10 CSR 10-6.020.

AUTHORITY: section 643.050, RSMo 2000. Original rule filed Sept. 2, 1993, effective May 9, 1994. For intervening history, please consult the ***Code of State Regulations****. Amended: Filed March 5, 2003.*

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., May 29, 2003. The public hearing will be held at the Harry S Truman State Office Building, Room 400, 301 W. High Street, Jefferson City, 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 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., June 5, 2003. 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 60—Public Drinking Water Program
Chapter 2—Definitions

PROPOSED AMENDMENT

10 CSR 60-2.015 Definitions. The commission is amending section (1) and subsections (2)(A), (2)(D), (2)(G), (2)(I), (2)(M), and (2)(P).

PURPOSE: This proposed amendment adopts definitions pertaining to EPA's Long Term 1 Enhanced Surface Water Treatment Rule and Arsenic Rule and amends other definitions for the purpose of clarifying text, correcting cross references, or promoting consistency with other rules.

(1) The terms used in 10 CSR 60 shall have the meanings *[as]* set forth in the Missouri Safe Drinking Water Act, the federal Safe Drinking Water Act and regulations, or this rule, unless the context of the term clearly requires otherwise. **In the event of any conflict or inconsistency, the more stringent definition shall apply.**

(2) Definitions.

(A) Terms beginning with the letter A.

1. Action level. The concentration of lead or copper in water which determines, in some cases, the treatment requirements, system modifications, public education or other requirements as specified by the department that a water system is required to complete.

2. Air-gap separation. A backflow prevention assembly consisting of a physical separation between the free-flowing discharge end of a public water system pipeline and an open or nonpressurized receiving vessel. An approved air-gap separation shall be at least twice the diameter of the system pipe measured vertically above the overflow rim of the vessel. In no case shall the distance be less than one inch (1").

3. Alpha particle. A particle identical with a helium nucleus, emitted from the nucleus of a radioactive element.

4. Applicant. The legal name of the *[water supply district, sewer district, rural community, city, town or village]* **public water system** for purposes of 10 CSR 60*[-13.010]*.

5. Auxiliary intake. Any piping, connection or device whereby water may be secured from a source other than the primary source.

6. Auxiliary water system. Any supply or source of water other than the approved public water system.

(D) Terms beginning with the letter D.

1. Department. The Missouri Department of Natural Resources.

2. Department of Health. The Missouri Department of Health.

3. Director. The director of the Missouri Department of Natural Resources.

4. Disinfectant. Includes, but is not limited to, chlorine, chlorine dioxide, chloramines and ozone added to water in any part of the treatment or distribution process, that is intended to kill or inactivate pathogenic microorganisms.

5. Disinfectant contact time. The "T" in the equation CT. The time in minutes that it takes for water to move from the point of disinfectant application or the previous point of disinfectant residual measurement to a point before or at the point where residual disinfectant concentration (C) is measured as determined by a department-approved study as outlined in the *Missouri Guidance Manual for Surface Water System Treatment Requirements*, 1992.

6. Disinfection. A process which inactivates pathogenic organisms in water by chemical oxidants or equivalent agents.

7. Domestic or other nondistribution system plumbing problem. A coliform contamination problem in a public water system with more than one (1) service connection that is limited to the specific service connection from which the coliform-positive sample was taken.

8. Dose equivalent. The product of the absorbed dose from ionizing radiation and factors that account for difference in biological effectiveness due to the type of radiation and its distribution in the body as specified by the International Commission of Radiological Units and Measurements (ICRU).

9. Double check valve assembly. A backflow prevention assembly composed of two (2) single, independently acting, internally spring loaded, approved check valves including tightly closing resilient-seated shut-off valves located at each end of the assembly and fitted with properly located test cocks.

(G) Terms beginning with the letter G.

1. GAC10. Granular activated carbon filter beds with an empty-bed contact time of ten (10) minutes based on average daily flow and a carbon reactivation frequency of every one-hundred-eighty (180) days.

2. Gross alpha particle activity. The total radioactivity due to alpha particle emission as inferred from measurements on a dry sample.

3. Gross beta particle activity. The total radioactivity due to beta particle emission as inferred from measurements on a dry sample.

4. Groundwater under the direct influence of surface water (GWUDISW). Any water beneath the surface of the ground with either of the following:

A. Significant and relatively rapid shifts in water characteristics such as turbidity, temperature, conductivity or pH which closely correlate to climatological or surface water conditions. Direct influence must be determined for individual sources in accordance with criteria established by the department. The department's determination of direct influence may be used on site specific measurements of water quality or documentation of well construction characteristics, or both, and geology with field evaluation; or

B. Significant occurrence of insects or other macroorganisms, algae or large diameter pathogens such as *Giardia lamblia* or *[, for systems using surface water or groundwater under the direct influence of surface water and serving at least 10,000 people,] Cryptosporidium*.

(I) Terms beginning with the letter I.

1. Initial Compliance Period.

[A.] That period beginning January 1, 1993, for existing sources. For new water supply sources, the first full three (3)-year

compliance period which begins no more than eighteen (18) months after the source is placed in service.

[B. For contaminants listed in 10 CSR 60-4.030(1)1., 5., 9., 13. and 18.; 10 CSR 60-4.040(1)3., 6., 7., 9., 10., 11., 12., 16., 19., 20., 23., 24., 27. and 29.; 10 CSR 60-4.100(1)(B)2., 10., and 11., for systems serving less than one hundred fifty (<150) service connections, that period beginning January 1, 1996, for existing sources, and for new sources, the first full three (3)-year compliance period after January 1, 1996, which begins no more than eighteen (18) months after the water supply source is placed in service.]

2. Iron removal. The removal of iron and manganese from a groundwater source with the treated water being exposed to aeration and chemical oxidation, pH adjustment, sedimentation and filtration.

(M) Terms beginning with the letter M.

1. Man-made beta particle and photon emitters. All radionuclides emitting beta particles, photons, or both, except the daughter products of thorium 232, uranium 235 and uranium 238, listed in *[Maximum Permissible Body Burdens and Maximum Permissible Concentrations of Radionuclides in Air or Water for Occupational Exposure, National Bureau of Standards Handbook 69]* **the EPA Implementation Guidance for Radionuclides, Appendix J**.

2. Maximum contaminant level (MCL). The maximum permissible level, as established in 10 CSR 60-4, of a contaminant in any water which is delivered to any user of a public water system.

3. Maximum contaminant level goal (MCLG). A level of a contaminant in drinking water at which no known or anticipated adverse effect on the health of persons would occur and which allows an adequate margin of safety. MCLGs are nonenforceable health goals.

4. Maximum residual disinfectant level (MRDL). A level of a disinfectant that may not be exceeded at the consumer's tap without an unacceptable possibility of adverse health effects.

5. Maximum residual disinfectant level goal (MRDLG). The maximum level of a disinfectant added for water treatment at which no known or anticipated adverse effect on the health of persons would occur, and which allows an adequate margin of safety. MRDLGs are nonenforceable health goals and do not reflect the benefit of the addition of the chemical for control of waterborne microbial contaminants.

6. Maximum total trihalomethane potential (MTTHMP). The maximum concentration of total trihalomethanes produced in a given water containing a disinfectant residual after seven (7) days at a temperature of twenty-five degrees Celsius (25°C) or above.

7. Missouri Safe Drinking Water Law. The *Revised Statutes of Missouri*, sections 640.100 through 640.140.

(P) Terms beginning with the letter P.

1. Person. Any individual, partnership, co-partnership, firm, company, public or private corporation, association, homeowners' association, joint stock company, trust, estate, political subdivision or any agency, board, department or bureau of the state or federal government, or any other legal entity whatever, which is recognized by law as the subject of rights and duties.

2. Picocurie (pCi). The quantity of radioactive material producing 2.22 nuclear transformations per minute.

3. Point of entry treatment device (POE). A treatment device applied to the drinking water entering a house or other building for the purpose of reducing contaminants in the drinking water distributed throughout the house or building.

4. Point of use treatment device (POU). A treatment device applied to a single tap for the purpose of reducing contaminants in the drinking water at that tap.

[3.] **5.** Primary public water system. A public water system which obtains its source of water directly from a well, infiltration gallery, lake, reservoir, river, spring or stream.

[4.] **6.** Public water system. A system for the provision to the public of piped water for human consumption, if the system has at least fifteen (15) service connections or regularly serves an average of at least twenty-five (25) individuals daily at least sixty (60) days out of the year. The system includes any collection, treatment, storage or distribution facilities used in connection with the system. A public water system is either a community water system or a noncommunity water system.

*AUTHORITY: section 640.100, RSMo Supp. [1999] **2002**. Original rule filed May 4, 1979, effective Sept. 14, 1979. For intervening history, please consult the **Code of State Regulations**. Amended: Filed March 17, 2003.*

PUBLIC COST: This proposed amendment is anticipated to cost state agencies and political subdivisions less than five hundred dollars ($500) in the aggregate.

PRIVATE COST: This proposed amendment is anticipated to cost private entities less than five hundred dollars ($500) in the aggregate.

*NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: Anyone may submit comments in support of or opposition to this proposed amendment. An information meeting and public hearing will be held May 22, 2003, 10:00 a.m., at the DNR Conference Center, 1738 East Elm Street, Jefferson City, Missouri. In preparing your comments, please include the regulatory citation and the **Missouri Register** page number. Please explain why you agree or disagree with the proposed change, and include alternative options or language. Written comments must be postmarked or received by June 16, 2003. Comments may be mailed or faxed to: Ms. Linda McCarty, Public Drinking Water Program, PO Box 176, Jefferson City, MO 65102. The fax number is (573) 751-3110.*

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 60—Public Drinking Water Program
Chapter 4—Contaminant Levels and Monitoring

PROPOSED AMENDMENT

10 CSR 60-4.020 Maximum Microbiological Contaminant Levels and Monitoring Requirements. The commission is amending sections (5) and (6).

*PURPOSE: This amendment is necessary to correct cross references and update notification requirements for consistency with the nomenclature and requirements in the new public notice rule, 10 CSR 60-8.010, proposed in this issue of the **Missouri Register**. This includes requiring notice within twenty-four (24) hours (Tier 1 notice) for fecal coliform- and E. Coli-positive samples and failure to test for fecal coliform or E. Coli after any repeat samples test positive for coliform and deleting the waiver of public notice requirements when corrective actions have been taken and laboratory results for two (2) consecutive days are negative for total coliform bacteria.*

(5) Fecal Coliforms/*Escherichia coli (E. coli)* Testing.

(B) The department has the discretion to allow a public water system, on a case-by-case basis, to forego fecal coliform or *E. coli* testing on a total coliform-positive sample if that system assumes that the total coliform-positive sample is fecal coliform-positive or *E. coli*-positive. The system must notify the department as specified in subsection (5)(A) of this rule*[, and the provisions of 10 CSR 60-8.010(1)(A)3. and (7)(B)1. apply]*, except as provided in subsection (5)(C) of this rule**, and must provide Tier 1 notice to the public as specified in 10 CSR 60-8.010, including the mandatory**

health effects language for fecal coliform/*E. Coli*.

(C) *[The public notice issued under 10 CSR 60-8.010(1)(A)3. and (7)(B)1. may be waived at the discretion of the department when corrective actions have been taken and laboratory results for two (2) consecutive days are negative for total coliform bacteria.]* The department, after consideration of the circumstances surrounding a specific incident, may reduce or extend the public notice period for acute violations, as it deems appropriate.

(6) Response to Violation.

(B) A public water system which has failed to comply with a coliform monitoring requirement, including the sanitary survey requirement, must report the monitoring violation to the department within ten (10) days after the system discovers the violation and notify the public in accordance with **the applicable requirement in** 10 CSR 60-8.010*[(2)]*.

*AUTHORITY: section 640.100, RSMo [1994] **Supp. 2002**. Original rule filed May 4, 1979, effective Sept. 14, 1979. Amended: Filed April 14, 1981, effective Oct. 11, 1981. Rescinded and readopted: Filed Dec. 4, 1990, effective July 8, 1991. Amended: Filed Feb. 1, 1996, effective Oct. 30, 1996. Amended: Filed March 17, 2003.*

PUBLIC COST: This proposed amendment is anticipated to cost state agencies and political subdivisions less than five hundred dollars ($500) in the aggregate.

PRIVATE COST: This proposed amendment is anticipated to cost private entities less than five hundred dollars ($500) in the aggregate.

*NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: Anyone may submit comments in support of or opposition to this proposed amendment. An information meeting and public hearing will be held May 22, 2003, 10:00 a.m., at the DNR Conference Center, 1738 East Elm Street, Jefferson City, Missouri. In preparing your comments, please include the regulatory citation and the **Missouri Register** page number. Please explain why you agree or disagree with the proposed change, and include alternative options or language. Written comments must be postmarked or received by June 16, 2003. Comments may be mailed or faxed to: Ms. Linda McCarty, Public Drinking Water Program, PO Box 176, Jefferson City, MO 65102. The fax number is (573) 751-3110.*

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 60—Public Drinking Water Program
Chapter 4—Contaminant Levels and Monitoring

PROPOSED AMENDMENT

10 CSR 60-4.030 Maximum Inorganic Chemical Contaminant Levels, Action Levels and Monitoring Requirements. The commission is amending sections (1), (5), (6), and (7) and subsection (2)(B).

*PURPOSE: This amendment adopts a provision from 40 CFR 141.11(d) that allows noncommunity water systems, with the department's approval, to exceed the nitrate maximum contaminant level (MCL) if certain conditions are met. This change complements the proposed adoption of special public notice requirements in 10 CSR 60-8.010(9) published in this issue of the **Missouri Register**.*

*This amendment also adopts changes to the arsenic MCL and clarifications to new source monitoring from the federal rule "Arsenic and Clarifications to Compliance and New Source Contaminant Monitoring," which was published in the Jan. 22, 2001 **Federal Register**. Adoption of this federal rule is required to maintain primacy. The lower arsenic MCL is anticipated to increase public health protection by reducing the incidence of bladder cancer, lung cancer, and certain noncancerous diseases such as diabetes and heart disease.*

(1) **Maximum Contaminant Levels (MCL) or Action Levels.**

(A) The maximum contaminant or action level listed as follows for inorganic chemicals 1.–17. apply to community water systems. The maximum contaminant or action level listed as follows for inorganic chemicals 1.–9. and 11.–17. apply to nontransient noncommunity water systems. The maximum contaminant or action level listed as follows for inorganic chemicals 13.–15. apply to transient noncommunity water systems:

Contaminant	Maximum Contaminant Level (MCL)
1. Antimony	0.006 mg/L
2. Arsenic	0.05 mg/L **(until Jan. 23, 2006)** **0.01 mg/L (effective Jan. 23, 2006)**
3. Asbestos	7 million fibers/liter (longer than 10 μm in length)
4. Barium	2 mg/L
5. Beryllium	0.004 mg/L
6. Cadmium	0.005 mg/L
7. Chromium	0.1 mg/L
8. Copper	* (See 10 CSR 60-15.010(3)(A).)
9. Cyanide	0.2 mg/L
10. Fluoride	4.0 mg/L
11. Lead	* (See 10 CSR 60-15.010(3)(B).)
12. Mercury	0.002 mg/L
13. Nitrate	10 mg/L (as nitrogen)
14. Nitrite	1 mg/L (as nitrogen)
15. Total Nitrate and Nitrite	10 mg/L (as nitrogen)
16. Selenium	0.05 mg/L
17. Thallium	0.002 mg/L

*Indicates action levels rather than maximum contaminant levels.

(B) Nitrate levels not to exceed twenty (20) mg/L may be allowed in a noncommunity water system if the suppler of water demonstrates to the satisfaction of the department that all of the following factors apply to the situation:

1. Such water will not be available to children under six (6) months of age;

2. The noncommunity water system is meeting the public notification requirements under 10 CSR 60-8.010(9), including continuous posting of the fact that nitrate levels exceed ten (10) mg/L and the potential health effects of exposure;

3. Local and state public health authorities will be notified annually of nitrate levels that exceed ten (10) mg/L; and

4. No adverse health effects shall result.

(2) Monitoring Frequency.

(B) Inorganic Chemicals. Community and nontransient noncommunity water systems shall monitor for antimony, **arsenic,** barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, selenium and thallium as set forth here.

1. Groundwater systems shall take one (1) sample at each sampling point during each three (3)-year compliance period beginning in the initial compliance period. Surface water systems (or combined surface/ground) shall take one (1) sample annually at each sampling point beginning in the initial compliance period.

2. Waivers.

A. The system may apply to the department for a suscepti-

bility waiver as described in 10 CSR 60-6.060(3). If the department grants the waiver, the system is required to take a minimum of one (1) sample while the waiver is effective. The term during which the waiver is effective shall not exceed one (1) nine (9)-year compliance cycle. Systems not receiving a waiver must monitor in accordance with the provisions of paragraph (2)(B)1. of this rule.

B. The department may grant a waiver provided surface water systems have monitored annually for at least three (3) years and groundwater systems have conducted a minimum of three (3) rounds of monitoring. At least one (1) sample shall have been taken since January 1, 1990. Both surface and ground water systems shall demonstrate that all previous analytical results were reliably and consistently less than the MCL. Systems that use a new water source are not eligible for a waiver until three (3) rounds of monitoring from the new source have been completed.

C. In determining the appropriate reduced monitoring frequency, the department shall consider the reported concentrations from all previous monitoring, the degree of variation in reported concentrations and other factors which may affect contaminant concentrations (such as changes in groundwater pumping rates, changes in the system's configuration, changes in the system's operating procedures, or changes in stream flows or characteristics).

D. A decision by the department to grant a waiver shall be made in writing and shall set forth the basis for the determination. The determination may be initiated by the department or upon an application by the public water system. The public water system shall specify the basis for its request. The department shall review and, where appropriate, revise its determination of the appropriate monitoring frequency when the system submits new monitoring data or when other data relevant to the system's appropriate monitoring frequency become available.

E. The department may grant a waiver for monitoring for cyanide, if the department determines that the system is not vulnerable due to lack of proximity to any industrial source of cyanide.

3. Increased and decreased monitoring.

A. Systems which exceed the MCLs as calculated in section (6) of this rule shall monitor quarterly beginning in the next quarter after the violation occurs.

B. Where the results of sampling for antimony, arsenic, asbestos, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, selenium, or thallium indicate an exceedance of the maximum contaminant level, the department may require that one (1) additional sample be collected as soon as possible after the initial sample was taken (but not to exceed two (2) weeks) at the same sampling point.

*[(B)]***C.** The department may decrease the quarterly monitoring requirement to the frequencies specified in paragraph (2)(B)1. of this rule provided it has determined that the analytical results for the system are reliably and consistently below the MCL. In no case can the department make this determination unless a groundwater system takes a minimum of two (2) quarterly samples and a surface water system (or combined surface/ground) takes a minimum of four (4) quarterly samples.

D. All new systems or systems that use a new source of water that begin operation after January 22, 2004 must demonstrate compliance with the MCL within a period of time specified by the department. The system must also comply with the initial sampling frequencies specified by the department to ensure a system can demonstrate compliance with the MCL. Routine and increased monitoring frequencies shall be conducted in accordance with the requirements in this section (2).

E. For systems which are conducting monitoring at a frequency greater than annual, compliance with the maximum contaminant levels for antimony, arsenic, asbestos, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, selenium, or thallium is determined by a running annual average at any sampling point. If the average at any sampling point is greater than the MCL, then the system is out of compliance. If any one (1) sample would cause the annual average to be exceeded, then the system is out of compliance immediately. Any sample below the method detection limit shall be calculated at zero (0) for the purpose of determining the annual average. If a system fails to collect the required number of samples, compliance (average concentration) will be based on the total number of samples collected.

F. For systems which are monitoring annually, or less frequently, and whose sample exceeds one-half (1/2) the MCL for antimony, arsenic, asbestos, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, selenium, or thallium, the system must begin quarterly monitoring. The system will not be in violation of the MCL until is has completed one (1) year of quarterly monitoring. If any sample result will cause the running annual average to exceed the MCL at any sampling point, the system is out of compliance with the MCL. If a system fails to collect the required number of samples, compliance (average concentration) will be based on the total number of samples collected.

G. Arsenic sampling results will be reported to the nearest 0.001 mg/L.

(5) Confirmation Samples.

(A) Where the results of sampling for antimony, **arsenic,** asbestos, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, selenium or thallium indicate an exceedance of the MCL, the department may require that one (1) additional sample be collected as soon as possible after the initial sample was taken (but not to exceed two (2) weeks) at the same sampling point.

(B) Nitrate and Nitrite.

1. Where nitrate or nitrite sampling results indicate an exceedance of the MCL, the system shall take a confirmation sample within twenty-four (24) hours of the system's receipt of notification of the analytical results of the first sample.

2. Systems unable to comply with the twenty-four (24)-hour sampling requirement must immediately notify *[the consumers]* **persons** served by the *[area served by the]* public water system in accordance with 10 CSR 60-8.010*[(1)(A)3]***(2)**. Systems exercising this option must take and analyze a confirmation sample within two (2) weeks of notification of the analytical results of the first sample.

(6) Compliance. Compliance with section (1) of this rule shall be determined based on the analytical result(s) obtained at each sampling point.

(A) For systems which are conducting monitoring at a frequency greater than annual, compliance with the MCLs for antimony, **arsenic,** asbestos, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, selenium or thallium is determined by a running annual average at each sampling point. If the average at any sampling point is greater than the MCL, then the system is out of compliance. If any one (1) sample would cause the annual average to be exceeded, then the system is out of compliance immediately. Any sample below the method detection limit shall be calculated at zero (0) for the purpose of determining the annual average.

(B) For systems which are monitoring annually, or less frequently, the system is out of compliance with the MCLs for antimony, **arsenic,** asbestos, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, selenium or thallium if the level of a contaminant at any sampling point is greater than the MCL. If a confirmation sample is required by the department, the determination of compliance will be based on the average of the two (2) samples.

(7) Public Notice. If the result of analyses indicates that the level of antimony, **arsenic,** asbestos, barium, beryllium, cadmium, chromi-

um, cyanide, fluoride, mercury, selenium or thallium exceeds the MCL, the supplier of water must report to the department within seven (7) days.

*AUTHORITY: section 640.100, RSMo [1994] **Supp. 2002**. Original rule filed May 4, 1979, effective Sept. 14, 1979. For intervening history please consult the **Code of State Regulations**. Amended: Filed March 17, 2003.*

PUBLIC COST: This proposed amendment is anticipated to cost state agencies and political subdivisions less than five hundred dollars ($500) in the aggregate.

PRIVATE COST: This proposed amendment is anticipated to cost private entities less than five hundred dollars ($500) in the aggregate, because any costs that might be incurred are caused by the federal arsenic rule, which will become effective in Missouri whether this amendment is adopted or not.

*NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: Anyone may submit comments in support of or opposition to this proposed amendment. An information meeting and public hearing will be held May 22, 2003, 10:00 a.m., at the DNR Conference Center, 1738 East Elm Street, Jefferson City, Missouri. In preparing your comments, please include the regulatory citation and the **Missouri Register** page number. Please explain why you agree or disagree with the proposed change, and include alternative options or language. Written comments must be postmarked or received by June 16, 2003. Comments may be mailed or faxed to: Ms. Linda McCarty, Public Drinking Water Program, PO Box 176, Jefferson City, MO 65102. The fax number is (573) 751-3110.*

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 60—Public Drinking Water Program
Chapter 4—Contaminant Levels and Monitoring

PROPOSED AMENDMENT

10 CSR 60-4.040 Maximum Synthetic Organic Chemical Contaminant Levels and Monitoring Requirements. The commission is amending section (5) and adding section (10).

*PURPOSE: This amendment adopts requirements from the federal rule "Arsenic and Clarifications to Compliance and New Source Contaminant Monitoring," which was published in the Jan. 22, 2001 **Federal Register**. Adoption of this federal rule is required to maintain primacy. The proposed changes make the maximum contaminant level calculations more consistent among all chemical rules and clarify new source monitoring requirements.*

(5) If contaminants are detected in any sample, then systems must sample quarterly beginning in the next quarter at each sampling point which resulted in a detection.

(E) *[If a system conducts sampling more frequently than annually, the system will be in violation when the running annual average at any sampling point exceeds the MCL.]* **If one (1) sampling point is in violation of an MCL, the system is in violation of the MCL.**

1. For systems monitoring more than once per year, compliance with the MCL is determined by a running annual average at each sampling point.

2. Systems monitoring annually or less frequently whose sample result exceeds the regulatory detection level as defined by 10 CSR 60-5.010(6)(B) must begin quarterly sampling. The system will not be considered in violation of the MCL until it has completed one (1) year of quarterly sampling.

3. If any sample result will cause the running annual average to exceed the MCL at any sampling point, the system is out of compliance with the MCL immediately.

4. If a system fails to collect the required number of samples, compliance will be based on the total number of samples collected.

5. If a sample result is less than the detection limit, zero will be used to calculate the annual average.

[(F) If a system conducts sampling annually or on a less frequent basis, the system will be in violation when one (1) sample (or the average of the initial and confirmation samples) at any point exceeds the MCL.]

[(G)] **(F)** If monitoring results in detection of one (1) or more of certain related contaminants (aldicarb, aldicarb sulfone, aldicarb sulfoxide and heptachlor, heptachlor epoxide), then subsequent monitoring shall analyze for all related contaminants.

(10) All new systems or systems that use a new source of water that begin operation after January 22, 2004 must demonstrate compliance with the MCL or treatment technique within a period of time specified by the department. The system must also comply with the initial sampling frequencies specified by the department to ensure a system can demonstrate compliance with the MCL or treatment technique. Routine and increased monitoring frequencies shall be conducted in accordance with the requirements in section (5) of this rule.

*AUTHORITY: section 640.100, RSMo [1994] **Supp. 2002.** Original rule filed May 4, 1979, effective Sept. 14, 1979. Amended: Filed April 14, 1981, effective Oct. 11, 1981. Rescinded and readopted: Filed March 31, 1992, effective Dec. 3, 1992. Amended: Filed May 4, 1993, effective Jan. 13, 1994. Amended: Filed Feb. 1, 1996, effective Oct. 30, 1996. Amended: Filed March 17, 2003.*

PUBLIC COST: This proposed mendment is anticipated to cost state agencies and political subdivisions less than five hundred dollars ($500) in the aggregate.

PRIVATE COST: This proposed amendment is anticipated to cost private entities less than five hundred dollars ($500) in the aggregate.

*NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: Anyone may submit comments in support of or opposition to this proposed amendment. An information meeting and public hearing will be held May 22, 2003, 10:00 a.m., at the DNR Conference Center, 1738 East Elm Street, Jefferson City, Missouri. In preparing your comments, please include the regulatory citation and the **Missouri Register** page number. Please explain why you agree or disagree with the proposed change, and include alternative options or language. Written comments must be postmarked or received by June 16, 2003. Comments may be mailed or faxed to: Ms. Linda McCarty, Public Drinking Water Program, PO Box 176, Jefferson City, MO 65102. The fax number is (573) 751-3110.*

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 60—Public Drinking Water Program
Chapter 4—Contaminant Levels and Monitoring

PROPOSED AMENDMENT

10 CSR 60-4.050 Maximum Turbidity *[Contaminant]* **Levels and Monitoring Requirements and Filter Backwash Recycling**. The commission is amending sections (1)–(3).

PURPOSE: This amendment adopts changes to notification requirements for turbidity exceedances required by the EPA's public notice rule, which was published in the May 4, 2000 ***Federal Register****.*

It also extends the turbidity requirements currently in effect for large public water systems to smaller surface water systems (serving less than ten thousand (10,000) people), pursuant to EPA's Long-Term 1 Enhanced Surface Water Treatment Rule (LT1ESWTR), which was published in the January 14, 2002 ***Federal Register****. The compliance date for these provisions is January 14, 2005. EPA's LT1ESWTR allows systems with only two (2) filters to monitor their combined filter effluent every fifteen (15) minutes, rather than each filter every fifteen (15) minutes. This proposed amendment requires these systems to monitor both filters every fifteen (15) minutes.*

Adopting the federal rules is necessary for maintaining primacy. The federal rules, fact sheets, and other background information on turbidity requirements for small systems are available on-line at http://www.epa.gov/safewater/pws/pwss.html by clicking on Rule Implementation, or by calling the Public Drinking Water Program at (573)751-5331.

(1) Applicability.

[(B) The department strongly encourages systems serving less than ten thousand (10,000) people and using surface water or ground water under the direct influence of surface water to strive to meet the maximum containment levels (MCLs) and turbidity standards in section (3) of this rule, since it is likely that federal regulations will require these systems to meet the more stringent standards in 2003.

(C) Beginning September 1, 2000, any water treatment plant proposed for construction or major modification must be designed to meet the turbidity requirements in section (3) of this rule.]

[(D)] **(B)** Beginning November 30, 2002, any water treatment plant proposed for construction or major modification must be designed to meet the filter backwash requirements in section (4) of this rule.

(2) Systems Serving Less Than Ten Thousand (10,000) People. **(Note: This section remains in effect only until January 13, 2005. Beginning January 14, 2005, the turbidity levels and other requirements in section (3) of this rule replace the requirements of this section.)**

(A) *[The MCLs for]* **Maximum Turbidity Levels**.

1. The turbidity level must be less than or equal to 0.5 turbidity units in at least ninety-five percent (95%) of the measurements taken each month.

2. The turbidity level must at no time exceed five (5) turbidity units in any one (1) confirmed measurement.

(C) If the result of a single turbidity measurement exceeds the *[MCL]* **level** established in subsection (2)(A), the measurement must be confirmed by resampling, preferably within one (1) hour. The resample result must replace the original sample result for determining compliance with subsection (2)(A) of this rule.

(D) If any confirmed sample result exceeds five (5) turbidity units, the supplier of water must notify the department by the end of the next business day and give notice as required by 10 CSR 60-8.010*[(1)(A)3.]***(2).**

(E) The department, on a case-by-case basis, may allow a system to operate at *[an MCL for]* **a maximum** turbidity **level** of 1.0 turbidity units in at least ninety-five percent (95%) of the measurements taken each month if the following criteria are met: the total percent removal and inactivation of *Giardia lamblia* is ninety-nine and nine-tenths percent (99.9%), required treatment is provided, the treatment facilities are properly operated, none of the treatment units are malfunctioning due to mechanical failure or incorrect construction, the system is in compliance with all of the disinfection requirements of 10 CSR 60-4.055(1)-(4), the treatment facilities are providing ninety-nine percent (99%) Giardia cyst removal and the system cannot meet the turbidity *[MCL]* **level** of 0.5 turbidity units due to raw water quality, iron, manganese or similar compelling factors. The request to operate at the higher turbidity *[MCL]* **level** must be made in writing and be accompanied by an engineering report which includes the results of full scale particle or *Giardia* cyst removal studies, operational test data, water analyses results, a report of the sanitary survey of the treatment facilities and any other information that the department may require to assure that the criteria of this rule are met. Approval of the engineering report is the approval to operate at the higher turbidity *[MCL]* **level**.

(3) *[Systems Serving Ten Thousand (10,000) or More People.]* **Enhanced Turbidity Requirements.**

[(A) The turbidity levels and other requirements in section (2) apply to these systems until January 1, 2002.

[(B)] **(A)** Beginning January 1, 2002 *[—]* **for systems serving ten thousand (10,000) or more people and beginning January 14, 2005 for systems serving less than ten thousand (10,000) people maximum turbidity levels and other requirements are as set forth in this section.**

(B) Maximum Turbidity Levels.

1. Turbidity must be equal to or less than 0.3 turbidity units in at least ninety-five percent (95%) of the measurements taken each month; and

2. There must be no more than one (1) turbidity unit in any one (1) *[confirmed]* measurement.

(D) **Reporting to the Department.**

1. If at any time the turbidity exceeds one (1) nephelometric turbidity unit (NTU) in representative samples of filtered water in a system using conventional filtration treatment or direct filtration, the system must inform the department as soon as possible, but no later than the end of the next business day.

2. If any *[confirmed]* sample result exceeds five (5) turbidity units, the supplier of water must *[notify the department by the end of the next business day and give notice as required by 10 CSR 60-8.010(1)(A)3.]* **consult with the department as soon as practical, but no later than twenty-four (24) hours after the exceedance is known, except that the department may allow additional time in the event of extenuating circumstances beyond the control of the owner or operator, such as a natural disaster.**

3. If at any time the turbidity in representative samples of filtered water exceeds the maximum level set by the department under subsection (3)(G) of this rule for filtration technologies other than conventional filtration treatment, the system must inform the department as soon as possible, but no later than the end of the next business day.

(E) Filtration Sampling Requirements for Surface Water Systems *[Serving More Than ten thousand (10,000) People]*.

1. A public water system subject to the requirements of 10 CSR 60-4.055(6) that provides conventional filtration treatment must conduct continuous monitoring of turbidity for each individual filter using an approved method in 10 CSR 60-5.010 and must calibrate turbidimeters using the procedure specified by the manufacturer. Systems must record the results of individual filter monitoring every fifteen (15) minutes.

2. If there is a failure in the continuous turbidity monitoring equipment, the system must conduct grab sampling every four (4) hours in lieu of continuous monitoring, until the turbidimeter is repaired and back on-line. A system has a maximum of five (5) working days after failure in the continuous monitoring equipment to repair the equipment before the system is in violation. **With department approval, systems serving less than ten thousand (10,000) people may be granted up to fourteen (14) days to repair the equipment before the system is in violation.**

*AUTHORITY: section 640.100, RSMo [2000] **Supp. 2002**. Original rule filed May 4, 1979, effective Sept. 14, 1979. Amended: Filed April 14, 1981, effective Oct. 11, 1981. Amended: Filed July 12, 1991, effective Feb. 6, 1992. Amended: Filed Feb. 1, 1996, effective Oct. 30, 1996. Amended: Filed Dec. 15, 1999, effective Sept. 1, 2000. Amended: Filed Jan. 16, 2002, effective Nov. 30, 2002. Amended: Filed March 17, 2003.*

PUBLIC COST: This proposed amendment is estimated to cost six (6) publicly-owned surface water systems approximately twelve thousand dollars ($12,000) in the aggregate for a one-time cost for additional turbidimeters for the individual filter monitoring required by this amendment that is in addition to the requirements in the federal rule and the Missouri Department of Natural Resources approximately seventeen thousand eight hundred seventy-four dollars ($17,874) in one-time costs and forty-six thousand five hundred ten dollars ($46,510) annually. Any other expenditures of money are caused by the federal rule and must be incurred regardless of whether the proposed amendment is adopted or not.

PRIVATE COST: This proposed amendment is estimated to cost private entities less than five hundred dollars ($500) in the aggregate. Privately-owned public water systems are already complying with the individual turbidity monitoring requirement, and any other expenditures of money are caused by the federal rule and must be incurred regardless of whether this proposed amendment is adopted or not.

*NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: Anyone may submit comments in support of or opposition to this proposed amendment. An information meeting and public hearing will be held May 22, 2003, 10:00 a.m., at the DNR Conference Center, 1738 East Elm Street, Jefferson City, Missouri. In preparing your comments, please include the regulatory citation and the **Missouri Register** page number. Please explain why you agree or disagree with the proposed change, and include alternative options or language. Written comments must be postmarked or received by June 16, 2003. Comments may be mailed or faxed to: Ms. Linda McCarty, Public Drinking Water Program, PO Box 176, Jefferson City, MO 65102. The fax number is (573) 751-3110.*

FISCAL NOTE
PUBLIC ENTITY COST

I. RULE NUMBER

Title:	10
Division:	60
Chapter:	4
Type of Rulemaking:	Proposed Amendment
Rule Number and Name:	10 CSR 60-4.050 Maximum Turbidity *[Contaminant]* Levels and Monitoring Requirements and Filter Backwash

II. SUMMARY OF FISCAL IMPACT

Affected Agency or Political Subdivision	**Estimated Cost of Compliance in the Aggregate**
Department of Natural Resources	$46,510 (annually) $17,874 (one-time)
6 Surface water systems serving < 10,000 population, and having two filters	$12,000 (one-time cost)
Total Estimated Cost	$46,510 annual costs $29,874 one-time costs

III. WORKSHEET

6 turbidimeters x $2,000 per turbidimeter = $12,000

1.0 FTE Environmental Specialist III = $33,276 salary (annually) + $13,234 expenses (annually) + $17,874 equipment (one-time)

IV. ASSUMPTIONS.

1. It is assumed that six small surface water systems having two filters will need to purchase one additional turbidimeter each in order to meet the new requirement for continuous individual filter monitoring. It is assumed that the turbidimeters can be purchased for approximately $2,000 each.

2. All other potential costs to water systems are caused by the federal rule, Long Term 1 Enhanced Surface Water Treatment Rule (LT1ESWTR), published January 14, 2002. Water systems must comply with the federal requirements regardless of whether they are incorporated into the state rule or not. For information purposes, the following cost data from the preamble to the LT1ESWTR is provided. In the cost analysis produced by EPA, it was reported that the LT1ESWTR would apply to 5,817 water systems. In Missouri, 72 systems, or .012% of the national total, are affected by this rule. Sixty-five of these are publicly owned. Extrapolating from the national cost figures, the federal requirements being incorporated into the state rule are estimated to cost the 65 publicly-owned water surface water systems affected by this rule approximately $4,642 per system in turbidimeter, treatment, and operation and maintenance costs, and approximately $750 per system in annual monitoring costs.

3. The Department of Natural Resources (DNR) will have additional staffing requirements over and

above the requirements of the existing rule. Small water systems will have tougher turbidity standards to meet and will need to do individual filter monitoring and other increased operational monitoring that must be done to assure these standards can be met. Staff in the Public Drinking Water Program (PDWP) and regional offices will need to assist the small systems as they attempt to meet the new turbidity standards. Due to limited resources and other constraints with these small water systems, violations of turbidity standards and other significant compliance issues can be expected in some cases. PDWP staff will need to be monitoring compliance and taking appropriate action when water systems violate the regulations.

The specific resources needed will be approximately 1.0 FTE. Based on an Environmental Specialist III classification, the cost would be $33,276 annually for salary and $17,874 one-time for equipment and $13,234 annually for expenses.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 60—Public Drinking Water Program
Chapter 4—Contaminant Levels and Monitoring

PROPOSED AMENDMENT

10 CSR 60-4.055 Disinfection Requirements. The commission is amending subsections (3)(D), (3)(E), (4)(D), (4)(E), and (5)(C) and section (6).

PURPOSE: This proposed amendment adopts the EPA Long Term 1 Enhanced Surface Water Treatment Rule (Jan. 14, 2002) and the technical corrections to the Interim Enhanced Surface Water Treatment Rule (Jan. 16, 2001). These changes are necessary in order to maintain primacy and be consistent with the federal rules. The amendment also corrects cross references and makes the trigger for public notice consistent with the federal rule when disinfectant residual concentrations are not met.

(3) For any water system adding a disinfectant, only free available chlorine or chloramines will be accepted as the disinfectant entering the distribution system. The residual disinfectant concentration in the water entering the distribution system cannot be less than 0.5 milligrams per liter (mg/L) free available chlorine or 1.0 mg/L chloramines for more than four (4) hours.

[(D) Failure to maintain the minimum residual disinfectant concentration as required in this rule is a violation of a treatment technique which requires public notification as specified in 10 CSR 60-8.010(1) and (7)(B)2.]

*[(E)]***(D)** If at any time the disinfectant residual entering the distribution system falls below the levels established in this section, the system must notify the department as soon as possible but no later than by the end of the next business day. The system must notify the department by the end of the next business day whether or not the disinfectant residual was restored to the levels established in this section within four (4) hours. **The department may require public notice for continuing or persistent violations of this requirement.**

(E) A residual disinfectant concentration in the water entering the distribution system of less than 0.2 mg/L for at least four (4) hours is a treatment technique violation which requires public notice pursuant to 10 CSR 60-8.010.

(4) The residual disinfectant concentration in the distribution system measured as total chlorine or combined chlorine cannot be less than 0.2 mg/L in more than five percent (5%) of the samples each month for any two (2) consecutive months that the system supplies water to the public.

(D) Failure to maintain the minimum residual disinfectant concentration required in this rule is a violation of a treatment technique which requires public notification as specified in 10 CSR 60-8.010*[(1) and(7)(B)2.]*.

(E) The residual disinfectant concentration must be measured at least at the same points in the distribution system and at the same time as total coliforms are sampled as specified in 10 CSR 60-4.020. Failure to comply with this subsection is a monitoring violation which requires public notification as specified in 10 CSR 60-8.010*[(2).]*

(5) Maximum Residual Disinfectant Levels.

(C) Compliance Dates.

1. Community water systems and nontransient noncommunity water systems.

A. Systems serving ten thousand (10,000) or more persons and using surface water or groundwater under the direct influence of surface water must comply with the MRDLs beginning *[December 16, 2001]* **January 1, 2002**.

B. Systems serving fewer than ten thousand (10,000) persons and using surface water or groundwater under the direct influence of surface water and systems using only groundwater not under the direct influence of surface water must comply with the MRDLs beginning *[December 16, 2003]* **January 1, 2004.**

2. Transient noncommunity water systems.

A. Systems serving ten thousand (10,000) or more persons and using surface water or groundwater under the direct influence of surface water and using chlorine dioxide as a disinfectant or oxidant must comply with the chlorine dioxide MRDL beginning *[December 16, 2001]* **January 1, 2002**.

B. Systems serving less than ten thousand (10,000) persons, using surface water or groundwater under the direct influence of surface water and using chlorine dioxide as a disinfectant or oxidant, and systems using only groundwater not under the direct influence of surface water and using chlorine dioxide as a disinfectant or oxidant, must comply with the chlorine dioxide MRDL beginning *[December 16, 2003]* **January 1, 2004**.

(6) Enhanced Disinfection Requirements. **Enhanced disinfection requirements and compliance dates vary depending on system size.**

(A) Compliance Date**s**. In addition to **the requirements in** sections (1)–(4) of this rule, surface water and groundwater under the direct influence of surface water systems serving at least ten thousand (10,000) people **also** must *[also]* comply with the requirements in this section beginning January 1, 2002 unless otherwise specified. **Those systems serving less than ten thousand (10,000) people must comply with the requirements in this section beginning January 14, 2005 unless otherwise specified.**

(B) General Requirements.

1. This section (6) establishes or extends treatment technique requirements in lieu of maximum contaminant levels for the following contaminants: *Giardia lamblia*, viruses, heterotrophic plate count bacteria, *Legionella, Cryptosporidium*, and turbidity. Each surface water and groundwater under the direct influence of surface water system*, [serving at least ten-thousand (10,000) people***including those serving less than ten thousand (10,000) people beginning January 14, 2005,** must provide treatment of its source water that complies with these treatment technique requirements and are in addition to those identified in sections (1)–(4) of this rule. The treatment technique requirements consist of installing and properly operating water treatment processes which reliably achieve:

A. At least *[nine-]*ninety**-nine** percent (99%) (2-log) removal of *Cryptosporidium* between a point where the raw water is not subject to recontamination by surface water runoff and a point downstream before or at the first customer *[for filtered systems]*; and

B. Compliance with the profiling and benchmark requirements under the provisions of subsection (6)(C) of this rule.

2. A public water system subject to the requirements of this section (6) is in compliance with the requirements of paragraph (6)(B)1. of this rule if it meets the applicable filtration requirements in 10 CSR 60-4.050 and the disinfection requirements in sections (2)–(4) and subsection (6)(C) of this rule.

(C) Disinfection Profiling and Benchmarking.

1. Disinfection profile. A disinfection profile is a summary of *[daily] Giardia lamblia* inactivation through the treatment plant **measured through the course of a year**. A public water system subject to the requirements of this section (6) must determine its total trihalomethanes (TTHM) annual average and its HAA5 annual average. The annual average is the arithmetic average of the quarterly averages of four (4) consecutive quarters of monitoring. **Surface water systems serving fewer than ten thousand (10,000) people must determine the arithmetic average based on samples collected after January 1, 1998. If the annual average exceeds the levels**

in subparagraph (6)(C)1.D then the requirements in paragraph (6)(C)2. apply.

A. The TTHM annual average must be the annual average during the same period as is used for the HAA5 annual average.

(I) Those systems that use "grandfathered" HAA5 occurrence data that meet the provisions of *[item]* **part** (5)(C)1.B.(I) of this rule must use TTHM data collected at the same time under the provisions of 10 CSR 60-4.090.

(II) Those systems that use HAA5 occurrence data that meet the provisions of *[subitem]* **subpart** (6)(C)1.B.(II)(a) of this rule must use TTHM data collected at the same time under the provisions of 10 CSR 60-4.090.

B. The HAA5 annual average must be the annual average during the same period as is used for the TTHM annual average.

(I) Those systems that have collected four (4) quarters of HAA5 occurrence data that meets the routine monitoring sample number and location requirements for TTHM in 10 CSR 60-4.090 and handling and analytical method requirements of 40 CFR 141.142 may use those data to determine whether the requirements of this section apply.

(II) Those systems that did not collect four (4) quarters of HAA5 occurrence data that meets the provisions of *[item]* **part** (6)(C)1.B.(I) of this rule by March 31, 2000 must either:

(a) Conduct monitoring for HAA5 that meets the routine monitoring sample number and location requirements for TTHM in 10 CSR 60-4.090(2) and handling and analytical method requirements of 40 CFR 141.142(b)(1) to determine the HAA5 annual average and whether the requirements of paragraph (6)(C)2. of this rule apply; or

(b) Comply with all other provisions of this section as if the HAA5 monitoring had been conducted and the results required compliance with paragraph (6)(C)2. of this rule.

C. The system must submit data to the department on the schedule required by the department.

D. Any system having either a TTHM annual average greater than or equal to 0.064 mg/L or an HAA5 annual average greater than or equal to 0.048 mg/L during the period identified in subparagraphs *[(5)]* **(6)**(C)1.A. and B. of this rule must comply with paragraph (6)(C)2. of this rule.

2. Disinfection profiling **requirements and compliance dates vary depending on system size. Surface water systems serving a population of less than ten thousand (10,000) must monitor profiling data according to subparagraph (6)(C)2.D. beginning July 1, 2003. Surface water and groundwater under the direct influence of surface water (GWUDISW) systems serving a population of less than five hundred (500) must monitor profiling data according to subparagraph (6)(C)2.D. beginning January 1, 2004.**

A. Any system that meets the criteria in subparagraph (6)(C)1.D. of this rule must develop a disinfection profile of its disinfection practice for a period of up to three (3) years.

B. The system must monitor daily for a period of twelve (12) consecutive calendar months to determine the total logs of inactivation for each day of operation, based on the $CT_{99.9}$ values in Tables 1 through 8 of the **Missouri** "Guidance Manual for Surface Water System Treatment Requirements," as appropriate, through the entire treatment plant. This system must begin this monitoring when requested by the department. As a minimum, the system with a single point of disinfectant application prior to entrance to the distribution system must conduct the monitoring set forth in this subparagraph (6)(C)2.B. A system with more than one (1) point of disinfectant application must conduct this monitoring for each disinfection segment. The system must monitor the parameters necessary to determine the total inactivation ratio, using analytical methods in 10 CSR 60-5.010, as follows:

(I) The temperature of the disinfected water must be measured once per day at each residual disinfectant concentration sampling point during peak hourly flow;

(II) If the system uses chlorine, the pH of the disinfected water must be measured once per day at each chlorine residual disinfectant concentration sampling point during peak hourly flow;

(III) The disinfectant contact time(s) must be determined for each day during peak hourly flow; and

(IV) The residual disinfectant concentration(s) of the water before or at the first customer and prior to each additional point of disinfection must be measured each day during peak hourly flow.

C. In lieu of the monitoring conducted under the provisions of subparagraph (6)(C)2.B. of this rule to develop the disinfection profile the system may elect to meet the requirements of *[item]* **part** (6)(C)2.C.(I) of this rule. In addition to the monitoring conducted under the provisions of subparagraph (6)(C)2.B. of this rule to develop the disinfection profile, the system may elect to meet the requirements of *[item]* **part** (6)(C)2.C.(II) of this rule.

(I) A PWS that has three (3) years of existing operational data may submit those data, a profile generated using those data, and a request that the department approve use of those data in lieu of monitoring under the provisions of paragraph (6)(C)2. of this rule. The department must determine whether these operational data are substantially equivalent to data collected under the provisions of subparagraph (6)(C)2.B. of this rule. These data must also be representative of *Giardia lamblia* inactivation through the entire treatment plant and not just of certain treatment segments. Until the department approves this request, the system is required to conduct monitoring under the provisions of subparagraph (6)(C)2.B. of this rule.

(II) In addition to the disinfection profile generated under subparagraph (6)(C)2.B. of this rule, a PWS that has existing operational data may use those data to develop a disinfection profile for additional years. Such systems may use these additional yearly disinfection profiles to develop a benchmark under the provisions of paragraph (6)(C)3. of this rule. The department will determine whether these operational data are substantially equivalent to data collected under the provisions of subparagraph (6)(C)2.B. of this rule. These data must also be representative of inactivation through the entire treatment plant and not just of certain treatment segments.

D. The system must monitor once per week on the same calendar day, for a period of twelve (12) consecutive calendar months, to determine the total logs of inactivation for each week of operation, based on the $CT_{99.9}$ values in Tables 1 through 8 of the Missouri "Guidance Manual for Surface Water System Treatment Requirements," as appropriate, through the entire treatment plant. As a minimum, the system with a single point of disinfectant application prior to entrance to the distribution system must conduct the monitoring set forth in this subparagraph. A system with more than one (1) point of disinfectant application must conduct this monitoring for each disinfection segment. The system must monitor the parameters necessary to determine the total inactivation ratio, using analytical methods in 10 CSR 60-5.010, as follows:

(I) The temperature of the disinfected water must be measured at each residual disinfectant concentration sampling point during peak hourly flow;

(II) If the system uses chlorine, the pH of the disinfected water must be measured at each chlorine residual disinfectant concentration sampling point during peak hourly flow;

(III) The disinfectant contact time(s) must be determined during peak hourly flow; and

(IV) The residual disinfectant concentration(s) of the water before or at the first customer and prior to each additional point of disinfection must be measured during peak hourly flow.

[D.] **E.** The system must calculate the total inactivation ratio as follows:

(I) The system may determine the total inactivation ratio for the disinfection segment based on either of the following methods:

(a) Determine one (1) inactivation ratio ($CTcalc/CT_{99.9}$) before or at the first customer during peak hourly flow; or

(b) Determine successive ($CTcalc/CT_{99.9}$) values, representing sequential inactivation ratios, between the point of disinfectant application and a point before or at the first customer during peak hourly flow. Under this alternative, the system must calculate the total inactivation ratio by determining ($CTcalc/CT_{99.9}$) for each sequence and then adding the ($CTcalc/CT_{99.9}$) values together to determine ($\Sigma(CTcalc/CT_{99.9})$); and

(II) The system must determine the total logs of inactivation by multiplying the value calculated in *[item]* **part** (6)(C)2.D.(I) of this rule by three (3.0).

[E.] **F.** A system that uses either chloramines or ozone for primary disinfection must also calculate the logs of inactivation for viruses using a method identified in EPA's "Alternative Disinfectants and Oxidants Guidance Manual."

[F.] **G.** The system must retain disinfection profile data in graphic form, as a spreadsheet, or in some other format acceptable to the department for review as part of sanitary surveys conducted by the department.

3. Disinfection benchmarking.

A. Any system required to develop a disinfection profile under the provisions of paragraphs (6)(C)1. and 2. of this rule and that decides to make a significant change to its disinfection practice must consult with the department in writing prior to making such change. Significant changes to disinfection practice are:

(I) Changes to the point of disinfection;

(II) Changes to the disinfectant(s) used in the treatment plant;

(III) Changes to the disinfection process; and

(IV) Any other modification identified by the department.

B. Any system that is modifying its disinfection practice must calculate its disinfection benchmark using one of the following procedures:

(I) For each year of profiling data collected and calculated under paragraph (6)(C)2. of this rule, the system must determine the lowest average monthly *Giardia lamblia* inactivation in each year of profiling data. The system must determine the average *Giardia lamblia* inactivation for each calendar month for each year of profiling data by dividing the sum of *[daily] Giardia lamblia [of]* inactivation by the number of values calculated for that month; or

(II) The disinfection benchmark is the lowest monthly average value (for systems with one (1) year of profiling data) or average of lowest monthly average values (for systems with more than one **(1)** year of profiling data) of the monthly logs of *Giardia lamblia* inactivation in each year of profiling data.

C. A system that uses either chloramines or ozone for primary disinfection must also calculate the disinfection benchmark for viruses using a method approved by the department.

D. The system must submit the following information to the department as part of its consultation process:

(I) A description of the proposed change;

(II) The disinfection profile for *Giardia lamblia* (and, if necessary, viruses) under paragraph (6)(C)2. of this rule and benchmark as required by subparagraph (6)(C)3.B. of this rule; and

(III) An analysis of how the proposed change will affect the current levels of disinfection.

*AUTHORITY: section 640.100, RSMo Supp. [1999] **2002**. Original rule filed July 12, 1991, effective Feb. 6, 1992. Amended: Filed Feb. 1, 1996, effective Oct. 30, 1996. Amended: Filed Dec. 15, 1999, effective Sept. 1, 2000. Amended: Filed March 17, 2003.*

PUBLIC COST: This amendment is estimated to cost state agencies and political subdivisions less than five hundred dollars ($500) in the aggregate.

PRIVATE COST: This amendment is estimated to cost private entities less than five hundred dollars ($500) in the aggregate.

*NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: Anyone may submit comments in support of or in opposition to this proposed amendment. An information meeting and public hearing will be held May 22, 2003, 10:00 a.m., at the DNR Conference Center, 1738 East Elm Street, Jefferson City, Missouri. In preparing your comments, please include the regulatory citation and the **Missouri Register** page number. Please explain why you agree or disagree with the proposed change, and include alternative options or language. Written comments must be postmarked or received by June 16, 2003. Comments may be mailed or faxed to: Linda McCarty, Public Drinking Water Program, PO Box 176, Jefferson City, MO 65102. The fax number is (573) 751-3110.*

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 60—Public Drinking Water Program
Chapter 4—Contaminant Levels and Monitoring

PROPOSED AMENDMENT

10 CSR 60-4.070 Secondary Contaminant Levels and Monitoring Requirements. The commission is amending section (3).

PURPOSE: This amendment corrects a cross-reference to 10 CSR 60-8.010.

(3) For community water systems, if the result of analyses indicates that the secondary contaminant level for fluoride is exceeded, the supplier of water must report to the department within seven (7) days and must collect three (3) additional samples from designated sampling points to be submitted for analysis within one (1) month at intervals determined by the department. When the average of the results of four (4) analyses as required by this section exceeds the secondary contaminant level, the supplier of water must notify the department as required by 10 CSR 60-7.010 and give notice as required by 10 CSR 60-8.010*[(4)]*.

*AUTHORITY: section 640.100, RSMo [(Cum. Supp. 1993)] **Supp. 2002**. Original rule filed May 4, 1979, effective Sept. 14, 1979. Amended: Filed April 14, 1981, effective Oct. 11, 1981. Amended: Filed Aug. 4, 1987, effective Jan. 1, 1988. Rescinded and readopted: Filed March 31, 1992, effective Dec. 3, 1992. Amended: Filed March 17, 2003.*

PUBLIC COST: This proposed amendment is anticipated to cost state agencies and political subdivisions less than five hundred dollars ($500) in the aggregate.

PRIVATE COST: This proposed amendment is anticipated to cost private entities less than five hundred dollars ($500) in the aggregate.

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: Anyone may submit comments in support of or in opposition to this proposed amendment. An information meeting and public hearing will be held May 22, 2003, 10:00 a.m., at the DNR Conference Center, 1738 East Elm Street, Jefferson City, Missouri. In

*preparing your comments, please include the regulatory citation and the **Missouri Register** page number. Please explain why you agree or disagree with the proposed change, and include alternative options or language. Written comments must be postmarked or received by June 16, 2003. Comments may be mailed or faxed to: Ms. Linda McCarty, Public Drinking Water Program, PO Box 176, Jefferson City, MO 65102. The fax number is (573) 751-3110.*

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 60—Public Drinking Water Program
Chapter 4—Contaminant Levels and Monitoring

PROPOSED AMENDMENT

10 CSR 60-4.090 Maximum Contaminant Levels and Monitoring Requirements for Disinfection By-Products. The commission is amending subsections (3)(B) (including Table 3), (4)(C), and (4)(D).

*PURPOSE: This amendment corrects cross references to 10 CSR 60-8.010 and adopts "Revisions to the Interim Enhanced Surface Water Treatment Rule (IESWTR), Stage 1 Disinfectants and Disinfection By-products Rule (Stage1DBPR), and Revisions to State Primacy Requirements To Implement The Safe Drinking Water Act (SDWA) Amendments," which was published in the January 16, 2001 **Federal Register**. These technical corrections fix errors in the published version of the original federal Disinfectants/Disinfection By-Products Rule. These corrections are in Table 3 and subparagraphs (3)(B)1.C. and (4)(D)3.A.*

(3) Monitoring Requirements and Plan.

(B) Monitoring Requirements for Disinfection By-Products.

1. TTHMs and HAA5.

A. Routine monitoring. Systems must monitor at the frequency indicated in Table 2.

Table 2. Routine Monitoring Frequency for TTHM and HAA5.

Surface water or GWUDISW system serving at least 10,000 people.	Four (4) water samples per quarter per treatment plant.	At least 25 percent of all samples collected each quarter at locations representing maximum residence time. Remaining samples taken at locations representative of at least average residence time in the distribution system and representing the entire distribution system, taking into account number of persons served, different sources of water, and different treatment methods.[1]
Surface water or GWUDISW system serving from 500 to 9,999 people.	One (1) water sample per quarter per treatment plant.	Locations representing maximum residence time.[1]
Surface water or GWUDISW system serving fewer than 500 people.	One (1) sample per year per treatment plant during month of warmest water temperature.	Locations representing maximum residence time.[1] If the sample (or average of annual samples, if more than one sample is taken) exceeds MCL, system must increase monitoring to one sample per treatment plant per quarter, taken at a point reflecting the maximum residence time in the distribution system, until system meets reduced monitoring criteria in subsection (3)(C) of this rule.
System using only ground water not under the direct influence of surface water using chemical disinfectant and serving at least 10,000 people.	One (1) water sample per quarter per treatment plant.[2]	Locations representing maximum residence time.[1]
System using only ground water not under the direct influence of surface water using chemical disinfectant and serving fewer than 10,000 persons.	One (1) sample per year per treatment plant[2] during month of warmest water temperature.	Locations representing maximum residence time.[1] If the sample (or average of annual samples, if more than one sample is taken) exceeds MCL, the system must increase monitoring to one sample per treatment plant per quarter, taken at a point reflecting the maximum residence time in the distribution system, until system meets the criteria in subsection (3)(C) of this rule for reduced monitoring.

[1]If a system elects to sample more frequently than the minimum required, at least 25 percent of all samples collected each quarter (including those taken in excess of the required frequency) must be taken at locations that represent the maximum residence time of the water in the distribution system. The remaining samples must be taken at locations representative of at least average residence time in the distribution system.

[2]Multiple wells drawing water from a single aquifer may be considered one (1) treatment plant for determining the minimum number of samples required, with department approval.

B. Systems may reduce monitoring except as otherwise provided, in accordance with Table 3.

Table 3. Reduced Monitoring Frequency TTHM and HAA5

If you are a . . .	You may reduce monitoring if you have monitored at least one year and your . . .	To this level
Surface water or GWUDISW system serving at least 10,000 persons which has a source water annual average total organic carbon (TOC) level, before any treatment, ≤ 4.0 mg/L	TTHM annual average ≤ 0.040 mg/L and HAA5 annual average ≤ 0.030 mg/L	One (1) sample per treatment plant per quarter at distribution system location reflecting maximum residence time.
Surface water or GWUDISW system serving from 500 to 9,999 persons which has a source water annual average TOC level, before any treatment, ≤ 4.0 mg/L	TTHM annual average ≤ 0.040 mg/L and HAA5 annual average ≤ 0.030 mg/L.	One (1) sample per treatment plant per year at distribution system location reflecting maximum residence time during month of warmest water temperature. NOTE: Any surface water or GWUDISW system serving fewer than 500 persons may not reduce its monitoring to less than one sample per treatment plant per year.
System using only groundwater not under direct influence of surface water using chemical disinfectant and serving at least 10,000 persons.	TTHM annual average ≤ 0.040 mg/L and HAA5 annual average ≤ 0.030 mg/L.	One (1) sample per treatment plant per year at distribution system location reflecting maximum residence time during month of warmest water temperature.
System using only groundwater not under direct influence of surface water using chemical disinfectant and serving fewer than 10,000 persons.	TTHM annual average ≤ 0.040 mg/L and HAA5 annual average ≤ 0.030 mg/L for two consecutive years OR TTHM annual average ≤ 0.20 mg/L and HAA5 annual average ≤ 0.015 mg/L for one year.	One (1) sample per treatment plant *[per]* **every three (3)** years at distribution system location reflecting maximum residence time during month of warmest water temperature, with the three-year cycle beginning on January 1 following quarter in which system qualifies for reduced monitoring.

C. Systems on a reduced monitoring schedule may remain on that reduced schedule as long as the average of all samples taken in the year (for systems which must monitor quarterly) or the result of the sample (for systems which must monitor no more frequently than annually) is no more than 0.060 mg/L for TTHMs and 0.045 mg/L for HAA5. Systems that do not meet these levels must resume monitoring at the frequency identified in Table 2: Routine Monitoring in the quarter immediately following the quarter in which the system exceeds 0.060 mg/L for TTHMs and 0.045 mg/L for HAA5. For systems using only groundwater under the direct influence of surface water and serving fewer than ten thousand (10,000) persons, if either the TTHM annual average is greater than 0.080 mg/L or the HAA5 annual average is greater than 0.060 mg/L, the system must go to increased monitoring. Systems on increased monitoring may return to routine monitoring **if after at least one (1) year of monitoring their** TTHM annual average is less than or equal to *[0.040]* **0.060** mg/L and HAA5 annual average is less than or equal to *[0.030]* **0.045** mg/L**, respectively**.

D. The department may return a system to routine monitoring at the department's discretion.

2. Chlorite. Community and nontransient noncommunity water systems using chlorine dioxide, for disinfection or oxidation, must conduct monitoring for chlorite.

A. Routine monitoring.

(I) Daily monitoring. Systems must take daily samples at the entrance to the distribution system. For any daily sample that exceeds the chlorite MCL, the system must take additional samples in the distribution system the following day at the following locations: near the first customer; at a location representative of average residence time; and at a location reflecting maximum residence time in the distribution system, in addition to the sample required at the entrance to the distribution system.

(II) Monthly monitoring. Systems must take a three (3)-sample set each month in the distribution system. The system must take one (1) sample at each of the following locations: near the first customer; at a location representative of average residence time; and at a location reflecting maximum residence time in the distribution system. Any additional routine sampling must be conducted in the same manner (as three (3)-sample sets, at the specified locations). The system may use the results of additional monitoring conducted under subparagraph (3)(B)2.B. to meet the requirement for monthly monitoring.

B. Additional monitoring. On each day following a routine sample monitoring result that exceeds the chlorite MCL at the entrance to the distribution system, the system is required to take three (3) chlorite distribution system samples at the following locations: as close to the first customer as possible, in a location representative of average residence time, and as close to the end of the distribution system as possible (reflecting maximum residence time in the distribution system).

C. Reduced monitoring.

(I) Chlorite monitoring at the entrance to the distribution system required by item (3)(B)2.A.(I) of this rule may not be reduced.

(II) Chlorite monitoring in the distribution system required by item (3)(B)2.A.(II) of this rule may be reduced to one (1) three

(3)-sample set each month in the distribution system. The system must take one (1) sample at each of the following locations: near the first customer; at a location representative of average residence time; and at a location reflecting maximum residence time in the distribution system. Any additional routine sampling must be conducted in the same manner (as three (3)-sample sets, at the specified locations). The system may use the results of additional monitoring conducted under subparagraph (3)(B)2.B. to meet the requirement for monthly monitoring.

3. Bromate.

A. Routine monitoring. Community and nontransient noncommunity systems using ozone for disinfection or oxidation must take one (1) sample per month for each treatment plant in the system using ozone. Systems must take samples monthly at the entrance to the distribution system while the ozonation system is operating under normal conditions.

B. Reduced monitoring. Systems required to analyze for bromate may reduce monitoring from monthly to once per quarter, if the system demonstrates that the average source water bromide concentration is less than 0.05 mg/L based upon representative monthly bromide measurements for one (1) year. The system may remain on reduced bromate monitoring until the running annual average source water bromide concentration, computed quarterly, is equal to or greater than 0.05 mg/L based upon representative monthly measurements. If the running annual average source water bromide concentration is greater than or equal to 0.05 mg/L, the system must resume routine monitoring.

(4) Compliance Requirements.

(C) Disinfectant Residuals.

1. Chlorine and chloramines.

A. Compliance must be based on a running annual arithmetic average, computed quarterly, of monthly averages of all samples collected by the system under paragraph (3)(C)1. of this rule. If the average covering any consecutive four (4)-quarter period exceeds the MRDL, the system is in violation of the MRDL and must notify the public pursuant to 10 CSR 60-8.010, in addition to reporting to the department pursuant to 10 CSR 60-7.010.

B. In cases where systems switch between the use of chlorine and chloramines for residual disinfection during the year, compliance must be determined by including together all monitoring results of both chlorine and chloramines in calculating compliance. Reports submitted pursuant to 10 CSR 60-7.010(6) must clearly indicate which residual disinfectant was analyzed for each sample.

2. Chlorine dioxide.

A. Acute violations. Compliance must be based on consecutive daily samples collected by the system under paragraph (3)(C)2. of this rule. If any daily sample taken at the entrance to the distribution system exceeds the MRDL, and on the following day one (1) (or more) of the three (3) samples taken in the distribution system exceed the MRDL, the system is in violation of the MRDL and must take immediate corrective action to lower the level of chlorine dioxide below the MRDL and must notify the public pursuant to the procedures for acute health risks in 10 CSR 60-8.010*[(1)(A)3.]***(2)**, in addition to reporting to the department pursuant to 10 CSR 60-7.010. Failure to take samples in the distribution system the day following an exceedance of the chlorine dioxide MRDL at the entrance to the distribution system will also be considered an MRDL violation and the system must notify the public of the violation in accordance with the provisions for acute violations under 10 CSR 60-8.010*[(1)(A)3.]***(2)**, in addition to reporting to the department pursuant to 10 CSR 60-7.010.

B. Nonacute violations. Compliance must be based on consecutive daily samples collected by the system in compliance with this rule.

(I) If any two (2) consecutive daily samples taken at the entrance to the distribution system detect chlorine dioxide, the system must take corrective action to lower the chlorine dioxide level.

(II) If any two (2) consecutive daily samples taken at the entrance to the distribution system exceed the MRDL and all distribution system samples taken are below the MRDL, the system is in violation of the MRDL and must take corrective action to lower the level of chlorine dioxide below the MRDL at the point of sampling and notify the public pursuant to the procedures for nonacute health risks in 10 CSR 60-8.010*[(7)(D)]***(3)**, in addition to reporting to the department pursuant to 10 CSR 60-7.010. Failure to monitor at the entrance to the distribution system the day following an exceedance of the chlorine dioxide MRDL at the entrance to the distribution system is also an MRDL violation and the system must notify the public of the violation in accordance with the provisions for nonacute violations in 10 CSR 60-8.010*[(7)(D)]***(3)**, in addition to reporting to the department pursuant to 10 CSR 60-7.010.

(D) Disinfection By-Product Precursors (DBPP).

1. Systems using surface water or groundwater under the direct influence of surface water and using conventional filtration treatment must operate with enhanced coagulation or enhanced softening to achieve the TOC percent removal levels specified in this rule unless the system meets at least one (1) of the alternative compliance criteria listed here. These systems must still comply with monitoring requirements in sections (3)–(4) of this rule. The alternative compliance criteria for enhanced coagulation and enhanced softening are:

A. The system's source water TOC level, measured according to 10 CSR 60-5.010, is less than 2.0 mg/L, calculated quarterly as a running annual average;

B. The system's treated water TOC level, measured according to 10 CSR 60-5.010, is less than 2.0 mg/L, calculated quarterly as a running annual average;

C. The system's source water TOC level, measured according to 10 CSR 60-5.010, is less than 4.0 mg/L, calculated quarterly as a running annual average; the source water alkalinity, measured according to 10 CSR 60-5.010, is greater than **sixty (**60**)** mg/L (as $CaCO_3$), calculated quarterly as a running annual average; and either the TTHM and HAA5 running annual averages are no greater than 0.040 mg/L and 0.030 mg/L, respectively; or prior to the effective date for compliance with this rule, the system has made a clear and irrevocable financial commitment not later than the effective date for compliance with this rule to use of technologies that will limit the levels of TTHMs and HAA5 to no more than 0.040 mg/L and 0.030 mg/L, respectively. Systems must submit evidence of a clear and irrevocable financial commitment, in addition to a schedule containing milestones and periodic progress reports for installation and operation of appropriate technologies, to the department for approval not later than the effective date for compliance with this rule. These technologies must be installed and operating not later than June 30, 2005. Failure to install and operate these technologies by the date in the approved schedule will constitute a violation;

D. The TTHM and HAA5 running annual averages are no greater than 0.040 mg/L and 0.030 mg/L, respectively, and the system uses only chlorine for primary disinfection and maintenance of a residual in the distribution system;

E. The system's source water SUVA, prior to any treatment and measured monthly according to 10 CSR 60-5.010, is less than or equal to 2.0 L/mg-m, calculated quarterly as a running annual average. SUVA refers to Specific Ultraviolet Absorption at two-hundred-fifty-four nanometers (254nm), an indicator of the humic content of water. It is a calculated parameter obtained by dividing a sample's ultraviolet absorption at a wavelength of 254nm (UV_{254}) (in m^{-1}) by its concentration of dissolved organic carbon (DOC) (in mg/L); and

F. The system's finished water SUVA, measured monthly according to 10 CSR 60-5.010, is less than or equal to 2.0 L/mg-m, calculated quarterly as a running annual average.

2. Additional alternative compliance criteria for softening systems. Systems practicing enhanced softening that cannot achieve the Step 1 TOC removals may use the alternative compliance criteria listed here in lieu of complying with paragraph (4)(D)3. of this rule.

Systems must still comply with monitoring requirements in sections (3)–(4) of this rule.

A. Softening that results in lowering the treated water alkalinity to less than **sixty (**60**)** mg/L (as $CaCO_3$), measured monthly according to 10 CSR 60-5.010 and calculated quarterly as a running annual average.

B. Softening that results in removing at least **ten (**10**)** mg/L of magnesium hardness (as $CaCO_3$), measured monthly and calculated quarterly as an annual running average.

3. Enhanced coagulation and enhanced softening performance requirements.

A. Systems must achieve the percent reduction of TOC specified in Table 4 between the source water and the combined filter effluent, unless the department approves a system's request for alternate minimum TOC removal (Step 2) requirements. Systems may begin monitoring to determine whether Step 1 TOC removals can be met twelve (12) months prior to the compliance date for the system. This monitoring is not required and failure to monitor during this period is not a violation. However, any system that does not monitor during this period, and then determines in the first twelve (12) months after the compliance date that it is not able to meet the Step 1 requirements and must therefore apply for alternate minimum TOC removal (Step 2) requirements, is not eligible for retroactive approval of alternate minimum TOC removal (Step 2) requirements and is in violation. Systems may apply for alternate minimum TOC removal (Step 2) requirements any time after the compliance date. **For systems required to meet Step 1 TOC removals, if the value calculated under part (4)(D)4.A.(IV) of this rule is less than 1.00, the system is in violation of the treatment technique requirements and must notify the public pursuant to 10 CSR 60-8.010 in addition to reporting to the department pursuant to 10 CSR 60-7.010.**

B. Required Step 1 TOC reductions, indicated in the following table, are based upon specified source water parameters measured in accordance with 10 CSR 60-5.010. Systems practicing softening are required to meet the Step 1 TOC reductions in the far-right column (Source water alkalinity >120 mg/L) for the specified source water TOC.

Table 4: Required Step 1 TOC Reductions.

Step 1 Required Removal of TOC By Enhanced Coagulation and Enhanced Softening For Surface Water and GWUDISW Systems Using Conventional Treatment[1,2]			
	Source water alkalinity, mg/L as $CaCO_3$		
Source water TOC, mg/L	0–60	>60–120	>120[3]
>2.0-4.0	35.0%	25.0%	15.0%
>4.0-8.0	45.0%	35.0%	25.0%
>8.0	50.0%	40.0%	30.0%

[1]Systems meeting at least one of the conditions in paragraph (4)(D)1. of this rule are not required to operate with enhanced coagulation.
[2]Softening systems meeting one of the alternative compliance criteria in paragraph (4)(D)1. of this rule are not required to operate with enhanced softening.
[3]Systems practicing softening must meet the TOC removal requirements in this column.

C. Conventional treatment systems using surface water or groundwater under the direct influence of surface water that cannot achieve the Step 1 TOC removals due to water quality parameters or operational constraints must apply to the department, within three (3) months of failure to achieve the Step 1 TOC removals, for approval of alternative minimum TOC (Step 2) removal requirements submitted by the system. If the department approves the alternative minimum TOC removal (Step 2) requirements, the department may make those requirements retroactive for the purposes of determining compliance. Until the department approves the alternate minimum TOC removal (Step 2) requirements, the system must meet the Step 1 TOC removals.

D. Alternate minimum TOC removal (Step 2) requirements. Applications made to the department by enhanced coagulation systems for approval of alternative minimum TOC removal (Step 2) requirements under subparagraph (4)(D)3.C. of this rule must include, as a minimum, results of bench- or pilot-scale testing conducted under this subparagraph (4)(D)3.D. and used to determine the alternate enhanced coagulation level.

(I) Alternate enhanced coagulation level is defined as coagulation at a coagulant dose and pH as determined by the method described here such that an incremental addition of ten (10) mg/L of alum (or equivalent amount of ferric salt) results in a TOC removal of less than or equal to 0.3 mg/L. The percent removal of TOC at this point on the "TOC removal versus coagulant dose" curve is then defined as the minimum TOC removal required for the system. Once approved by the department, this minimum requirement supersedes the minimum TOC removal required by Table 4 of this rule. This requirement will be effective until such time as the department approves a new value based on the results of a new bench- and pilot-scale test. Failure to achieve department-set alternative minimum TOC removal levels is a violation.

(II) Bench- or pilot-scale testing of enhanced coagulation must be conducted by using representative water samples and adding 10 mg/L increments of alum (or equivalent amounts of ferric salt) until the pH is reduced to a level less than or equal to the enhanced coagulation Step 2 target pH shown in Table 5.

Table 5: Enhanced Coagulation Step 2 Target pH.

Alkalinity (mg/L as $CaCO_3$)	Target pH
0–60	5.5
>60–120	6.3
>120–240	7.0
>240	7.5

(III) For waters with alkalinities of less than sixty (60) mg/L for which addition of small amounts of alum or equivalent addition of iron coagulant drives the pH below 5.5 before significant TOC removal occurs, the system must add necessary chemicals to maintain the pH between 5.3 and 5.7 in samples until the TOC removal of 0.3 mg/L per 10 mg/L alum added (or equivalent addition of iron coagulant) is reached.

(IV) The system may operate at any coagulant dose or pH necessary (consistent with other regulatory requirements) to achieve the minimum TOC percent removal approved under subsection (3)(C) of this rule.

(V) If the TOC removal is consistently less than 0.3 mg/L of TOC per 10 mg/L of incremental alum dose at all dosages of alum (or equivalent addition of iron coagulant), the water is deemed to contain TOC not amenable to enhanced coagulation. The system may then apply to the department for a waiver of enhanced coagulation requirements.

4. Compliance calculations.

A. Systems using surface water or groundwater under the direct influence of surface water, other than those identified in paragraphs (4)(D)1. or 2. of this rule, must comply with requirements contained in subparagraph (4)(D)3.B. of this rule. Systems must calculate compliance quarterly, beginning after the system has collected twelve (12) months of data, by determining an annual average using the following method:

(I) Determine actual monthly TOC percent removal, equal to: $(1 - (\text{treated water TOC}/\text{source water TOC})) \times 100$;

(II) Determine the required monthly TOC percent removal;

(III) Divide the value in part (4)(D)4.A.(I) by the value in part (4)(D)4.A(II); and

(IV) Add together the results of part (4)(D)4.A.(III) for the last twelve (12) months and divide by twelve (12). If the value calculated is less than 1.00, the system is not in compliance with the TOC percent removal requirements.

B. Systems may use the following provisions in lieu of the calculations in subparagraph (4)(D)4.A. of this rule to determine compliance with TOC percent removal requirements:

(I) In any month that the system's treated or source water TOC level, measured according to 10 CSR 60-5.010, is less than 2.0 mg/L, the system may assign a monthly value of 1.0 (in lieu of the value calculated in part (4)(D)4.A.(III) of this rule);

(II) In any month that a system practicing softening removes at least 10 mg/L of magnesium hardness (as $CaCO_3$), the system may assign a monthly value of 1.0 (in lieu of the value calculated in part (4)(D)4.A.(III) of this rule);

(III) In any month that the system's source water SUVA, prior to any treatment and measured according to 10 CSR 60-5.010, is less than or equal to 2.0 L/mg-m, the system may assign a monthly value of 1.0 (in lieu of the value calculated in part (4)(D)4.A.(III) of this rule);

(IV) In any month that the system's finished water SUVA, measured according to 10 CSR 60-5.010, is less than or equal to 2.0 L/mg-m, the system may assign a monthly value of 1.0 (in lieu of the value calculated in part (4)(D)4.A.(III) of this rule); and

(V) In any month that a system practicing enhanced softening lowers alkalinity below sixty (60) mg/L (as $CaCO_3$), the system may assign a monthly value of 1.0 (in lieu of the value calculated in part (4)(D)4.A.(III) of this rule).

C. Systems using conventional treatment and surface water or groundwater under the direct influence of surface water may also comply with the requirements of this rule by meeting the criteria in paragraph (4)(D)1. or 2. of this rule.

*AUTHORITY: section 640.100, RSMo Supp. [1999] **2002**. Original rule filed April 14, 1981, effective Oct. 11, 1981. Amended: Filed Feb. 1, 1996, effective Oct. 30, 1996. Amended: Filed Dec. 15, 1999, effective Sept. 1, 2000. Amended: Filed March 17, 2003.*

PUBLIC COST: This proposed amendment is anticipated to cost state agencies and political subdivisions less than five hundred dollars ($500) in the aggregate.

PRIVATE COST: This proposed amendment is anticipated to cost private entities less than five hundred dollars ($500) in the aggregate.

*NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: Anyone may submit comments in support of or opposition to this proposed amendment. An information meeting and public hearing will be held May 22, 2003, 10:00 a.m., at the DNR Conference Center, 1738 East Elm Street, Jefferson City, Missouri. In preparing your comments, please include the regulatory citation and the **Missouri Register** page number. Please explain why you agree or disagree with the proposed change, and include alternative options or language. Written comments must be postmarked or received by June 16, 2003. Comments may be mailed or faxed to: Ms. Linda McCarty, Public Drinking Water Program, PO Box 176, Jefferson City, MO 65102. The fax number is (573) 751-3110.*

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 60—Public Drinking Water Program
Chapter 4—Contaminant Levels and Monitoring

PROPOSED AMENDMENT

10 CSR 60-4.100 Maximum Volatile Organic Chemical Contaminant Levels and Monitoring Requirements. The commission is adding subsection (3)(E) and section (10).

*PURPOSE: This amendment corrects a typographical error and adopts requirements from the federal rule "Arsenic and Clarifications to Compliance and New Source Contaminant Monitoring," which was published in the January 22, 2001 **Federal Register**. Adoption of this federal rule is required to maintain primacy. The proposed changes make the maximum contaminant level calculations more consistent among all chemical rules and clarify new source monitoring requirements.*

(3) For the purpose of determining compliance with MCLs, a supplier of water must collect samples of the product water for analyses as follows:

(C) If the system draws water from more than one (1) source and the sources are combined before distribution, the system must sample at an entry point to the distribution system during periods of normal operating conditions; *[and]*

(D) The department may require more frequent monitoring than specified in subsection (3)(A) of this rule and may require confirmation samples for positive and negative results at its discretion*[.]*; **and**

(E) If one (1) sampling point is in violation of an MCL, the system is in violation of the MCL.

1. For systems monitoring more than once per year, compliance with the MCL is determined by a running annual average at each sampling point.

2. Systems monitoring annually or less frequently whose sample result exceeds the MCL must begin quarterly sampling. The system will not be considered in violation of the MCL until it has completed one (1) year of quarterly sampling.

3. If any sample result will cause the running annual average to exceed the MCL at any sampling point, the system is out of compliance with the MCL immediately.

4. If a system fails to collect the required number of samples, compliance will be based on the total number of samples collected.

5. If a sample result is less than the detection limit, zero will be used to calculate the annual average.

(10) All new systems or systems that use a new source of water that begin operation after January 22, 2004 must demonstrate compliance with the MCL or treatment technique within a period of time specified by the department. The system must also comply with the initial sampling frequencies specified by the department to ensure a system can demonstrate compliance with the MCL or treatment technique. Routine and increased monitoring frequencies shall be conducted in accordance with the requirements in this rule.

*AUTHORITY: section 640.100, RSMo [1994] **Supp. 2002**. Original rule filed June 2, 1988, effective Aug. 31, 1988. Rescinded and readopted: Filed March 31, 1992, effective Dec. 3, 1992. Amended: Filed May 4, 1993, effective Jan. 13, 1994. Amended: Filed Feb. 1, 1996, effective Oct. 30, 1996. Amended: Filed March 17, 2003.*

PUBLIC COST: This proposed amendment is anticipated to cost state agencies and political subdivisions less than five hundred dollars ($500) in the aggregate.

PRIVATE COST: This proposed amendment is anticipated to cost private entities less than five hundred dollars ($500) in the aggregate.

*NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: Anyone may submit comments in support of or in opposition to this proposed amendment. An information meeting and public hearing will be held May 22, 2003, 10:00 a.m., at the DNR Conference Center, 1738 East Elm Street, Jefferson City, Missouri. In preparing your comments, please include the regulatory citation and the **Missouri Register** page number. Please explain why you agree or disagree with the proposed change, and include alternative options or language. Written comments must be postmarked or received by June 16, 2003. Comments may be mailed or faxed to: Ms. Linda McCarty, Public Drinking Water Program, PO Box 176, Jefferson City, MO 65102. The fax number is (573) 751-3110.*

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 60—Public Drinking Water Program
Chapter 6—Enforcement

10 CSR 60-6.050 Procedures and Requirements for Abatement Orders. The commission is amending section (5).

PURPOSE: This amendment corrects a cross reference to 10 CSR 60-8.010.

(5) Public notification of an abatement order must be issued in accordance with **Tier 1 requirements in** 10 CSR 60-8.010*[(1)]*.

*AUTHORITY: section 640.130, RSMo [1986] **2000**. Original rule filed July 12, 1991, effective Feb. 6, 1992. Amended: Filed March 17, 2003.*

PUBLIC COST: This proposed amendment is anticipated to cost state agencies and political subdivisions less than five hundred dollars ($500) in the aggregate.

PRIVATE COST: This proposed amendment is anticipated to cost private entities less than five hundred dollars ($500) in the aggregate.

*NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: Anyone may submit comments in support of or in opposition to this proposed amendment. An information meeting and public hearing will be held May 22, 2003, 10:00 a.m., at the DNR Conference Center, 1738 East Elm Street, Jefferson City, Missouri. In preparing your comments, please include the regulatory citation and the **Missouri Register** page number. Please explain why you agree or disagree with the proposed change, and include alternative options or language. Written comments must be postmarked or received by June 16, 2003. Comments may be mailed or faxed to: Ms. Linda McCarty, Public Drinking Water Program, PO Box 176, Jefferson City, MO 65102. The fax number is (573) 751-3110.*

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 60—Public Drinking Water Program
Chapter 7—Reporting

PROPOSED AMENDMENT

10 CSR 60–7.010 Reporting Requirements. The commission is amending sections (7) and (9).

*PURPOSE: This amendment adopts a change to reporting requirements to make the state rule consisent with the EPA's public notice rule, which was published in the May 4, 2000 **Federal Register** and became effective in Missouri on May 4, 2002. The amendment requires the supplier of water to provide a certificate that he or she has complied with public notice regulations and a representative copy of each type of notice made available.*

*The amendment also adopts the Long-Term 1 Enhanced Surface Water Treatment Rule (January 14, 2002 **Federal Register**) and technical corrections to the Interim Enhanced Surface Water Treatment Rule (January 16, 2001 **Federal Register**). These changes add individual turbidity monitoring requirements in subsection (7)(B) for systems serving less than ten thousand (10,000) people and turbidity reporting requirements for all surface water systems.*

These three (3) federal rules are required for maintaining primacy. The federal rules, fact sheets, and other background information are available on-line at http://www.epa.gov/safewater/pws/pwss.html#implement, or by calling the Public Drinking Water Program at (573)751-5331.

(7) Enhanced Filtration and Disinfection Reporting and Record Keeping Requirements. In addition to the reporting and record keeping requirements in sections (5) and (8) of this rule, a public water system subject to the requirements of 10 CSR 60-4.055(6) that provides conventional filtration treatment must report monthly to the department the information specified in subsections (7)(A) and (7)(B) of this rule beginning January 1, 2002. In addition to the reporting and record keeping requirements in sections (5) and (8) of this rule, a public water system subject to the requirements of 10 CSR 60-4.055(6) that provides filtration approved under 10 CSR 60-4.050(3)(G) must report monthly to the department the information specified in subsection (7)(A) of this rule beginning January 1, 2002. The reporting in subsection (7)(A) of this rule takes the place of the reporting specified in section (4) of this rule.

(B) Systems must maintain the results of individual filter monitoring taken under 10 CSR 60-4.050(3)(E) for at least three (3) years. Systems must report that they have conducted individual filter turbidity monitoring under 10 CSR 60-4.050(3)(E) within ten (10) days after the end of each month the system serves water to the public. Systems must report the individual filter turbidity measurement results within ten (10) days after the end of each month the system serves water to the public only if measurements demonstrate one (1) or more of the conditions in paragraphs (7)(B)1.–*[4.]***2.** of this rule. Systems that use lime softening may apply to the department for alternative exceedance levels for the levels specified in this subsection (7)(B) if they can demonstrate that higher turbidity levels in individual filters are due to lime carryover only and not due to degraded filter performance.

1. Surface water systems that serve more than ten thousand (10,000) people must report the individual filter turbidity measurement results within ten (10) days after the end of each month only if measurements demonstrate one (1) or more of the following conditions.

*[1.]***A.** For any individual filter that has a measured turbidity level of greater than 1.0 NTU in two (2) consecutive measurements taken fifteen (15) minutes apart, the system must report the filter number, the turbidity measurement, and the date(s) on which the exceedance occurred. In addition, the system must either produce a filter profile for the filter within seven (7) days of the exceedance (if the system is not able to identify an obvious reason for the abnormal filter performance) and report that the profile has been produced or report the obvious reason for the exceedance.

*[2.]***B.** For any individual filter that has a measured turbidity level of greater than 0.5 NTU in two (2) consecutive measurements taken fifteen (15) minutes apart at the end of the first four (4)

hours of continuous filter operation after the filter has been backwashed or otherwise taken offline, the system must report the filter number, the turbidity, and the date(s) on which the exceedance occurred. In addition, the system must either produce a filter profile for the filter within seven (7) days of the exceedance (if the system is not able to identify an obvious reason for the abnormal filter performance) and report that the profile has been produced or report the obvious reason for the exceedance.

*[3.]***C.** For any individual filter that has a measured turbidity level of greater than 1.0 NTU in two (2) consecutive measurements taken fifteen (15) minutes apart at any time in each of three (3) consecutive months, the system must report the filter number, the turbidity measurement, and the date(s) on which the exceedance occurred. In addition, the system must conduct a self-assessment of the filter within fourteen (14) days of the exceedance and report that the self-assessment was conducted. The self-assessment must consist of at least the following components: assessment of filter performance; development of a filter profile; identification and prioritization of factors limiting filter performance; assessment of the applicability of corrections; and preparation of a filter self-assessment report.

*[4.]***D.** For any individual filter that has a measured turbidity level of greater than 2.0 NTU in two (2) consecutive measurements taken fifteen (15) minutes apart at any time in each of two (2) consecutive months, the system must report the filter number, the turbidity measurement, and the date(s) on which the exceedance occurred. In addition, the system must arrange for the conduct of a Comprehensive Performance Evaluation by the department or a third party approved by the department no later than thirty (30) days following the exceedance and have the evaluation completed and submitted to the department no later than ninety (90) days following the exceedance.

*[A.]***(I)** The Comprehensive Performance Evaluation is a thorough review and analysis of a treatment plant's performance-based capabilities and associated administrative, operation and maintenance practices. It is conducted to identify factors that may be adversely impacting a plant's capability to achieve compliance and emphasizes approaches that can be implemented without significant capital improvements. The comprehensive performance evaluation must consist of at least the following components: Assessment of plant performance; evaluation of major unit processes; identification and prioritization of performance limiting factors; assessment of the applicability of comprehensive technical assistance; and preparation of a Comprehensive Performance Evaluation report.

*[B.]***(II)** If the Comprehensive Performance Evaluation results indicate improved performance potential, the system shall implement Comprehensive Technical Assistance. The system must identify and systematically address plant-specific factors. The Comprehensive Technical Assistance is a combination of utilizing Comprehensive Performance Evaluation results as a basis for follow-up, implementing process control priority-setting techniques, and maintaining long-term involvement to systematically train staff and administrators.

2. Surface water systems that serve less than ten thousand (10,000) people must report the individual filter turbidity measurements within ten (10) days after the end of each month only if measurements demonstrate one (1) or more of the following conditions.

A. For any individual filter that exceeds 1.0 NTU in two (2) consecutive recordings fifteen (15) minutes apart, the system must report the filter number(s), corresponding date(s), turbidity value(s) which exceeded 1.0 NTU, and the cause (if known) for the exceedance(s).

B. For any individual filter that for three (3) months in a row the turbidity exceeded 1.0 NTU in two (2) consecutive recordings fifteen (15) minutes apart, the system must conduct a self-assessment of the filter(s) within fourteen (14) days of the triggering event. The system must report the date self-assessment was triggered and the date it was completed. The self-assessment must consist of at least the following components: assessment of filter performance; development of a filter profile; identification and prioritization of factors limiting filter performance; assessment of the applicability of corrections; and preparation of a filter self-assessment report. The filter self-assessment is not required if a comprehensive performance evaluation (CPE) was required.

C. For any individual filter that for two (2) months in a row the turbidity exceeded 2.0 NTU in two (2) consecutive recordings, fifteen (15) minutes apart, the system must arrange to have a CPE conducted not later than sixty (60) days following the triggering event. The CPE must be conducted by the department or a third party approved by the department. If a CPE has been completed by the department or a third party approved by the department within the twelve (12) prior months or the system and department are jointly participating in an ongoing Comprehensive Technical Assistance (CTA) project at the system, a new CPE is not required. If conducted, a CPE must be completed and submitted to the department no later than one hundred twenty (120) days following the triggering event.

(C) Additional turbidity reporting requirements. Reporting requirements for turbidity exceedences are in 10 CSR 60-4.050(3).

(9) A supplier of water *[is required to]* **shall** submit proof to the department that public notification has been made within ten (10) days of the date that the notice was to have been made **for initial public notice and any repeat notices**. *[Proof of public notification may include, but is not limited to, a copy of the affidavit of publication, a copy of the public notice, a copy of the mailing list of people sent the public notice or a picture of the posted notices.]* **The supplier of water shall provide a certification he/she has fully complied with the public notification regulations, and shall provide a representative copy of each type of notice distributed, published, posted, and made available to the persons served by the system and to the media.**

AUTHORITY: section 640.100, RSMo Supp. [1999] 2002. Original rule filed May 4, 1979, effective Sept. 14, 1979. Amended: Filed April 14, 1981, effective Oct. 11, 1981. Amended: Filed July 12, 1991, effective Feb. 6, 1992. Amended: Filed Dec. 15, 1999, effective Sept. 1, 2000. Amended: Filed March 17, 2003.

PUBLIC COST: This proposed amendment is estimated to cost the Department of Natural Resources sixty thousand three hundred thirty-four dollars ($60,334) in the aggregate in annualized salary and expenses for the duration of the rule and seventeen thousand eight hundred seventy-four dollars ($17,874) in one-time costs. Any other expenditures of money are caused by the federal rule and must be incurred regardless of whether the proposed amendment is adopted or not.

PRIVATE COST: This proposed amendment is estimated to cost private entities less than five hundred dollars ($500) in the aggregate. Any expenditures of money are caused by the federal rule and must be incurred regardless of whether the proposed amendment is adopted or not.

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: Anyone may submit comments in support of or in opposition to this proposed amendment. An information meeting and public hearing will be held May 22, 2003, 10:00 a.m., at the DNR Conference Center, 1738 East Elm Street, Jefferson City, Missouri. In

*preparing your comments, please include the regulatory citation and the **Missouri Register** page number. Please explain why you agree or disagree with the proposed change, and include alternative options or language. Written comments must be postmarked or received by June 16, 2003. Comments may be mailed or faxed to: Ms. Linda McCarty, Public Drinking Water Program, PO Box 176, Jefferson City, MO 65102. The fax number is (573) 751-3110.*

FISCAL NOTE
PUBLIC ENTITY COST

I. RULE NUMBER

Title: 10
Division: 60
Chapter: 7
Type of Rulemaking: Proposed Amendment
Rule Number & Name: 10 CSR 60-7.010 Reporting Requirements

II. SUMMARY OF FISCAL IMPACT

Affected Agency or Political Subdivision	Estimated Cost of Compliance in the Aggregate Shown as an Annualized Cost
Missouri Department of Natural Resources	annual salary and expenses $60,334 one-time equipment costs $17,874

III. WORKSHEET

1.0 FTE Environmental Engineer III = $47,100 annual salary + $13,234 annual expenses + $17,874 one-time equipment costs

IV. ASSUMPTIONS

The Department of Natural Resources (DNR) will have additional staffing requirements over and above the requirements of the existing rule. Small water systems will now be required to report to DNR and take other actions based on the results of individual filter monitoring. Systems will likely need assistance from DNR staff in preparing filter profiles, filter assessments and specific reporting required by the rule. These reports will need to be reviewed by Public Drinking Water Program staff and appropriate action taken when water systems are not in compliance. Due to limited resources and other constraints with these small water systems, significant compliance issues can be expected in some cases. In these situations a Comprehensive Performance Evaluation (CPE) will be required. DNR staff will be needed to conduct these CPE's and provide appropriate follow-up.

The specific resources needed will be approximately 1.0 FTE. Based on an Environmental Engineer III classification, the cost would be $47,100 annually for salary and $17,874 one-time for equipment and $13,234 annually for expenses.