



Rules of
Department of Natural Resources
Division 20—Clean Water Commission
Chapter 6—Permits

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

10 CSR 20-6.010 Construction and Operating Permits

PURPOSE: This rule sets forth the requirements and process of application for construction and operating permits, and the terms and conditions for the permits. This rule also clarifies the requirements of the permit program, improves its administration, and brings the program in compliance with the latest federal regulations, 44 FedReg 32.854 (1979).

(1) Permits—General.

(A) All persons who build, erect, alter, replace, operate, use, or maintain existing point sources, or intend these actions for a proposed point source, water contaminant sources, or wastewater treatment facilities shall apply to the department for the permits required by the Missouri Clean Water Law and these regulations. The department issues these permits in order to enforce the Missouri Clean Water Law and regulations and administer the National Pollutant Discharge Elimination System (NPDES) Program.

(B) The following are exempt from permit regulations:

1. Nonpoint source discharges;
2. Service connections to wastewater sewer systems;
3. Internal plumbing and piping or other water diversion or retention structures within a manufacturing or industrial plant or mine, which are an integral part of the industrial or manufacturing process or building or mining operation. An operating permit or general permit shall be required, if the piping, plumbing, or structures result in a discharge to waters of the state;
4. Routine maintenance or repairs of any existing sewer system, wastewater treatment facility, or other water contaminant or point source;
5. Single family residences;
6. The discharge of water from an environmental emergency cleanup site under the direction of, or the direct control of, the Missouri Department of Natural Resources or the Environmental Protection Agency (EPA), provided the discharge shall not violate any condition of 10 CSR 20-7.031 Water Quality Standards;
7. Water used in constructing and maintaining a drinking water well and distribution system for public and private use, geologic test holes, exploration drill holes,

groundwater monitoring wells, and heat pump wells;

8. Small scale pilot projects or demonstration projects for beneficial use, that do not exceed a period of one (1) year, may be exempted by written project approval from the permitting authority. The department may extend the permit exemption for up to one (1) additional year. A permit application shall be submitted at least ninety (90) days prior to the end of the demonstration period if the facility intends to continue operation, unless otherwise exempted under this rule or Chapter 6; and

9. The application of pesticides in order to control pests (e.g., any insect, rodent, nematode, fungus, weed, etc.) in a manner that is consistent with the requirements of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Missouri Pesticide Use Act unless such application is made directly into or onto waters of the state, in which case the applicator shall obtain a permit.

(C) Nothing shall prevent the department from taking action, including the requirement for issuance of any permits under the Missouri Clean Water Law and regulations, if any of the activities exempted under subsection (1)(B) should cause pollution of waters of the state or otherwise violate the Missouri Clean Water Law or these regulations.

(2) Applications.

(A) An application for, or for renewal of, a construction permit or operating permit shall be made on forms (see 10 CSR 20-6.090) provided by the department. The applications may be supplemented with copies of information submitted for other federal or state permits. The application shall include a one inch equals two thousand feet (1" = 2000') scale (or larger) map showing the location of all outfalls, as well as a flowchart indicating each process which contributes to an outfall. Each application must be accompanied by the appropriate permit fee. Alternate scale maps are allowed upon the request of the applicant and approval of the Department of Natural Resources.

(B) All applications must be signed as follows:

1. For a corporation, by an individual having responsibility for the overall operation of the regulated facility or activity, such as the plant manager, or by an individual having overall responsibility for environmental matters at the facility;
2. For a partnership or sole proprietorship, by a general partner or the proprietor respectively; or
3. For a municipal, state, federal, or

other public facility, by either a principal executive officer or by an individual having overall responsibility for environmental matters at the facility.

(C) All other reports required by the department shall be signed by a person designated in subsection (2)(B) of this rule or a duly authorized representative, if—

1. The representative so authorized is responsible for the overall operation of the facility from which the discharge occurs; and

2. The authorization is made in writing by a person designated in subsection (2)(B) of this rule and is submitted to the director.

(D) Any changes in the written authorization which occur after the issuance of a permit shall be reported to the department by submitting a new written authorization which meets the requirements of subsection (2)(C).

(3) Continuing Authorities.

(A) All applicants for construction permits or operating permits shall show, as part of their application, that a permanent organization exists which will serve as the continuing authority for the operation, maintenance, and modernization of the facility for which the application is made. Construction and first-time operating permits shall not be issued unless the applicant provides such proof to the department and the continuing authority has submitted a statement indicating acceptance of the facility.

(B) Continuing authorities which can be issued permits to collect and/or treat wastewater under this regulation are listed in preferential order in the following paragraphs. An applicant may utilize a lower preference continuing authority by submitting, as part of the application, a statement waiving preferential status from each existing higher preference authority, providing the waiver does not conflict with any area-wide management plan approved under section 208 of the Federal Clean Water Act or any other regional sewage service and treatment plan approved for the higher preference authority by the department:

1. A municipality or public sewer district which has been designated as the area-wide management authority under section 208(c)(1) of the Federal Clean Water Act;

2. A municipality, public sewer district, or sewer company regulated by the Public Service Commission (PSC) which currently provides sewage collection and/or treatment services on a regional or watershed basis as outlined in 10 CSR 20-6.010(3)(C) and approved by the Clean Water Commission. Permits shall not be issued to a continuing authority regulated by the PSC until the



authority has obtained a certificate of convenience and necessity from the PSC;

3. A municipality, public sewer district, or sewer company regulated by the PSC other than one which qualifies under paragraph (3)(B)1. or 2. of this rule or a public water supply district. Permits shall not be issued to a continuing authority regulated by the PSC until the authority has obtained a certificate of convenience and necessity from the PSC;

4. Any person with complete control of, and responsibility for, the water contaminant source, point source, or wastewater treatment facility and all property served by it. The person may constitute a continuing authority only by showing that the authorities listed under paragraphs (3)(B)1.-3. of this rule are not available, do not have jurisdiction, are forbidden by statute or ordinance from providing service to the person or, if available, have submitted written waivers as provided for in subsection (3)(B) of this rule; and

5. An association of property owners served by the wastewater treatment facility, provided the applicant shows that—

A. The authorities listed in paragraphs (3)(B)1.-3. of this rule are not available or that any available authorities have submitted written waivers as provided for in subsection (3)(B);

B. The association owns the facility and has valid easements for all sewers;

C. The document establishing the association imposes covenants on the land of each property owner which assures the proper operation, maintenance, and modernization of the facility including at a minimum:

(I) The power to regulate the use of the facility;

(II) The power to levy assessments on its members and enforce these assessments by liens on the properties of each owner;

(III) The power to convey the facility to one (1) of the authorities listed in paragraphs (3)(B)1.-3.; and

(IV) The requirement that members connect with the facility and be bound by the rules of the association; and

D. The association is a corporation in good standing registered with the Office of the Missouri Secretary of State.

(C) The department will review the planning, design, construction, and designation of watershed or regional sewage works. Where development is insufficient to warrant immediate construction of facilities for the entire watershed or region, interim facilities for a portion of the area shall be authorized as long as the design is compatible with 10 CSR 20-8, Design Guides. The department shall condition permits for these interim discharges so

they will be eliminated upon the availability of watershed or regional facilities. At such time as watershed or regional facilities become available, and to the extent their capacity is sufficient, any existing subregional treatment works and/or lift stations shall be taken out of service and the tributary waste flows diverted into the watershed or regional facilities. A Regional Sewage Service and Treatment Plan shall be developed by all affected political jurisdictions and submitted to the department. Staff will review the plan and submit recommendations to the Clean Water Commission. The Clean Water Commission may approve, require changes, deny the plan, and/or hold public hearings related to approval of the plan.

(D) Industries, including electric cooperatives and mining operations, are by definition continuing authorities for collection and treatment of industrial type wastewater and incidental domestic wastewater associated with their operation when an authority listed in paragraph (3)(B)1. or 2. is infeasible.

(E) Private corporations which are not incorporated under the laws of the state of Missouri shall be represented by a registered agent in the state of Missouri before a construction permit or an operating permit will be issued by the department.

(4) Construction Permits.

(A) No person shall cause or permit the construction, installation, or modification of any sewer system or of any water contaminant source, point source, or wastewater treatment facility without first receiving a construction permit issued by the department except for the following:

1. Construction of a separate storm sewer; and

2. Facilities as provided in other 10 CSR 20-6 regulations.

(B) A separate application for each sewer system, water contaminant source, point source, or wastewater treatment facility must be submitted to the department. Where there are multiple releases from a single operating location, however, one (1) application may cover all facilities and releases. For continuing authorities listed in paragraph (3)(B)1. or 2. only one (1) application may be required when the authority operates a sewage treatment plant and has one (1) or more other noncontinuous storm water-related discharges associated with the sewage treatment plant.

(C) An application for a construction permit must be submitted to the department at least one hundred eighty (180) days in advance of the date on which construction begins. Requests for a shorter time for a review of a wastewater treatment facility may be made but must be accompanied by a

detailed statement of the justification for the request. No such statement is required when the application is only for the construction of sewers.

(D) An application shall consist of the following items:

1. Unless not required by the department, an engineering report shall be submitted by an engineer and shall contain the information required by 10 CSR 20-8.020 and 10 CSR 20-8.110-10 CSR 20-8.220. If the report includes a wastewater treatment facility, it shall include consideration of the feasibility of constructing and operating a facility which will have no discharge to waters of the state (see section (12) of this rule). Unless the department specifies otherwise, this report will be reviewed and necessary changes made before the plans and specifications in paragraph (4)(D)2. will be reviewed;

2. Detailed plans and specifications shall be submitted by an engineer and shall contain the information required in 10 CSR 20-8.020 and 10 CSR 20-8.110-10 CSR 20-8.220 or other regulations as applicable;

3. An application form and permit fee;

4. A one inch equals two thousand feet (1" = 2000') scale map (or larger) showing the location of all outfalls (alternate scale maps are allowed upon the request of the applicant and approval of the Department of Natural Resources);

5. Other information necessary to determine compliance with the Missouri Clean Water Law and these regulations as required by the department; and

6. If a construction permit is waived by the department, or not required, the information in paragraphs (4)(D)1.-5. may be required with application for the operating permit.

(E) If an application is incomplete or otherwise deficient, the applicant shall be notified of the deficiency and processing of the application may be discontinued until the applicant has corrected all deficiencies. The department will act after receipt of all documents and information necessary for a properly completed application, including appropriate filing fees and other supporting documents as necessary, by either issuing a notice of operating permit pending, issuing the construction permit, or denying the permit. The director in writing, shall give the reasons for a denial to the applicant. Applicants who fail to satisfy all department comments after two (2) certified department comment letters in a time frame established by the department shall have the application returned as incomplete and the construction fees shall be forfeited. The applicant has the right to request that the time frames be



extended when additional time is needed. The request must occur within the established time frame, it must be in writing and the department will grant reasonable time extensions.

(F) A notice of permit pending is a statement that the department intends to issue an operating permit. The department will issue the public notice of a pending new operating permit for a wastewater treatment facility before it issues the construction permit for the wastewater treatment facility. This allows the public an opportunity for comment prior to the construction of a wastewater treatment facility. A public notice will not be required prior to the issuance of a construction permit for a sewer collection system. If a construction permit for a new wastewater treatment facility is not issued within one (1) year of the date of the notice of permit pending, a new notice of permit pending will be issued.

(G) Construction permits shall expire one (1) year from the date of issuance unless the permittee applies for an extension. The department shall extend construction permits only one (1) time. An applicant for this extension shall show that there have been no substantial changes in the original project and file for extension thirty (30) days prior to expiration. When a construction permit is issued for a project for which the construction period is known in advance to require longer than one (1) year from the date of issuance, the department may issue a permit allowing a period of time greater than one (1) year upon a showing by the applicant that the period of time is necessary and that no substantial changes in the project will be made without notifying the department. If there are changes, the department may require the applicant to apply for a new construction permit. Construction permits may be issued for a period of less than one (1) year when appropriate.

(H) Issuance of a construction permit does not constitute a guarantee by the department that the finished water contaminant source, point source, or wastewater treatment facility will meet specified effluent limitations.

(I) The applicant shall provide the department with evidence the local planning and zoning agency has been notified of the project and must update the department on the status of any action by the local planning and zoning agency.

(5) Operating Permits.

(A) Persons who build, erect, alter, replace, operate, use, or maintain any water contaminant source, point source, or wastewater treatment facility which discharges to waters of the state shall obtain an operating

permit from the department before any discharge occurs. The operating permit shall be issued to the owner/operator. Nondischarging facilities for the treatment or disposal of wastes, wastewater, or residuals shall obtain permits as provided in 10 CSR 20-6.015. Persons who intend to discharge in accordance with section (14) of this rule are permitted by rule and may discharge without additional written approval from the department.

(B) Applications for an original operating permit for a facility that had a valid construction permit and a prior public notice shall be received by the department at least thirty (30) days before the facility begins to receive wastewater. Applications shall include the earliest date on which the discharge is scheduled to begin. The department will issue or deny the permit within sixty (60) days of receipt of the application. No facility shall discharge without a valid operating permit.

(C) Applications for the renewal of operating permits or for operating permits for facilities that did not require construction permits must be received at least one hundred eighty (180) days either before the expiration date of the present operating permit or the date the facility begins to receive wastewater.

(D) The department shall require that an engineer certify in writing that the project has been completed in accordance with its approved plans and specifications. A municipal official who has the responsibility for the operation and maintenance of the completed facility and knowledge of the construction may submit the certification to the department. A representative of the department may inspect the completed work in order to determine that the completed work substantially adheres to the approved plans and specifications and to the Missouri Clean Water Law and Clean Water Commission regulations.

(E) The department shall specify in each operating permit the concentration, weight, or both, of each contaminant which may be released.

(6) Sewer Extensions.

(A) Persons who construct sewers tributary to a system operated by one (1) of the continuing authorities listed in paragraphs (3)(B)1. or (3)(B)2. will be exempt from the construction permit requirements for sewers if the continuing authority administers a permit program which has been approved by the department.

1. In order to obtain approval of its permit program the continuing authority must submit a written request. The request must include an account of the procedures to be followed in approving the construction of

sewers by others and for handling the design of sewers to be built by its own staff or contractors. The request must include at least the following:

A. Standard specifications and typical appurtenance construction details to which all construction will be required to adhere;

B. A showing that the applicant will engage or employ a sufficient number of professional engineers and other staff qualified to review plans, issue permits, prepare reports, inspect construction, and enforce local and state requirements for each sewer extension;

C. A showing that the applicant will engage or employ a sufficient number of persons qualified to supervise construction or that the applicant has enforceable ordinances which require construction supervision and subsequent certification by a Missouri professional engineer; and

D. A showing that the applicant will maintain permanent plans of all sewers constructed and maintain records of sewer extension approvals and reports.

2. The department will review the application for approval and may ask for additional information if necessary to determine compliance with the Missouri Clean Water Law and these regulations. Approval may be granted for a period of up to five (5) years in the applicant's operating permit.

(B) Upon completion of construction and certification by the engineer in accordance with subsection (5)(D), owners or operators of sanitary sewer systems or extensions for which construction permits were issued shall apply for a letter of authorization for operation. The system or extension then shall be considered as a part of the treatment facility to which it is tributary for permit purposes.

(7) Schedules of Compliance.

(A) Permits may contain schedules of compliance requiring the permittee to take specific steps to achieve expeditious compliance with applicable standards and limitations and other requirements. Schedules of compliance shall require compliance as soon as practicable, but in no case later than an applicable statutory deadline.

(B) If any permit allows a time for achieving final compliance from the date of permit issuance, the schedule of compliance in the permit shall set forth interim requirements and the dates for their achievement.

(C) Within fourteen (14) days following each interim date and the final date of compliance, the permittee shall provide the department with written notice of the permittee's compliance or noncompliance with the interim or final requirement for the dates.



(D) The department may modify a schedule of compliance in an issued permit upon request and a showing of justification by the applicant. In no case shall the compliance schedule be modified to extend beyond an applicable statutory treatment deadline.

(8) Terms and Conditions of Permits.

(A) The following shall be incorporated as terms and conditions of all permits:

1. All discharges and sludge disposal shall be consistent with the terms and conditions of the permit;

2. The permit may be modified or revoked after thirty (30) days' notice for cause including, but not limited to, the following causes:

A. A violation of any term or condition of the permit;

B. A misrepresentation or failure to fully disclose all relevant facts in obtaining a permit;

C. A change in the operation, size, or capacity of the permitted facility; and

D. The permit may be modified after proper public notice and opportunity for comment when a wasteload allocation study has been completed showing that more stringent limitations are necessary to protect the in-stream water quality;

3. The permit may not be modified so as to extend the term of the permit beyond five (5) years after its issuance;

4. Permittees shall operate and maintain facilities to comply with the Missouri Clean Water Law and applicable permit conditions and regulations. Operators or supervisors of operations at regulated wastewater treatment facilities shall be certified in accordance with 10 CSR 20-9.020(2) and any other applicable state law or regulation. Operators of other wastewater treatment facilities, water contaminant source, or point sources, upon request of the department, shall demonstrate that wastewater treatment equipment and facilities are effectively operated and maintained by competent personnel;

5. For the purpose of inspecting, monitoring, or sampling the point source, sludge, water contaminant source, or wastewater treatment facility for compliance with the Clean Water Law and these regulations, authorized representatives of the department shall be allowed by the permittee, upon presentation of credentials and at reasonable times, to—

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

B. Have access to, or copy, any records required to be kept under terms and

conditions of the permit;

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

D. Inspect any collection, treatment, or discharge facility covered under the permit; and

E. Sample any wastewater or sludge at any point in the collection system or treatment process;

6. If the permit is for a discharge from a publicly-owned treatment works, the permittee shall give notice to the department of any new introduction of pollutants or any substantial change in the character or volume of non-domestic pollutants already being introduced. Notice shall include:

A. The origin, quality, and quantity of pollutants to be introduced into the publicly-owned treatment works; and

B. Any anticipated impact on the quality and quantity of the effluent to be discharged or on the quality or quantity of the sludge to be disposed of by the treatment works;

7. If the permit is for a discharge from a publicly-owned treatment works, the permittee shall be able to identify any introduction of pollutants or substances into the facility that alone or in combination will cause—disruption of the treatment processes, violation of effluent standards as defined in their operating permit, violation of water quality standards in the receiving stream as defined in 10 CSR 20-7.031, or classification of the residues of the treatment processes as hazardous waste as defined in 10 CSR 25-4.010. In addition, the permittee shall require any industrial user of the treatment works to comply with the requirements of 10 CSR 20-6.100;

8. If a toxic effluent standard, prohibition, or schedule of compliance is established under Section 307(a) of the Federal Clean Water Act for a toxic pollutant in the discharge of permittee's facility and the standard is more stringent than the limitations in the permit, then upon notice to the permittee the more stringent standard, prohibition, or schedule shall be incorporated into the permit as one (1) of its conditions;

9. Facility expansions, production increases, or process modifications which will result in a new or substantially different discharge or sludge characteristics must be reported sixty (60) days before the facility or process modification begins. Notification may be accomplished by application for a new permit, or if the discharge does not violate effluent limitations specified in the permit, by submission of notice to the department of the changed discharge; and

10. When a continuing authority under paragraph (3)(B)1. or 2. is expected to be available for connection within the next five (5) years, any operating permit issued to a

permittee under this paragraph, located within the service area of the paragraph (3)(B)1. or 2. facility, shall contain the following special condition: The tributary wastewater flow shall be connected to the continuing authority listed in paragraph (3)(B)1. or 2. within ninety (90) days of notice of availability by the continuing authority. The permittee shall obtain departmental approval for closure or alternate use of these facilities.

(B) The permit shall contain effluent limitations and monitoring requirements. Other terms and conditions shall be incorporated into permits if the department determines they are necessary to assure compliance with the Clean Water Law, related regulations or policies of the Missouri Clean Water Commission.

(9) Prohibitions. No permit shall be issued in the following circumstances:

(A) Where the terms and conditions of the permit do not comply with applicable guidelines or requirements, the Missouri Clean Water Law and Clean Water Commission regulations or the Federal Clean Water Act and federal regulations;

(B) Where the EPA regional administrator has properly objected to the issuance of a permit by the director;

(C) Where the permit conditions cannot ensure compliance with the applicable water quality requirements of all other affected states;

(D) Where, in the judgment of the secretary of the army acting through the appropriate district engineer, anchorage and navigation would be substantially impaired;

(E) For the discharge of any radiological, chemical, or biological warfare agent or high level radioactive waste;

(F) For any discharge from a point source inconsistent with a plan or plan amendment approved under Section 208(b) of the Federal Clean Water Act; or

(G) To a facility which is a new source or a new discharger, if the discharge from the construction or operation of the facility will—

1. Cause or contribute to the violation of water quality standards if the point of discharge is located in a segment that was an effluent limitation segment, prior to the introduction of the discharge from the new source or new discharger; or

2. Exceed its pollutant load allocation if the discharge is into a water quality limited segment.

(10) Operating Permit Renewal and Expiration Dates.

(A) The first operating permit issued to new sources and new dischargers will be issued for a period of time sufficient only to allow the completion of construction of the facility, but not to exceed five (5) years, but not less than



one (1) year. When all construction has been completed, the first operating permit may be issued for a period not to exceed five (5) years.

(B) Whenever a release or a potential for release from a point source, water contaminant source, or wastewater treatment facility is permanently eliminated, the existing operating permit will be terminated upon verification by the department.

(C) Where a person has the permit responsibility for more than one (1) wastewater treatment facility, water contaminant source, or point source involving more than one (1) operating permit, the department may combine the billings by issuing all operating permits with the same expiration date. Each facility shall continue to operate under and be governed by the separate provisions of each individual permit.

(D) When a check used for an application fee is returned to the department as nonnegotiable, review of the application shall cease and the applicant be notified. No further action shall be taken on the application until the fees have been resubmitted in the form of a cashier's check or money order payable to the state of Missouri.

(E) Continuation of Expiring Permits.

1. The terms and conditions of an expired permit are continued automatically pending issuance of a new permit if—

A. The permittee has submitted a timely and sufficient application for a new permit under this rule; and

B. The department is unable, through no fault of the permittee, to issue a new permit before the expiration date of the previous permit.

2. Permits continued under paragraph (10)(E)1. remain fully effective and enforceable.

(11) Permits Transferable.

(A) Subject to section (3), a construction permit and/or operating permit may be transferred upon submission to the department of an application to transfer signed by the existing owner and/or continuing authority and the new owner and/or continuing authority. Until the time the permit is officially transferred, the original permittee remains responsible for complying with the terms and conditions of the existing permit. To receive a transfer permit, the new owner and/or continuing authority must complete an application and demonstrate to the department that the new organization is permanent and will serve as the continuing authority for the operation, maintenance, and modernization of the facility. The new owner and/or continuing authority shall be responsible for complying with the terms and conditions of the permit upon transfer.

(B) The department, within thirty (30) days of receipt of the application, shall notify the new applicant of its intent to revoke and reissue or transfer the permit.

(12) Closure of Treatment Facilities.

(A) Persons who cease operation or plan to cease operation of waste, wastewater, and sludge handling and treatment facilities shall close the facilities in accordance with a closure plan approved by the department.

(B) Operating permits under section (5) of this rule or under 10 CSR 20-6.015 are required until all waste, wastewater, and sludges have been disposed of in accordance with the closure plan approved under subsection (12)(A) of this rule.

(13) General Permits.

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

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

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

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

C. State highway systems; and

D. Any other appropriate division or combination of boundaries; and

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

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

B. Discharge the same types of wastes;

C. Require the same effluent limitations or operating conditions;

D. Require the same or similar monitoring; and

E. Are controlled more appropriately, in the opinion of the director, under a general permit than under individual permits.

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

(C) The director may require any person authorized by a general permit to apply for and obtain an individual operating permit. Any interested person may petition the director to take action under this subsection.

Cases where an individual operating permit may be required include, but are not limited to, the following:

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

2. The discharger is not in compliance with the conditions of the general operating permit; and

3. A Water Quality Management Plan containing requirements applicable to these point sources is approved.

(D) Any owner/operator authorized by a general permit may request to be excluded from the coverage of the general permit by applying for an individual permit. As indicated in section (2), the owner/operator shall submit, to the director, an application with reasons supporting the request. The request shall be granted by issuing any individual permit if the reasons cited by the owner/operator are adequate to support the request.

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

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

(14) Permit by Rule. The department shall petition the Clean Water Commission to reopen this rule for public review and comment on a five- (5-) year interval.

(A) Hydrostatic Testing. Persons discharging water used for the hydrostatic testing of new petroleum-related oil and gas pipelines and storage tanks in the state of Missouri may discharge to waters of the state without first obtaining a permit if the discharge is *de minimis* (less than one thousand (<1,000) gallons) or the person takes the following steps:

1. Notification. The owner/operator must notify the department in writing of its intent to conduct hydrostatic test discharge(s) under this rule at least thirty (30) days prior to the first such discharge. This requirement may be met by a one- (1-) time annual notification. Notice shall specify the source of water to be used in the hydrotest and shall identify the location(s) of the pipeline(s) and/or tank(s) to be tested.



2. Filing fee. Persons who intend to discharge in accordance with section (14) of this rule must pay a filing fee of twenty-five dollars (\$25) to the department with their notification above.

3. Discharge limits. The discharge must meet the following limits: <10 mg/l total petroleum hydrocarbons, <100 mg/l total suspended solids, and equal to or between 6.0 and 9.5 standard units pH.

4. Sampling and testing requirements. One (1) grab sample shall be taken per discharge during the first sixty (60) minutes of the discharge. The sample shall be analyzed for the pollutants limited by this rule. Sampling and analysis shall be performed in accordance with 10 CSR 20-7.015(9)(A). Total discharge volume shall be documented for each hydrostatic test discharge.

5. Analytical report. The owner/operator of the pipeline(s) and/or storage tank(s) on which the hydrostatic tests are performed shall submit an annual report summarizing each discharge, including date, time, test location, analytical results, and total discharge volume, in gallons, by October 28, of each year.

6. Exception reporting. If any of the sampling results from the hydrostatic test discharge show any violations of the following discharge limitations, written notification shall be made to the department within five (5) days of notification of analytical results. Notification shall indicate the date(s) of sample collection, the analytical results, and a statement concerning the revisions or modifications in management practices that are being implemented to address the violation of the limitation that occurred.

A. <10 mg/l total petroleum hydrocarbons.

B. <100 mg/l total suspended solids.

C. pH equal to or between 6.0 and 9.5 standard pH units.

7. General requirement. The hydrostatic testing water shall not contain dyes or have a visible sheen indicating the presence of petroleum products.

8. Any person who irrigates wastewater from a hydrostatic test may do so under this rule if the notification, filing fee, and annual reporting requirements of paragraphs (4)(A)1., 2., and 4. are met and the irrigation does not result in any discharge to waters of the state. The quality of the irrigated wastewater is not required to meet the limits stated in paragraph (14)(A)6. of this rule.

9. The quality of wastewater from a hydrostatic test that is discharged directly to the Mississippi or Missouri Rivers must meet the limits stated in paragraph (14)(A)6. of

this rule with the exception of pH which shall be within a range between 6 and 10.

(B) The department may require a permit for these discharges if it determines that requiring a permit may better protect the quality of waters of the state.

(C) The person(s) discharging under this rule may apply for a permit at any time.

(D) This rule does not supersede nor eliminate liability for compliance with county and other local ordinances.

(E) Persons discharging under this rule are not required to obtain a separate permit to construct and operate an oil-water separator to aid in meeting limits for hydrostatic wastewater.

(F) The department shall maintain records open to the public on all persons claiming coverage under permit by rule. Appeals of permits in accordance with 10 CSR 20-6.020(6) may be received by the department up to thirty (30) days from the date the department received notice from the discharger.

AUTHORITY: sections 640.710 and 644.026, RSMo 2000. Original rule filed June 6, 1974, effective June 16, 1974. Rescinded: Filed Oct. 16, 1979, effective July 10, 1980. Readopted: Filed Feb. 4, 1980, effective July 11, 1980. Amended: Filed Sept. 8, 1981, effective Feb. 11, 1982. Amended: Filed Nov. 10, 1982, effective May 12, 1983. Amended: Filed Sept. 11, 1984, effective March 12, 1985. Amended: Filed Feb. 1, 1988, effective June 13, 1988. Amended: Filed Sept. 13, 1988, effective Feb. 14, 1989. Amended: Filed July 15, 1991, effective Jan. 13, 1992. Amended: Filed March 1, 1996, effective Nov. 30, 1996. Amended: Filed Nov. 3, 1997, effective July 30, 1998. Amended: Filed May 15, 2003, effective Jan. 30, 2004. Amended: Filed May 12, 2008, effective Feb. 28, 2009. Amended: Filed March 16, 2009, effective Dec. 30, 2009. Emergency amendment filed July 14, 2011, effective Oct. 31, 2011, expired April 27, 2012. Amended: Filed July 14, 2011, effective April 30, 2012.*

**Original authority: 640.710, RSMo 1996 and 644.026, RSMo 1972, amended 1973, 1987, 1993, 1995, 2000.*

Op. Atty. Gen. No. 53, Lafser (1-26-79). The point source discharges of pollutants from federal facilities within the state of Missouri are subject to the same NPDES program requirements as are any other point source discharges of pollutants subject to the Missouri Clean Water Law and regulations.

Op. Atty. Gen. No. 156, Wilson (8-18-76). The initial responsibility for issuing Clean Water Commission permits under section 204.051, RSMo Supp. 1975 rests with the

director of the Department of Natural Resources acting in his/her capacity of administering Department of Natural Resources programs relating to environmental control and executing policies established by the Clean Water Commission.

10 CSR 20-6.011 Fees

PURPOSE: This regulation explains how the Department of Natural Resources implements fees authorized by the Missouri Clean Water Law. It sets the procedures for collection of fees from permit holders. Fees are collected for state operating permits, several permits, and construction permits. An appendix to the rule reflects the range of fees that is established under the Missouri Clean Water Law.

(1) Fees—General.

(A) Until December 31, 2014, all persons who build, erect, alter, replace, operate, use, or maintain wastewater treatment facilities shall pay the appropriate fees as designated in sections 644.051 to 644.057, RSMo. Pursuant to section 644.057, RSMo, beginning on January 1, 2015, such persons shall pay the appropriate fees prescribed by this rule (see Appendix A).

(B) Definitions.

1. Adjusted design flow. The actual average wastewater flow from a human sewage treatment system. If the average flow is sixty percent (60%) or less than the system's design flow, the average flow may be substituted for the design flow when calculating the permit fee on human sewage treatment facilities in Appendix A of this rule.

2. Definitions as set forth in the Missouri Clean Water Law and 10 CSR 20-2.010 shall apply to those terms when used in this regulation.

3. Human sewage. Human excreta and wastewater, including bath and toilet waste, residential laundry waste, residential kitchen waste, and other similar waste from household or establishment appurtenances.

4. Industrial process wastewater. This term as used in section 644.052, RSMo means any water, including storm water, that is regulated under 10 CSR 20-6.200, during manufacturing or processing, which comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, by-product or waste product.

5. Privately-owned treatment works. A treatment works serving a residential area, restaurant, commercial concern, or other operation that only produces domestic sewage as defined in section 701.025, RSMo.

(C) The fees referenced in subsection (1)(A)



shall be paid by check, money order, or credit card, made payable to the state of Missouri. In the event a check used for the payment of operating fees is returned to the department marked insufficient funds, the person forwarding the check shall be given fifteen (15) days to correct the insufficiency. If payment has not been corrected after fifteen (15) days, the person may be referred to the attorney general's office and assessed late penalties, pursuant to section 644.055, RSMo. When a check used for the payment of a construction fee is returned to the department marked insufficient funds, review of the application shall cease and the applicant shall be notified. If the insufficiency is not corrected after ten (10) days, the application shall be returned as incomplete.

(D) Annual operating fees shall be submitted to: Department of Natural Resources, Water Protection Program, PO Box 176, Jefferson City, MO 65102 and construction fees shall be submitted with the application for the construction permit to Department of Natural Resources, Water Protection Program, PO Box 176, Jefferson City, MO 65102.

(E) Each payment shall identify the following: National Pollutant Discharge Elimination System (NPDES) permit number, payment period, and applicant, or the permittee name and address. Persons who own or operate more than one (1) facility may submit one (1) check to cover all annual permit fees, but are responsible for submitting the appropriate information to allow proper credit of each permit account.

(F) Annual fees shall be paid in full on their due date as defined in section (2) and subsections (3)(A) and (4)(A). Permittees who only discharge intermittently, seasonally or for a short period of time must pay the entire annual fee. Fees are annual fees and may not be prorated. In the event the discharge is eliminated, the permittee is responsible for requesting termination of the permit. When permits are revoked or denied, the annual fees are forfeited. It is unlawful to discharge water contaminants into waters of the state without a permit.

(G) Annual fees are the responsibility of the permittee. Failure to receive a statement due to mailing errors, change of address, ownership changes or other reason(s) is not an excuse for failure to remit the fees. Penalties shall be charged as provided in section 644.055, RSMo.

(2) Fees—Amounts.

(A) Persons with operating permits, including but not limited to site-specific permits, general permits, or permits by rule issued pursuant to this chapter shall pay fees

pursuant to subsections (B) to (F) of this section. Persons with a sewer service connection to public sewer systems owned or operated by a city, public sewer district, public water district, or other publicly owned treatment works shall pay fees pursuant to subsection (G) of this section. Persons requesting a permit modification shall pay fees pursuant to subsection (H) of this section. Persons requesting water quality certification shall pay fees pursuant to subsection (I) of this section. Persons requesting an anti-degradation review shall pay fees pursuant to subsection (J) of this section. Persons requesting a construction permit shall pay fees pursuant to subsection (K) of this section.

(B) A privately owned treatment works or an industry which treats only human sewage shall annually pay a fee based upon the design flow of the facility as follows:

1. One hundred fifty dollars (\$150) if the design flow is less than five thousand (5,000) gallons per day;

2. Three hundred dollars (\$300) if the design flow is equal to or greater than five thousand (5,000) gallons per day but less than ten thousand (10,000) gallons per day;

3. Six hundred dollars (\$600) if the design flow is equal to or greater than ten thousand (10,000) gallons per day but less than fifteen thousand (15,000) gallons per day;

4. One thousand dollars (\$1,000) if the design flow is equal to or greater than fifteen thousand (15,000) gallons per day but less than twenty-five thousand (25,000) gallons per day;

5. One thousand five hundred dollars (\$1,500) if the design flow is equal to or greater than twenty-five thousand (25,000) gallons per day but less than thirty thousand (30,000) gallons per day;

6. Three thousand dollars (\$3,000) if the design flow is equal to or greater than thirty thousand (30,000) gallons per day but less than one hundred thousand (100,000) gallons per day.

7. Four thousand dollars (\$4,000) if the design flow is equal to or greater than one hundred thousand (100,000) gallons per day but less than two hundred fifty thousand (250,000) gallons per day; or

8. Five thousand dollars (\$5,000) if the design flow is equal to or greater than two hundred fifty thousand (250,000) gallons per day.

(C) Persons who produce industrial process wastewater which requires treatment and who apply for or possess a site-specific permit shall annually pay—

1. Five thousand dollars (\$5,000) if the industry is a class IA concentrated animal

feeding operation as defined by the commission; or

2. For facilities issued operating permits based upon categorical standards pursuant to the Federal Clean Water Act and regulations implementing such act:

A. Four thousand two hundred dollars (\$4,200) if the design flow is less than one (1) million gallons per day; or

B. Five thousand dollars (\$5,000) if the design flow is equal to or greater than one (1) million gallons per day.

(D) Persons who apply for or possess a site-specific permit solely for industrial storm water shall pay an annual fee of:

1. One thousand eight hundred dollars (\$1,800) if the design flow is less than one (1) million gallons per day; or

2. Two thousand eight hundred dollars (\$2,800) if the design flow is equal to or greater than one (1) million gallons per day.

(E) Persons who produce industrial process wastewater who are not included in subsections (2)(C) or (2)(D) of this section shall annually pay—

1. One thousand eight hundred dollars (\$1,800) if the design flow is less than one (1) million gallons per day; or

2. Three thousand dollars (\$3,000) if the design flow is equal to or greater than one (1) million gallons per day.

(F) Persons who apply for or possess a general permit or permit by rule shall pay—

1. For the discharge of storm water from a land disturbance site—

A. Five hundred dollars (\$500) if the site is at least one (1) acre and less than five (5) acres;

B. Six hundred dollars (\$600) if the site is equal to or greater than five (5) acres but less than ten (10) acres;

C. Seven hundred fifty dollars (\$750) if the site is equal to or greater than ten (10) acres but less than twenty-five (25) acres;

D. One thousand five hundred dollars (\$1,500) if the site is equal to or greater than twenty-five (25) acres but less than one hundred (100) acres;

E. Three thousand dollars (\$3,000) if the site is equal to or greater than one hundred (100) acres but less than five hundred (500) acres; or

F. Five thousand dollars (\$5,000) if the site is equal to or greater than five hundred (500) acres; and

G. Any permit issued to a public agency or private party for multiple sites shall pay a single fee based upon the estimated acreage of all the sites as follows:

(I) One thousand five hundred dollars (\$1,500) if the sites are less than one hundred (100) acres;



(II) Three thousand dollars (\$3,000) if the sites are equal to or greater than one hundred (100) acres but less than five hundred (500) acres; or

(III) Five thousand dollars (\$5,000) if the sites are equal to or greater than five hundred (500) acres;

2. One hundred dollars (\$100) annually for the operation of a chemical fertilizer or pesticide facility;

3. For the operation of an animal feeding operation or a concentrated animal feeding operation—

A. Five thousand dollars (\$5,000) per year for a national pollutant discharge elimination system permit or a Missouri state operating permit for a class IA concentrated animal feeding operation as defined by the commission;

B. Four hundred fifty dollars (\$450) per year for a national pollutant discharge elimination system permit for a class IB concentrated animal feeding operation as defined by the commission;

C. Three hundred fifty dollars (\$350) per year for a national pollutant discharge elimination system permit for a class IC or class II concentrated animal feeding operation as defined by the commission;

D. Three hundred dollars (\$300) per year for a Missouri state operating permit for a class IB concentrated animal feeding operation as defined by the commission; or

E. One hundred fifty dollars (\$150) per year for a Missouri state operating permit for a class IC or class II concentrated animal feeding operation as defined by the commission;

4. Two hundred fifty dollars (\$250) annually for the discharge of storm water from a municipal separate storm sewer system (MS4);

5. Three hundred dollars (\$300) annually for the operation of an aquaculture facility;

6. For discharging publicly owned treatment works which treats only human sewage shall annually pay the fee in subsection (G) based upon the number of service connections to the facility;

7. One hundred fifty dollars (\$150) annually for a permit by rule and for a pesticide applicator permit.

8. Two hundred dollars (\$200) annually for a permit for the discharge of process water or storm water, potentially contaminated by activities not included in paragraphs 1. to 7. of this subsection.

(G) Persons with a direct or indirect sewer service connection to a public sewer system owned or operated by a city, public sewer district, public water district, other publicly owned treatment works, or any district formed

pursuant to the provisions of section 30(a) of Article VI of the *Missouri Constitution* shall pay an annual fee per water service connection as provided in this subsection. Customers served by multiple water service connections shall pay such fee for each water service connection, except that no single facility served by multiple connections shall pay more than a total of seven hundred dollars (\$700) per year. The fees provided for in this subsection shall be collected by the agency billing such customer for sewer service and remitted to the department. The fees may be collected in monthly, quarterly, or annual increments, and shall be remitted to the department no less frequently than annually. The fees collected shall not exceed the amounts specified in this subsection and, except as provided in paragraph 7. of this section, shall be collected at the specified amounts unless adjusted by the commission in rules. The annual fees shall be—

1. For customers of sewer systems that serve more than thirty-five thousand (35,000) customers, forty-eight cents (\$0.48);

2. For customers of sewer systems that serve equal to or less than thirty-five thousand (35,000) but more than twenty thousand (20,000) customers, sixty cents (\$0.60);

3. For customers of sewer systems that serve equal to or less than twenty thousand (20,000) but more than seven thousand (7,000) customers, seventy-two cents (\$0.72); or

4. For customers of sewer systems that serve equal to or less than seven thousand (7,000) customers, eighty cents (\$0.80);

5. Three dollars and forty-two cents (\$3.42) for commercial or industrial customers not served by a public water system as defined in Chapter 640;

6. Three dollars (\$3) per water service connection for all other customers with water service connections of less than or equal to one (1) inch excluding taps for fire suppression and irrigation systems;

7. Eleven dollars (\$11) per water service connection for all other customers with water service connections of more than one (1) inch but less than or equal to four (4) inches, excluding taps for fire suppression and irrigation systems; or

8. Twenty-nine dollars (\$29) per water service connection for all other customers with water service connections of more than four (4) inches, excluding taps for fire suppression and irrigation systems.

(H) For the purpose of permit modification fees, non-substantive changes are those listed as minor modifications in 40 CFR section 122.63. Persons requesting modifications to state operating permits that charge a service

connection fee shall pay two hundred dollars (\$200). Persons requesting a modification to an operating permit shall pay:

1. One hundred dollars (\$100) for name changes, address changes, or other non-substantive changes, or for a modification of a general permit; or

2. A fee equal to twenty-five percent (25%) of the annual operating fee assessed for the facility for other changes;

(I) Persons requesting water quality certifications in accordance with Section 401 of the Federal Clean Water Act shall pay a fee of—

1. One hundred fifty dollars (\$150) for a project that requires a Finding of No Significant Impact or other documentation pursuant to the federal National Environmental Policy Act, but does not require an environmental impact statement; or

2. One thousand five hundred dollars (\$1,500) for a project that does require an environmental impact statement, pursuant to the federal National Environmental Policy Act. Applicants shall submit the standard application form for a Section 404 permit as administered by the U.S. Army Corps of Engineers or similar information required for other federal licenses and permits, except that the fee is waived for water quality certifications issued to and accepted by the U.S. Army Corps of Engineers for activities authorized pursuant to a general permit or nationwide permit issued pursuant to section 404 of the federal Clean Water Act.

(J) Persons applying for an anti-degradation review shall pay a fee as follows:

1. Two hundred fifty dollars (\$250) for an anti-degradation review or a water quality review analysis for an existing wastewater treatment plant that will be upgraded;

2. Five hundred dollars (\$500) for an anti-degradation review for a new wastewater treatment plant if the design flow is less than one hundred thousand (100,000) gallons per day; or

3. One thousand dollars (\$1,000) for an anti-degradation review for a new wastewater treatment plant if the design flow is equal to or more than one hundred thousand (100,000) gallons per day;

(K) Persons applying for a construction permit shall pay fee as follows. The applicant shall pay only the highest appropriate fee pursuant to paragraphs 1. to 3. of this subsection, regardless of the extent of additional planned construction as part of the same application.

1. One thousand dollars (\$1,000) for a construction permit for a wastewater treatment plant if the design flow is less than five hundred thousand (500,000) gallons per day;



2. Three thousand dollars (\$3,000) for a construction permit for a wastewater treatment plant if the design flow is equal to or more than five hundred thousand (500,000) gallons per day; or

3. Three hundred dollars (\$300) for a construction permit for a sewer extension of more than one thousand feet (1,000 ft) in length or have two (2) or more lift stations.

(L) Persons applying for a variance shall pay a fee of two hundred fifty dollars (\$250).

(3) Operating Fees.

(A) All persons who are subject to fees under section 644.052.2, 644.052.4, or 644.052.5, RSMo, shall remit their first annual fee with their original application and pay an annual fee each year on the anniversary date of their permit. Permittees with permits in effect at the time these sections become effective shall remit annual fees on the anniversary date of the permit. Persons whose permit is renewed during the duration of these fees shall submit a renewal application one hundred eighty (180) days before their permit expires, but the annual fee shall be paid on the anniversary date. The permit issue date that was in effect on October 1, 1990 shall be the anniversary date during the effective period of section 644.052, RSMo.

(B) Persons with a direct or indirect sewer service connection to a public sewer system owned or operated by a city, public sewer district, public water district, or other publicly-owned treatment works, shall pay an annual fee per water service connection. Customers served by multiple water service connections shall pay such fee for each water service connection, except that no single facility served by multiple connections shall pay more than seven hundred dollars (\$700) per year. The fees provided for in this subsection shall be collected by the agency billing such customer for sewer service and remitted to the department. The fees may be collected in monthly, quarterly, or annual increments, and shall be remitted to the department no less frequently than annually.

(C) Five percent (5%) of the fees collected pursuant to subsections (2)(B) and (C) of this rule shall be retained by the city, public sewer district, public water district, or other publicly-owned treatment works as reimbursement of billing and collection expenses.

(D) All persons who require permits, other than a general permit, for facilities that do not normally discharge such as land application facilities, sludge disposal facilities, agricultural facilities, and no-discharge facilities are subject to fees as follows:

1. Fees are based on the design flow of the wastewater being handled; and

2. Fees for sludge or solids disposal facilities are based on the combined total design flow of the wastewater treatment facilities from which the sludge or solids are removed.

(4) General Permits and Fees.

(A) Persons with more than one (1) point source shall obtain a general permit for each point source or specific area. Where there are multiple releases from a single operating location, however, one (1) application may cover all facilities and releases.

(B) The department may issue general permits for the following types of discharges: storm water releases from limestone quarries; hydrostatic pressure checks of pipelines, tanks and related equipment; potable water treatment plants; private trout farms or hatcheries for flow through spring water; swimming pool discharges; emergency spill cleanup sites; storm water releases from facilities that store less than fifty thousand (50,000) gallons of petroleum with no other wastewater; storm water releases from municipalities and industries; domestic wastewater treatment facility with a flow of less than fifty thousand gallons per day (50,000 gpd), and clay pits or gravel washing operations.

(C) The department may issue general permits for the following types of discharges within a given specific area: storm water release points owned or operated by a utility company (a permit will be issued for each county, or the City of St. Louis, in which the utility operates); intermittent releases from the maintenance dredging of lakes owned or controlled by a city, local unit of government, or home owners association within their boundaries.

(5) Construction Fees.

(A) Construction permit fees shall be tendered together with the construction permit application. Incomplete construction permit applications and related engineering documents will be returned by the department if they are not completed in the time frame established by the department in a comment letter to the owner. Construction permit fees for returned applications shall be forfeited.

(B) Application fees for construction applications being processed by the department that are withdrawn by the applicant shall be forfeited.

(C) Fees for construction permit applications for modification to an existing sewage treatment plant shall be based on the design flow of the plant after the modifications are completed.

AUTHORITY: section 644.054, RSMo Supp. 2013. Emergency rule filed July 27, 1990,*

effective Sept. 12, 1990, expired Jan. 10, 1991. Original rule filed July 17, 1990, effective Dec. 31, 1990. Amended: Filed July 15, 1991, effective Jan. 13, 1992. Amended: Filed Nov. 22, 1991, effective May 14, 1992. Amended: Filed Nov. 9, 2000, effective July 30, 2001. Amended: Filed Sept. 16, 2013, effective May 30, 2014.

**Original authority: 644.054, RSMo 1990, amended 1994, 2000, 2006, 2009, 2010, 2011, 2013.*

10 CSR 20-6.015 No-Discharge Permits

PURPOSE: This rule sets forth the requirements and process of application for nondischarging facility permits and the terms and conditions of the authorizations.

(1) Definitions.

(A) Definitions as set forth in the Missouri Clean Water Law and 10 CSR 20-2.010 shall apply to those terms when used in this regulation.

(B) Other applicable definitions are as follows:

1. Biosolids. An organic fertilizer or soil amendment produced by the treatment of wastewater sludge;

2. Catastrophic storm. A precipitation event of twenty-four (24)-hour duration or less that exceeds the twenty-five (25)-year, twenty-four (24)-hour storm event;

3. Chronic storm event. A precipitation event with a duration of more than twenty-four (24) hours that exceeds the one-in-ten (1 in 10)-year return frequency;

4. *De minimis* source. A waste or wastewater source, or a facility for treatment or disposal of process wastes, that is determined by the department to pose a negligible potential impact on waters of the state even in the event of the malfunction of wastewater treatment controls;

5. Land application facility. A facility where process wastes are land applied or stored for subsequent land application, including land treatment basins;

6. Land treatment basin. An earthen impoundment that provides land treatment of wastewater by allowing wastewater percolation through the soil at controlled rates which exceed the allowable percolation rates under the pond sealing requirements in 10 CSR 20-8.020 and 10 CSR 20-8.200;

7. No-discharge facility. A facility designed, constructed and operated to meet each of the following conditions:

A. To hold or irrigate, or otherwise dispose without discharge to surface or subsurface waters of the state, all process wastes and associated storm water flows except for



discharges that are caused by catastrophic and chronic storm events;

B. Process wastes are not land applied during frozen, snow covered or saturated soil conditions; and

C. Basins are sealed in accordance with 10 CSR 20-8 and there are no subsurface releases in violation of 10 CSR 20-7.015 or section 577.155, RSMo;

8. One-in-ten (1-in-10)-year precipitation. The wettest precipitation expected once every ten (10) years for a three hundred sixty-five (365)-day period, based on at least thirty (30) years of records from the National Climatic Data Center;

9. Operating location. All contiguous lands owned, operated or controlled by one (1) person or by two (2) or more persons jointly or as tenants in common or noncontiguous lands if they use a common area for the disposal of wastes. State and county roads are not considered property boundaries for the purposes of this rule;

10. Process wastes. The waste, wastewater, sludges, biosolids and residuals originating from sanitary conveniences, or generated during manufacturing or processing, or results from the production or use of any raw material, intermediate product, finished product, by-product, or waste product and includes discharges from land application fields that occur as a result of the land application process;

11. Septage. Septage is domestic wastewater sewage sludge that is removed from septic tanks or similar treatment works, including domestic wastewater treatment works serving up to one hundred fifty (150) persons;

12. Site-specific permit. An operating permit that is developed with limitations based on a case-by-case review of site-specific conditions;

13. Sludge. The solid, semisolid or liquid residue removed during the treatment of wastewater. Sludge includes septage removed from septic tanks; and

14. Twenty-five (25)-year, twenty-four (24)-hour rainfall. The wettest precipitation event for a twenty-four (24)-hour period with a probable recurrence interval of once in twenty-five (25) years based on at least thirty (30) years of records from the National Climatic Data Center.

(2) General.

(A) All persons who build, erect, alter, replace, operate, use or maintain water contaminant sources, point sources facilities for storage, treatment, land application or disposal of process wastes which are designed, constructed and operated so as not to dis-

charge to waters of the state or will have infrequent discharges shall apply for construction and operating permits unless exempted under section (3) of this rule.

(B) Nothing shall prevent the department from taking action to assure that facilities do not discharge into waters of the state, including requiring permits for facilities normally exempted under this rule. Permits may be required where necessary to protect the environment, including the following:

1. To correct noncompliance;

2. To ensure when the department has determined that construction or operating practices are not adequate, that the facility will be operated in a no-discharge manner;

3. To require, by departmental determination from an on-site visit, that construction and operating permits are necessary for special operating controls or monitoring and reporting of site-specific conditions such as groundwater effects, surface runoff, waste or wastewater characteristics, topography, geology, watershed factors or land application loading rates;

4. When an unauthorized discharge has occurred or has the potential to occur;

5. When a discharge results in violation of water quality standards under 10 CSR 20-7.031; or

6. Other relevant factors.

(3) Exemptions.

(A) *De minimis* Exemption. Persons may apply to the department for an exemption as a *de minimis* source for operations that will not discharge or will have a negligible environmental impact. The department shall make a determination on a case-by-case basis. This determination shall consider the potential for releases to surface water and groundwater of contaminants in concentrations exceeding background water quality levels or limitations in the water quality standards rule under 10 CSR 20 Chapter 7. Testing of total and leachable concentrations of pollutants as compared to background levels in soils and/or waters of the state shall be submitted as determined necessary by the department.

(B) The following are exempt from no-discharge permit requirements unless required under subsection (2)(B):

1. Nonpoint sources;

2. Land application of composts and mulches in normal farming operations or horticulture operations provided that the compost does not contain more than five percent (5%) sewage sludge or industrial sludge;

3. Land application sites for beneficial use of water treatment plant residues removed during the treatment of drinking water sup-

plies provided that aluminum or other potentially phytotoxic compounds are not present in the residues in concentrations which would result in chronic toxicity to plants or animals. This exemption does not apply to treatment or storage facilities;

4. Nondischarging facility for the handling, use or disposal of solid wastes that holds a valid permit issued under the Missouri Solid Waste Management Law and regulations in accordance with 10 CSR 80 or the Missouri Hazardous Waste Management Law and regulations in accordance with 10 CSR 25;

5. Animal feeding operations. Requirements for animal feeding operations are contained in 10 CSR 20-6.300;

6. Nondischarging facilities for domestic wastewater flows of three thousand gallons per day (3,000 gpd) or less;

7. Composting sites of less than two (2) acres when sludges are less than five percent (5%) of the compost mix and from which no storm water is discharged except during a chronic or catastrophic storm event. Other storm water discharges are regulated under 10 CSR 20-6.200;

8. Products containing or derived from sludges, biosolids or other process wastes when such products are licensed under the Missouri Fertilizer Law, sections 266.291 through 266.351, RSMo and regulations and the products do not exceed pollutant standards for protection of public health and the environment as established by the department. To receive this exemption, the manufacturer or distributor shall submit an initial report to the department on the pollutant content of the product and shall file periodic monitoring reports as determined necessary by the department;

9. Single family residences;

10. Internal plumbing and piping or other water diversion or retention structures within a manufacturing or industrial plant or mine, which are an integral part of the industrial or manufacturing process or building or mining operation. This exemption does not include lagoon, ponds or earthen impoundments which receive any process wastes;

11. Small scale pilot projects or demonstration projects for beneficial use that do not exceed a period of one (1) year may be exempted by written project approval from the permitting authority. The department may extend the permit exemption for up to one (1) additional year after review of the first year's results. A permit application shall be submitted at least ninety (90) days prior to end of the demonstration period if the facility intends to continue operation, unless otherwise exempted under this rule or Chapter 6;



12. An operating permit is not required for process waste holding structures from which the contents are hauled to a permitted treatment or disposal facility, if the owner has a written contract with the hauler and approval from the receiving facility;

13. Contract haulers are not required to have a permit under this rule if all waste is hauled to a permitted facility;

14. Other exemptions as may be prescribed in a general permit issued by the department in accordance with 10 CSR 20 Chapter 6;

15. The placement of uncontaminated soil, rock, sand, gravel, concrete, cinder blocks, bricks, recycled asphaltic pavement, and minimal amounts of wood and metal which are removed by demolition or construction activities and used as fill for construction projects; provided that placement of such material does not violate water quality standards as stated in 10 CSR 20-7.031. Storm water discharges may be regulated under 10 CSR 20-6.200; and

16. The placement of material, other than those listed in paragraph (3)(B)15., which are exempt as clean fill or beneficial use under the Missouri Solid Waste Management Law and regulations, provided the material is not placed in contact with surface or subsurface waters of the state. Storm water discharges may be regulated under 10 CSR 20-6.200.

(4) Permits.

(A) Permits required by this rule shall be issued in accordance with permit application and processing procedures contained in 10 CSR 20-6.010, 10 CSR 20-6.011, 10 CSR 20-6.020 and 10 CSR 20-6.200.

(B) Design Standards.

1. Facilities shall be constructed and operated in accordance with the rules under 10 CSR 20 Chapter 7 and Chapter 8. Exceptions or deviations may be considered by the department when determined appropriate based upon site-specific factors.

2. Where standards are not available, an engineering report addressing all available environmental data concerning potential pollutants and toxic substances shall be submitted in accordance with 10 CSR 20-8.020(3)(D), 10 CSR 20-8.020(15)(F), 10 CSR 20-8.110 and 10 CSR 20-7.031(4)(B).

3. Pollutant limitations for land application of sludge or biosolids shall conform to 10 CSR 20-7.015(9)(F).

4. Potential pollutant movement to groundwater shall not exceed the limitations in the water quality standards rule under 10 CSR 20-7.031 and the effluent rule under 10 CSR 20-7.015.

5. Groundwater monitoring may be required, where determined appropriate by the department, at land disposal sites or land application sites that receive pollutants in excess of beneficial use limitations or has potential for excess migration of pollutants to waters of the state. Monitoring wells shall be installed in accordance with monitoring well construction standards under 10 CSR 23, Chapter 4.

6. Hazardous waste shall not be land applied or disposed except in accordance with the Missouri Hazardous Waste Management Law and regulations under 10 CSR 25.

(C) Permit Conditions.

1. The department shall develop permit conditions containing limitations, monitoring, reporting and other requirements to protect soils, crops, surface waters, groundwater, public health and the environment.

2. The department may establish standard permit conditions and best management practices for land application facilities by following the public participation procedures under 10 CSR 20-6.020.

3. The department may establish a general permit for a category of similar facilities in accordance with 10 CSR 20-6.010(13).

4. Noncontiguous land application sites may be included in the operating permit for a process waste generator or contract hauler as determined appropriate by the department.

5. Whenever feasible or appropriate, all operating permit requirements under 10 CSR 20 Chapter 6 rules shall be incorporated into a single operating permit for each operating location.

6. Applications for permits shall include an engineer's seal affixed to all engineering plans and engineering certifications.

7. A water balance barrel test conducted in accordance with 10 CSR 20-8.020(16) shall be required for lagoons or earthen impoundments receiving industrial wastes, and engineering certification of the constructed seal shall be submitted as part of the operating permit application.

(5) Closure of Waste Storage Structures.

(A) No-discharge facilities that cease operation, or plan to close lagoons and other waste storage structures, shall comply with the following requirements:

1. Facilities which cease operation shall continue to maintain a valid operating permit until all lagoons and waste storage structures are properly closed according to a closure plan approved by the department; and

2. Facilities that are exempted from permits under this rule and that cease operation shall either close the waste storage structures in accordance with subsection (5)(B) of this

rule or shall continue to maintain all storage structures so that there is not a discharge to waters of the state.

(B) Closure Requirements. Lagoons and waste storage structures shall be closed by removal and land application of all wastewater and sludges, or in accordance with an alternate closure plan approved by the department. The removed wastewater and sludges shall be land applied at normal agricultural rates for nitrogen fertilizer not to exceed the maximum nitrogen utilization of the vegetation grown and shall be applied at controlled rates so that there will be no discharge to waters of the state. After removal and proper land application of wastewater and sludge, the earthen basins may be—

1. Demolished by removing the berms, grading and revegetation of the site so as to provide erosion control; or

2. Left in place for future use as a farm pond or similar uses or reserved for future use as a waste storage structure. To prevent damage to the bottom seal due to drying and weed growth, earthen basins shall be refilled with fresh water as soon as possible and water depths of three feet (3') or more should be maintained.

AUTHORITY: section 644.026, RSMo Supp. 1997. Original rule filed July 15, 1991, effective Jan. 13, 1992. Amended: Filed June 1, 1995, effective Jan. 30, 1996. Amended: Filed Nov. 3, 1997, effective July 30, 1998.*

**Original authority: 644.026, RSMo 1972, amended 1973, 1987, 1993, 1995.*



MISSOURI DEPARTMENT OF NATURAL RESOURCES
CLEAN WATER COMMISSION
APPLICATION FOR LETTER OF APPROVAL
(NO-DISCHARGE FACILITY)

P.O. BOX 178
JEFFERSON CITY, MO 65102

TYPE APPLIED FOR

- CONSTRUCTION
- OPERATING
- OWNERSHIP TRANSFER

CONSTRUCTION APPLICATION: Complete part I of this form.
OPERATING APPLICATION: Complete parts I and II of this form. **OWNERSHIP TRANSFER:** Complete part I of this form.

PART I

1. FACILITY NAME:	TELEPHONE NUMBER
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ADDRESS	CITY	STATE	ZIP CODE
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2. FACILITY LOCATION 1/4. 1/4. Sec Twp. Rge. County

3. OWNER	TELEPHONE NUMBER
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ADDRESS	CITY	STATE	ZIP CODE
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4. OPERATING AUTHORITY NAME:	TELEPHONE NUMBER
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ADDRESS	CITY	STATE	ZIP CODE
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5. CHECK ONE OF THE FOLLOWING: NEW FACILITY, EXPANSION OF EXISTING OPERATION, CHANGE FROM DISCHARGE TO NO-DISCHARGE
 OTHER EXPLAIN: _____
 IF AN EXISTING OPERATION OR EXPANSION, WRITE IN CURRENT APPROVAL OR PERMIT NO _____

6. BRIEF DESCRIPTION OF FACILITIES (IF ADDITIONAL SPACE IS REQUIRED, ATTACH ANOTHER SHEET.) _____

7. ATTACH ALL PERTINENT DESIGN INFORMATION, INCLUDE DETAILED PLANS AND SPECIFICATIONS, AND MANAGEMENT PLANS. (SEE INSTRUCTIONS SHEET)

8. I CERTIFY THAT I AM FAMILIAR WITH THE INFORMATION CONTAINED IN THE APPLICATION AND ATTACHMENTS, AND THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF SUCH INFORMATION IS TRUE, COMPLETE, AND ACCURATE, AND IF GRANTED THIS LETTER OF APPROVAL, I AGREE TO ABIDE BY ALL REGULATIONS OF THE MISSOURI CLEAN WATER COMMISSION. I UNDERSTAND THAT A LETTER OF APPROVAL DOES NOT AUTHORIZE WASTEWATER DISCHARGES TO WATERS OF THE STATE.

PRINT NAME	APPLICANT'S SIGNATURE	DATE
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APPLICANTS REQUESTING OPERATING APPROVAL ALSO MUST COMPLETE THE FOLLOWING SECTION

PART II

1. CONSTRUCTED UNDER CONSTRUCTION PERMIT OR APPROVAL NO. _____
(WRITE "NONE" IF CONSTRUCTION APPROVAL WAS NOT OBTAINED.)

2. IF THE ANSWER TO ITEM 1 IS "NONE," COMPLETE ITEM 7 ON PART ONE

3. IF THE FACILITY CONSTRUCTED IS DIFFERENT FROM THE CONSTRUCTION APPROVAL, ATTACH "AS-BUILT" PLANS, INDICATE CHANGED PORTIONS, AND EXPLAIN THE REASONS FOR THE CHANGES.

4. CERTIFICATION:

I, THE PROJECT ENGINEER ON THE ABOVE-DESCRIBED FACILITIES, HEREBY CERTIFY THAT I HAVE INSPECTED THESE FACILITIES AND FIND THEM TO BE CONSTRUCTED ESSENTIALLY IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS AND RECOMMEND THEIR ACCEPTANCE AND APPROVAL BY THE MISSOURI CLEAN WATER COMMISSION. THIS CERTIFICATION INCLUDES THE FOLLOWING ITEMS

- A. LAGOONS OR STORAGE BASINS SEALED AND FIELD TESTED IN ACCORDANCE WITH GEOLOGIC REPORT AND DEPARTMENT OF NATURAL RESOURCES REGULATIONS;
- B. LAGOONS AND STORAGE BASINS FILLED WITH FRESH WATER TO MINIMUM OPERATING WATER LEVEL, AND BERMS SEEDED AND MULCHED;
- C. WATER-LEVEL-MEASUREMENT GAUGES INSTALLED;
- D. GROUND-WATER-MONITORING WELLS INSTALLED, IF REQUIRED IN CONSTRUCTION PLANS;
- E. LAND-APPLICATION SYSTEM INSTALLED AND FIELD TESTED, OR RENTAL AGREEMENTS SIGNED;
- F. OPERATING MANUAL AND RECORD-KEEPING SYSTEM DEVELOPED, AND TRAINING PROVIDED TO OWNER AND OPERATOR;
- G. OTHER CONDITIONS CONTAINED IN THE LETTER OF APPROVAL FOR CONSTRUCTION.

PROJECT ENGINEER'S SIGNATURE	DATE
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MC 780-0725 (4-88)

CWC 108 (4-86)



INSTRUCTIONS FOR LETTER OF APPROVAL APPLICATION FORM CWC 108

A filing fee is **not** required for a Letter of Approval.

The Letter of Approval application form is to be used for requesting approval of a no-discharge wastewater and sludge-management facility that has been designed to prevent discharge to waters of the state and provide beneficial use of the waste materials. To qualify for beneficial use, the land application of wastewater and sludge must not exceed agronomic rates.

For livestock-feeding operations, submit the application to the address shown on the application form. All other applications should be submitted to the appropriate regional office as shown on the current regional office map published by the Department of Natural Resources.

The application for Construction Letter of Approval shall consist of an application form, design plans and specifications, and management plans. The operating application shall include an application form and engineering certification that the project has been completed in accordance with approved plans or as-built plans.

1. Application Form

The application for Letter of Approval shall be on form CWC 108, provided by the Department of Natural Resources. All items on the form shall be completed and the application signed by the owner or legally authorized representatives.

2. Plans and Specifications Content

The construction application shall include proposed design plans. The operating application shall include as-built plans and construction-completion certification by a professional engineer or by the University Extension Service or the U.S. Soil Conservation Service.

Plans and specifications shall include the following information unless waived by the reviewing authority:

- a. Facility Classification: List Standard Industrial Classification (SIC) codes and certify that the wastes are not classed as hazardous waste
- b. Wastewater Flow and Sludge Production Volume
- c. Wastewater Characteristics Based on Laboratory Analysis
- d. Pretreatment Facility Design
- e. Storage Basin and Lagoon Design
- f. Geologic Report
- g. Lagoon and Storage Basin Sealing Procedures
- h. Application Site Information
 - (1) Topographic maps showing property boundaries and major features of the area and proposed facility
 - (2) Aerial photo from Agricultural Stabilization and Conservation Service
 - (3) Vegetation
 - (4) Soil Profile Data (This may be waived for domestic wastewater application rates less than 30 inches per acre per year)
 - (5) Facility layout plan to approximate scale of 1 inch = 100 ft. or less
- i. Application Rate:
 - (1) Hydraulic Loading: inches per acre per year, inches per hour (in/hr), inches per week (in/week), gallons per acre (gal/acre), dry tons per acre
- j. Distribution Design
 - (1) Pumping Equipment: gpm, head, power source, intake pipe
 - (2) Pipe Specs: diameter, head loss calculations, type of pipe, psi rating, buried or above ground
 - (3) Nozzle or gated pipe openings: diameter, gpm, psi, area/opening, total number openings, spacing
 - (4) Liquid and dry solids, or sludge-hauling and spreading equipment.

3. Management Plan Content

Management plans shall include the following minimum information:

- a. Ownership of the application area or lease agreements for non-owned land.
- b. Person responsible for operation of the application system
- c. Operating schedule for land application:
 - (1) Days per week and hours per day of application
 - (2) Record-keeping procedures
 - (3) Adjusted rates for rainfall and temperature
 - (4) Visual checks for runoff from the application site
 - (5) Supervision of equipment during operation
 - (6) Freeboard measurements on storage basin or lagoons
- d. Crop planting and harvesting schedule and person responsible
- e. Operation and maintenance on equipment
- f. Monitoring Requirement: (as applicable) rainfall, wastewater and sludge characteristics, soil tests, crop tissue analysis, and ground water

4. Transfer of Ownership

A construction Letter of Approval may **not** be transferred. An operating Letter of Approval may be transferred to a new owner if there have been no significant changes in the facility. To request a transfer, the new owner shall check the ownership transfer request block at the top of the application form, CWC 108, and complete Part I. A copy of the original Letter of Approval and the operating plans shall be attached to the application as evidence that the new owner has reviewed this information. Signature of the transfer application will be the new owner's certification that he has read and understands the operating requirements of the facility and that the wastewater loading and facility operation is substantially unchanged.

5. Engineering Certification

Part II, Item 4 of the application form contains a list of items that must be inspected and certified as completed in order to obtain a Letter of Approval for operation.

Exception. Partial certification or certification by subcontractors shall be attached to the application if consideration of these is requested due to special circumstances. Justification for exceptions must be provided and substantiated by as-built plans and operating manuals.



10 CSR 20-6.020 Public Participation, Hearings and Notice to Governmental Agencies

PURPOSE: This rule sets forth the procedures which the department will follow in providing opportunity for participation by the public and other governmental agencies during the permit issuing process. This rule clarifies the process. This rule also addresses the procedures for appeals to the Clean Water Commission from departmental actions.

(1) Public Participation.

(A) The department shall review applications for general permits, operating permits or the renewal of operating permits and other relevant facts to determine whether or not the permits should be issued. When all required and requested information has been received, the department shall prepare the following documents:

- 1. A draft operating permit containing the following elements:
A. Terms and conditions of the permit;
B. Effluent limitations, standards and other limitations;
C. Applicable compliance schedules;
and
D. Monitoring requirements; and

2. If the draft operating permit is for a major discharger as defined by the Environmental Protection Agency (EPA) or a general permit or if it incorporates any variances or modifications, or if the regional administrator or director finds it is the subject of widespread public interest, the department will prepare a fact sheet. The fact sheet shall include:

- A. A brief explanation of the express statutory or regulatory provisions on which permit requirements are based;
B. Any calculations or other necessary explanation of the derivation of specific effluent limitations and conditions, including a citation to the applicable guideline, development documents or standard provisions and reasons why they are applicable or an explanation of how the alternate effluent limitations were developed;
C. Where appropriate, a sketch or detailed description of the location of the discharge described in the application;
D. A quantitative description of the discharge described in the application and of the activities that lead to the discharge;
E. Reasons requested variances or modifications do or do not appear justified; and

F. Name and telephone number of a person who can provide additional information.

(B) A public notice of permit pending will be prepared by the department. There shall be a period of not less than thirty (30) days following the date of the public notice when interested persons may submit their written views on the proposed permit. The department will issue or deny the permit within sixty (60) days after all requirements of the Federal Clean Water Act, the Missouri Clean Water Law and those regulations concerning the issuance of permits have been satisfied.

(C) Public Notice for General Permits.

1. Public notice of newly created, or the reissuance of an existing statewide general permit shall be prepared by the department in accordance with subsections (1)(B) and (D) of this rule.

2. Public notification of the issuance of any general permit to an applicant will not be required, except for the following general permits:

- A. Airports;
B. Chemical manufacturing;
C. Fabricated structured metal;
D. Foundries;
E. Limestone and rock quarries;
F. Lubricant manufacturing;
G. Petroleum storage greater than fifty thousand (50,000) gallons; and
H. Wood treaters.

3. For issuance of the first general permit for any newly constructed water contaminant source, point source or wastewater treatment facility, public notification shall occur in accordance with subsections (1)(B) and (C) of this rule.

4. Reissuance of general permits to individual facilities shall not require public notification unless the facility was found to have been in significant noncompliance during the time of the previous permit.

5. As new general permits are created, the need for an individual facility public notification process shall be determined and identified in the general permit.

(D) The public notice of permit pending will contain at least the following:

- 1. Name, address, telephone number of the department and any other places at which interested persons may obtain further information, request copies of the draft permit and the fact sheet and inspect and copy related forms and documents;
2. Name and address of the applicant and address of the discharger if different from the applicant;
3. Brief description of the applicant's activities or operations which result in the

discharge or potential discharge described in the application;

4. Name of watercourse to which the applicant will discharge, a description of the location of the discharge and designation of the discharge as new or existing;

5. A statement of the tentative determination to issue a permit;

6. A brief description of the procedures for making final determination, including the thirty (30)-day comment period and any other means by which interested persons may influence or comment upon the making of the determinations; and

7. The name and address of the office processing the application.

(E) Notice will be circulated within the geographical areas of the proposed discharge; the circulation may include any or all of the following:

- 1. Posting in the post office and public places of the municipality nearest the proposed discharge; and
2. Posting near the entrance to the applicant's premises.

(F) The notice shall be mailed by the department to persons who have notified the department of their interest or who have requested the notice.

(G) The department, upon request, shall add the name of any person or group to a mailing list to receive copies of notices for all applications within the state.

(H) All relevant and material comments received pursuant to the public notice shall be given consideration by the department before making a final decision. When significant water quality concerns are raised during the comment period the department may hold a public meeting to discuss the applications. The department does not have jurisdiction to address questions of zoning, location, property values or other nonwater quality related items.

(2) Notice to Other Governmental Agencies. The department shall send a copy of the draft permit and accompanying fact sheet the United States Army Corps of Engineers, the United States Fish and Wildlife Service, the Missouri Department of Conservation and to all affected states.

(A) Each affected state shall be given an opportunity to submit written recommendations to the department and to the regional administrator which the department may incorporate into the permit if issued. If the department does not incorporate these recommendations, it shall send a written explanation to the affected states of the reasons for failing to accept them.



(B) If the appropriate district engineer of the Corps of Engineers advises the director, in writing, during the public comment period that anchorage and navigation of any of the waters of the United States would be substantially impaired by the granting of a permit, the permit shall be denied and the applicant so notified. If the district engineer advises the director that imposing specified conditions upon the permit is necessary to avoid any substantial impairment of anchorage or navigation, then the director shall include the specified conditions of the permit. Review or appeal of a denial of a permit or of conditions specified by the district engineer shall be made through the applicable procedures of the Army Corps of Engineers.

(3) Public Access to Information.

(A) Applications, draft permits, supporting documents and reports upon those documents shall be available to the public, except for those portions determined to be confidential. Information other than effluent data, support documents or reports contained in any issued permit or document in the water pollution control program may be made confidential upon a showing that methods or processes entitled to protection as trade secrets would be revealed if the information were made public. The director shall make the final determination of confidentiality.

(B) The department shall provide for public inspection and copying of information relating to these documents.

(4) Public Participation Process.

(A) Department of Natural Resources (DNR) Hearing.

1. An opportunity shall be provided for the applicant, any affected state, any affected interstate agency, the regional administrator or any interested agency, person or group of persons to request or petition for a public hearing with respect to the application. Any request for a public hearing shall be filed with the department within the comment period and shall indicate the interest of the party filing the request and the reasons why a hearing is warranted. The department shall hold a public hearing if there is significant technical merit and concern related to the responsibilities of the Missouri Clean Water Law. Instances of doubt shall be resolved in favor of holding the hearing. Any public hearing shall be held in the geographical area of the proposed discharge or other appropriate area. An appeal filed upon the issuance of a construction permit will be considered as an appeal of the construction permit and the first operating permit.

2. At least thirty (30) days before any hearing, notice of hearing shall be published in at least one (1) newspaper of general circulation in the geographical area of the discharge and mailed to any person or group on request and to all persons, groups and agencies who received a copy of notice or fact sheet for the proposed permit. In any case, notice shall be at least as broad as was the notice of permit pending. The notice shall contain at least the following:

A. Name, address and telephone number of the department;

B. Name and address of each applicant whose application will be considered at the hearing and name and address of the discharger if different from the applicant;

C. A brief statement of the applicant's activities for which the permit is sought;

D. Name of the watercourse to which permittee will discharge and a short description of the location of each discharge;

E. A brief reference to the public notice issued for each application, including identification number and date of issuance;

F. Information regarding the time and location for the hearing;

G. The purpose of the hearing;

H. A concise statement of the department's understanding of the issues raised by the persons requesting the hearing;

I. Address and telephone number of premises at which interested persons may obtain further information, request a copy of each draft permit or each fact sheet or statement of basis, inspect and copy forms and related documents; and

J. A brief description of the nature of the hearing, including the rules and procedures to be followed.

(B) Clean Water Commission hearings for regulation development, fact finding and other nonjudiciary matters will be held in conformance with Chapter 644, RSMo.

(C) Clean Water Commission hearings on permit issues, abatement orders and other judiciary type matters will be held in conformance with Chapters 536 and 644, RSMo.

(5) Time Limits for Appeals for Abatement Orders, Permit Denials and Variances.

(A) The thirty (30)-day time limit provided for the filing of appeals to the commission as established by section 644.056.3, RSMo for appeals of abatement orders; section 644.051.6, RSMo for appeals from denials of permits; section 644.061.5, RSMo for appeals from the recommendation to grant or deny variances; and 10 CSR 20-6.060(5) for appeals from the denial of water quality certifications shall be computed from the day of service of the notice of the order or issuance

or denial of the variance or denial of the permit or water quality certification, as the case may be.

(B) Service of the notice may be accomplished by either hand delivery or certified mail, return receipt requested.

1. Service by hand delivery.

A. Service by hand delivery is accomplished when a copy of the notice is tendered to—

(I) The applicant or permittee or other affected person or with some person of his/her family over the age of fifteen (15) years and residing in his/her dwelling, house or usual place of abode;

(II) An officer of a corporate applicant or permittee or other affected person;

(III) A partner of a partnership applicant or permittee or other affected person;

(IV) A managing or general agent of the applicant or permittee or other affected person;

(V) A registered agent or any other agent of the applicant or permittee or other affected person authorized by appointment or required by law to receive the notice; and

(VI) Any person in charge of the water contaminant or point source of the applicant or permittee or other affected person.

B. The person who effects service by hand delivery shall state the time, place and manner of service in a signed file memorandum or other writing.

C. The accomplishment of service of notice by hand delivery is not altered by the refusal of the person to be served to receive the notice when this fact is shown on the return.

2. Service by certified mail.

A. Service by certified mail is accomplished by mailing a copy of the notice by certified or registered mail, return receipt requested, to any of the persons listed in parts (5)(B)1.A.(I)-(VI) of this rule.

B. Service by mail is complete on the delivery date shown on the return receipt; or on the date of refusal as shown on the envelope of the returned notice.

(C) The appeals previously referenced in subsection (5)(A) of this rule may be made by the applicant, permittee, person named in the order or any other person with an interest which is or may be adversely affected. The appeal shall be filed with the commission secretary of the Clean Water Commission, P.O. Box 176, Jefferson City, MO 65102 and shall be received by the Clean Water Commission prior to expiration of the thirty



(30)-day appeal period as computed in subsection (5)(A). The appeal shall be a contested case and shall be conducted under section 644.066, RSMo.

(6) Time Limits for Appeals of Conditions in Issued Permits.

(A) The thirty (30)-day limit provided for the filing of appeals to the commission established by sections 640.010.1 and 644.051.6, RSMo for appeals of conditions in issued permits shall be computed from the day of service of notice.

(B) Service of the notice shall be accomplished by mailing the issued permits, first-class postage prepaid, to the persons listed in parts (5)(B)1.A.(I)-(VI) of this rule.

(C) Three (3) days shall be added to the prescribed thirty (30)-day period for appeals of conditions in issued permits when the service of notice is accomplished by mail.

(D) The appeals referenced previously in subsection (6)(A) of this rule may be made by the applicant, permittee or any other person with an interest which is or may be adversely affected. The appeal shall be filed with the commission secretary of the Clean Water Commission, P.O. Box 176, Jefferson City, MO 65102 and shall be received by the Clean Water Commission prior to expiration of the thirty (30)-day appeal period as computed in subsections (6)(A) and (C) of this rule. The appeal shall be a contested case and shall be conducted under section 644.066, RSMo.

(7) Appeals made under sections (5) and (6) of this rule shall be—

(A) An original filed with the secretary of the commission;

(B) Signed by the appellant or appellant's legal counsel;

(C) Clearly identified as an appeal;

(D) Comprised of the following information:

1. Full name, address and telephone number of the appellant and any attorney representing the appellant;

2. Reasons why the appellant believes the actions of the department or commission should be reversed or modified, including the identification and copy of the order or decision made by the director or commission which gives rise to the appeal;

3. Suitable space in the caption for the commission secretary to affix a case number; and

4. Acknowledgment that the matter will automatically be set for hearing.

(8) Appeals filed under sections (5) and (6) of this rule may contain a request for stay of the conditions appealed.

(9) The commission shall construe the provisions of sections (5)-(7) of this rule liberally if the appellant has prepared the complaint without legal counsel.

(10) The secretary of the commission shall serve notice of an appeal filed under sections (5) and (6) on the director and all parties to the appeal by delivery or certified mail.

AUTHORITY: section 644.026, RSMo Supp. 1997. Original rule filed June 19, 1974, effective June 29, 1974. Rescinded: Filed Oct. 16, 1979, effective July 11, 1980. Read-opted: Filed Feb. 4, 1980, effective July 11, 1980. Amended: Filed May 10, 1984, effective Oct. 15, 1984. Amended: Filed Feb. 1, 1988, effective June 13, 1988. Amended: Filed March 1, 1996, effective Nov. 30, 1996. Amended: Filed July 9, 1998, effective March 30, 1999.*

**Original authority: 644.026, RSMo 1972, amended 1973, 1987, 1993, 1995.*

10 CSR 20-6.030 Disposal of Wastewater in Residential Housing Developments

PURPOSE: This rule sets forth requirements for developers of residential housing to determine the method of wastewater disposal. This rule applies to all new residential housing developments and existing subdivisions that were required to comply with previous regulations which were effective June 30, 1974, June 26, 1975, or May 15, 1984, but have not received department approval.

(1) General Requirements.

(A) Definitions.

1. Definitions as set forth in the Missouri Clean Water Law and 10 CSR 20-2.010 shall apply to those terms when used in this rule.

2. Common promotional plan. A plan, undertaken by one (1) or more persons, to offer lots for sale or lease; where land is offered for sale by a person or group of persons acting in concert, and the land is contiguous or is known, designated or advertised as a common unit or by a common name or similar names, the land is presumed, without regard to the number of lots covered by each individual offering, as being offered for sale or lease as part of a common promotional plan.

3. Developer. Any person who directly or indirectly, sells or leases or offers to sell or lease, any lots, but shall not include any licensed broker or licensed salesman who is not a shareholder, director, officer or employ-

ee of a developer and who has no legal or equitable interest in the land.

4. Limiting layer. Any soil horizon that will severely limit the soil's ability to treat or dispose of effluent. The limiting layer may include a restrictive horizon, or permanent or seasonal high water table as defined in 19 CSR 20-3.060(1)(A).

5. Lot. Any portion, piece, division, unit or undivided interest in real estate, if the interest includes the right to the exclusive use of a specific portion of real estate, whether for a specific term or in perpetuity.

6. Residential housing development. Any land which is divided or proposed to be divided into three (3) or more lots, whether contiguous or not, for the purpose of sale or lease as part of a common promotional plan.

(B) Unless specifically provided otherwise, this rule shall apply to any developer who owns or controls land and—

1. Develops or divides land into residential housing lots;

2. Resubdivides land into more lots, adds additional lots to which when added to an existing group of lots which are contiguous, or which are known, designated or advertised as a common unit or by a common name, as part of a common promotional plan, will in total constitute a residential housing development; and

3. Any expansion of three (3) or more lots in any subdivision or development will be subject to this rule.

(C) The following subdivisions or residential housing developments are exempted:

1. Subdivisions in which control of more than twenty percent (20%) of the lots was permanently relinquished prior to July 1, 1974;

2. Subdivisions which were approved or exempted by the department under the subdivision regulations which were effective June 30, 1974, June 26, 1975 or May 15, 1984;

3. Residential housing developments with less than fifteen (15) lots, in existence prior to the effective date of this rule;

4. Lots of five (5) acres and larger in residential housing developments;

5. Residential housing developments located in areas where the department has determined that the local administrative authority has a local program sufficient to meet the goals of this rule;

6. If a developer proposes a centralized wastewater collection and treatment system, the requirements of this rule shall be considered met, provided that all other requirements of the Missouri Clean Water Law and regulations can be satisfied and continuing authority, in accordance with 10 CSR 20-6.010, will be established prior to the sale or lease of lots



or the commencement of construction of residences; and

7. Recreational developments will be subject to section (5) of this rule.

(D) Unless exempted in this rule, the developer of any residential housing development shall obtain approval from the department for the method of sewage treatment and disposal to be used in the development prior to the sale or lease of any lot, or the commencement of construction on any lot by the developer or any person. To obtain approval the developer must submit to the appropriate DNR office a copy of the geohydrologic evaluation, the soils report and the plat map as described in this rule.

1. The developer may apply for approval to use individual on-site systems in the proposed development provided that the minimum lot size is forty thousand (40,000) square feet. For residential housing developments with lots of less than forty thousand (40,000) square feet, (0.92 acres) only centralized sewage collection and treatment are acceptable for the development. However, this minimum lot size does not apply to residential housing developments that do not require approval. Construction and operating permits will be required for central sewage collection and treatment systems.

2. Only residential housing developments with seven (7) or more lots must receive approval for the method of sewage treatment and disposal prior to the sale or lease of any lots.

(2) Geohydrologic Evaluation.

(A) All developers required to by this rule shall apply for a geohydrologic evaluation pertaining to the use of on-site wastewater treatment facilities from the Department of Natural Resources, Division of Geology and Land Survey, Geological Survey Program (GSP). The evaluation will include a review of available geologic data and may include a field evaluation conducted by the GSP.

1. A written request for the geohydrologic evaluation must be submitted on forms provided by the department and within forty-five (45) days the developer will be notified in writing by the department of the results.

2. The request for a geohydrologic evaluation shall include a map of the proposed development along with the legal description, total number of acres and type of water supply being proposed.

3. The criteria contained in the document entitled *Residential Housing Development Geohydrologic Groundwater Evaluation Rating, DNR, Division of Geology and Land Survey, Geological Survey Program, October 1997* shall be used to determine the minimum

lot size as related to the geology and possibility of groundwater contamination in the area.

(B) Residential housing developments may be exempted from obtaining the geohydrologic evaluation in areas where bedrock and surficial materials exhibit low overall permeability and groundwater recharge is limited, or the groundwater gradient is low and groundwater velocity is slow. A determination of whether a residential housing development meets the criteria for an exemption from obtaining a geohydrologic evaluation will be determined by GSP based on the information supplied on the request form and data on file at GSP.

(3) Soils Report.

(A) A soils report for each residential housing development must be prepared by a soil scientist as defined in 19 CSR 20-3.080. The report must indicate if the proposed system is a soil absorption system or other system (lagoon). The soils report can be generated only after a thorough, systematic investigation of the soil properties and landscapes in the proposed development. Soil observation pits (backhoe or hand dug) dug to a depth to reveal the major soil horizons shall be utilized. The minimum number of pits shall be one (1) every ten (10) acres, however, in developments with the majority of lots less than two (2) acres, the minimum number of pits shall be one (1) every five (5) acres. These pits may be supplemented by soil borings to help determine the extent of similar soil properties. Profile descriptions which include horizon designations, depth, color, texture, structure, consistence, coarse fragments, mottling and other pertinent features shall be submitted.

1. The soils report shall contain a topographic map delineating the proposed development into the following slope categories: 0-2%, 3-14%, 15-30% and 31% and greater.

2. A map delineating the depth of acceptable soil into the following categories: less than 18 inches, 18 to 30 inches over bedrock, 18 to 30 inches over a limiting layer, and greater than 30 inches shall also be provided.

3. Table 1 shall be used to determine the minimum lot size based on soil properties and site conditions. More than fifty percent (50%) of each lot must be in a single acreage category or more than fifty percent (50%) may be in that and smaller acreage categories in order to use that minimum sized lot.

Table 1

Minimum Lot Size (Acres) for Soil Absorption Systems Based on Soil Depth and Slope

	Acceptable Soil (inches)				
	>30"	18-30"	18-30"	<18"	
	Limiting Bedrock Layer				
	0-2	0.92	2	2	3
slope (%)	3-14	0.92	1	2	3
	15-30	1	2	3	5
	31+	2	3	5	>5

4. Lots with less than eighteen inches (18") of acceptable soil should be evaluated carefully to determine if a soil absorption system will function properly on the site. It must be shown that mitigation of the limiting soil condition is a feasible option. Lots with less than twelve inches (12") of acceptable soil will not be approved for soil absorption systems unless the limiting condition is a high water table and the soil scientist determines that water table lowering schemes may be effective.

(B) Acceptable soil will have the following properties:

1. Any structure except strong platy or massive;

2. Fifty percent (50%) and less coarse fragments (>2 mm);

3. No limiting layer; and

4. Available area and landscape position suitable for an on-site system.

(C) Wastewater stabilization ponds (lagoons) may be allowed for the single-family residence wastewater treatment facilities if local regulations do not prohibit them.

1. Minimum lot size for lagoons is two and one-half (2.5) acres; larger lot sizes are recommended in order to provide for all wastewater to be contained on the lot and handled in a manner that there will be no violation of the Missouri Clean Water Law and regulations.

2. Report must show that the soils, available area and landscape position is suitable for lagoons. A minimum of four feet (4') of soil is required if the natural soil is to be used as the liner. Strongly sloping areas should be avoided. Areas with slopes greater than fifteen percent (15%) will not be considered suitable for lagoons.

(4) Plat Map.

(A) A map drawn to a scale of one inch (1") equals from fifty to two hundred feet (50-200') showing the location of the individual lots, roads, existing wells, and known easements shall be provided. The number of lots, lot sizes and type of water supply shall also be provided. A copy of the United States



Geological Survey topographic map and the soil map and legend from the United States Department of Agriculture County Soil Survey if available must be provided with the area of development clearly outlined.

(5) Recreational Development.

(A) A development is considered recreational when land is sold or leased for the purpose of camping in recreational vehicles. In order to be considered a recreational development, restrictive covenants must prohibit continuous year round living on the lot and no cabins or other structures will be allowed that could be used for year round residential purposes.

1. The minimum lot size for a recreational development that will use individual on-site wastewater treatment facilities is twenty thousand (20,000) square feet. No reduction will be allowed from the minimum lot size determined by the geohydrologic evaluation. A one-half (1/2) reduction in minimum lot size as indicated by the soils report may be allowed.

2. In recreational developments where sewage collection and treatment is provided by sewage dump stations, the sewage dump stations will be considered centralized sewage collection and treatment for the purposes of compliance with this rule.

3. The developer must submit a copy of the restrictive covenants along with any plans for sewage dump stations or centralized sewage collection and treatment systems.

(6) Multiple Family Housing Units.

(A) Residential housing developments that propose to build multiple family housing units (duplexes, quadplexes, etc.) shall submit an engineer's report in accordance with 10 CSR 20-8.020 Design of Small Sewage Works. Each housing unit shall be considered equal to a single family residence for the purposes of compliance with this rule.

(7) Department Review.

(A) The department shall determine if the requirements of this rule are satisfied. Minimum lot size will be the larger of the values calculated in the geohydrologic evaluation if required or the soils report. Approval under this rule does not guarantee that each lot in the residential housing development will be approved for a soil absorption system.

(B) The developer of any residential housing development required to obtain approval from the department, shall obtain written approval and comply with all conditions and requirements set forth in writing by the department as contained in the Missouri Clean Water Law and corresponding regula-

tions, prior to the sale or lease of any lot or the commencement of construction on any lot by any developer(s) or owner(s).

(C) There shall be no deviation or change that may adversely affect the geohydrologic evaluation, lot sizes, number of lots or the proposed water supply for a residential housing development following departmental approval without first securing written approval of the proposed changes from the department.

(D) Within ninety (90) days of receipt of the completed requirements and any other documents or information required in this rule by the department, the department will approve or disapprove the wastewater disposal plans and attach any conditions to an approval which it deems necessary to protect waters of the state in accordance with the Missouri Clean Water Law and regulations.

(E) Any developer or person owning any residential housing development or lots covered by this rule who has a proposal for wastewater disposal denied, or any condition in an approval in all or in part, may appeal to the Missouri Clean Water Commission within thirty (30) days of issuance of the denial or conditioned approval.

(F) Nothing in this rule shall preclude any local, municipal, county or other lawful authority from establishing subdivision, sewer or single-family residence on-site systems regulations and ordinances equal to or more stringent than those contained in this rule.

(G) Compliance With Other Law. Nothing in this rule shall excuse any person from complying with or from liability for violations of the Missouri Clean Water Law and regulations or any other laws of Missouri.

(H) Severability. If any section, paragraph, sentence, clause or phrase of this rule, or any part of each, be declared unconstitutional or invalid for any reason, the remainder of this rule shall not be affected and shall remain in full force and effect.

AUTHORITY: section 644.026, RSMo Supp. 1997. Original rule filed June 14, 1974, effective June 24, 1974. Amended: Filed June 16, 1975, effective June 26, 1975. Rescinded and readopted: Filed Oct. 12, 1983, effective May 15, 1984. Rescinded and readopted: Filed July 13, 1998, effective March 30, 1999.*

**Original authority: 644.026, RSMo 1972, amended 1973, 1987, 1993, 1995.*



**Residential Housing Development
Geohydrologic Groundwater Evaluation Rating
Missouri Department of Natural Resources
Division of Geology and Land Survey, Geological Survey Program
Box 250, Rolla, Missouri 65402
Phone: (573) 368-2161 FAX: (573) 368-2111**

Project: _____ County: _____
 Location _____, Sec. _____, T. _____, R. _____, Quad: _____
 Latitude: _____ Deg., _____ Min., _____ Sec., Longitude: _____ Deg., _____ Min., _____ Sec.

	Rating Number
1. Upper Bedrock	
Surficial materials >20 feet thick (bedrock is not karst)	0.0
Bedrock generally displays low permeability	0.0
Bedrock has moderate to high near-surface permeability and relatively low permeability at depth	0.1
Bedrock has persistent open fractures and/or moderate to high permeability	0.4
Bedrock displaying well developed karst features	1.2
2. Surficial Materials Type	
Clay: Glacial drift or residuum with low permeability	0.0
Silt/Sand: Loess, silty and sandy alluvium, moderate permeability residuum	0.1
Gravel: Gravelly alluvium and residuum, fragipan over permeable residuum	0.4
Macropore permeability, relict bedrock structure residuum	1.2
3. Surficial Materials Thickness (above saturated zone)	
>20 feet	0.0
>10 but ≤20 feet	0.1
≥5 but ≤10 feet	0.4
<5 feet	1.2
4. Watershed Hydrology	
Limited Recharge	0.0
Local Recharge	0.4
Regional Recharge	1.2
5. Approximate Groundwater Velocity	
Low to Moderate	0.0
High	1.2
6. Water Supply	
Public Water Supply or Community Well	0.0
Noncommunity Wells	0.1
Multi-family Wells or Domestic Wells with Full-Length Grout	0.4
Individual Wells	1.2

TOTAL _____

Total of rating numbers for all categories above equals minimum lot size in acres.

October, 1997



Missouri Department of Natural Resources
Division of Geology and Land Survey, Geological Survey Program
REQUEST FOR GEOHYDROLOGIC EVALUATION OF
RESIDENTIAL HOUSING DEVELOPMENT (SUBDIVISION)

FOR OFFICE USE ONLY

PROJECT ID # _____

Date received _____

SUBDIVISION OR DEVELOPMENT LOCATION

SUBDIVISION OR DEVELOPMENT NAME
1/4 1/4 SECTION 1/4 1/4 SECTION 1/4 SECTION SECTION TOWNSHIP RANGE QUADRANGLE NAME
N E W
WRITTEN LOCATION IF LEGAL DESCRIPTION IS UNAVAILABLE COUNTY

DEVELOPER INFORMATION

DEVELOPER NAME TELEPHONE DATE
DEVELOPER ADDRESS CITY STATE ZIP CODE

REQUESTOR INFORMATION

NAME AND COMPANY OF REQUESTOR (if different than developer) TELEPHONE
ADDRESS CITY STATE ZIP CODE

DEVELOPMENT INFORMATION

TYPE OF WATER SUPPLY PROPOSED TO BE USED IN SUBDIVISION
[] COMMUNITY PUBLIC WATER SUPPLY [] NON-COMMUNITY PUBLIC WATER SUPPLY
[] INDIVIDUAL DOMESTIC WELLS
[] MULTI-FAMILY OR INDIVIDUAL WELLS WITH FULL-LENGTH GROUT
TOTAL ACREAGE OF DEVELOPMENT _____ ACRES

SKETCH MUST BE SUBMITTED WITH REQUEST!
A sketch map or photocopy of topographic map must contain the following: development boundaries, all known wells, springs, sinkholes, caves, mines, and roads. Include a scale and north arrow on the sketch map.
Geohydrologic evaluation reports will be mailed to the developer, requesting party, DNR-DEQ regional office and Water Pollution Control Program central office.

COMMENTS

REQUESTOR'S SIGNATURE TITLE DATE

PROPERTY OWNER'S SIGNATURE (INDICATES PERMISSION TO ACCESS PROPERTY) DATE

MAIL COMPLETED COPY TO: DEPARTMENT OF NATURAL RESOURCES, ENVIRONMENTAL GEOLOGY SECTION
P.O. BOX 260, ROLLA, MO 65402-0260
Phone: (573) 368-2161 Fax: (573) 368-2111 E-MAIL ADDRESS: gspeg@mail.dnr.state.mo.us



10 CSR 20-6.040 Expiration of Operating Permits in Force Under Senate Bill 424
(Rescinded July 10, 1980)

AUTHORITY: section 204.026, RSMo 1978. Original rule filed Oct. 31, 1973, effective Nov. 9, 1973. Amended: Filed June 19, 1974, effective June 29, 1974. Rescinded: Filed Oct. 12, 1979, effective July 10, 1980.

10 CSR 20-6.050 Self-Monitoring
(Rescinded May 12, 1983)

AUTHORITY: section 204.026, RSMo 1978. Original rule filed Dec. 4, 1975, effective Dec. 14, 1975. Rescinded: Filed Oct. 16, 1979, effective July 11, 1980. Readopted: Filed Feb. 4, 1980, effective July 11, 1980. Rescinded: Filed Nov. 10, 1982, effective May 12, 1983.

10 CSR 20-6.060 Water Quality Certification

PURPOSE: Section 401 of Public Law 92-500 requires that any applicant for a federal license or permit to conduct any activity which may result in any discharge into the navigable waters shall provide the federal licensing or permitting agency a water quality certification from the state. This certification will contain such conditions that ensure the proposed activity will comply with the state water quality standards and other applicable standards as required by federal law. This rule establishes the procedure and time limitations the Department of Natural Resources will follow in issuing certifications.

(1) Definitions. Definitions as set forth in the Missouri Clean Water Law and 10 CSR 20-2.010 shall apply to those terms when used in this rule, unless the context clearly requires otherwise.

(2) Requests for water quality certifications should be sent by the applicant directly to the Department of Natural Resources (DNR), Water Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102. The request to the DNR should include a letter requesting the state's water quality certification for the proposed project and one (1) copy of the federal application (ENG Form 4345, FEB 94, or the latest revision) with drawings. (The federal agency requires one (1) copy of the federal application (ENG Form 4345, AUG 89) with appropriate drawings and one (1) copy of the letter to the DNR requesting certification.) If the applicant believes a project

will be authorized by a general or nationwide 404 permit for which the Corps of Engineers (COE) has accepted DNR's certification, the applicant need not send an application to DNR.

(3) In order to minimize delay in construction for individually permitted projects, the federal agency issues a DNR/federal public notice on the permit application. This notice provides the public an opportunity to provide their written comments regarding the proposed permit. A reasonable comment period, normally thirty (30) days, but not fewer than fifteen (15) days, is provided. The public notice will express DNR's intent to certify the proposed project after completion of the public notice period and resolution of any adverse water quality comments received. In the event the DNR receives a request for certification that should not be issued, the DNR will advise the federal agency within ten (10) working days that the joint public notice should not be issued. Individual public notices are not used for projects authorized by general or nationwide permits. When the Corps has not requested certification for a project that would be authorized by an individual permit, and the certification deadline approaches, a contingent certification action will be issued that approves the project as it appeared in the public notice. This certification is the final certification action on the project as long as nothing in the project changes from what was included in the public notice.

(4) After the completion of the joint public notice period, comments received by the federal agency will be forwarded for review and consideration by the DNR. Consideration shall be given to both direct and indirect water quality effects before issuing or denying water quality certification. Direct effect comments pertain to a water quality problem that would result from the actual work on the proposed project such as increased turbidity, improper disposal of dredge and fill material and siltation. Indirect effects include long or short range effects that are likely to occur as a result of the proposed construction but are not anticipated to cause water quality problems or pollution at the time of initial construction activity.

(A) If no objections to the proposed project are received during the public notice period and the DNR determines that no adverse water quality problems are reasonably anticipated, the DNR will issue a certification with provisions that if adverse water quality problems develop during construction the certification may be suspended pending resolution

of the problem(s).

(B) If objections to the proposed project are raised during the public notice period, the federal agency and the DNR will attempt to resolve the objections. If sufficient public interest is expressed, a public hearing will be held.

1. If the comments are resolved during negotiations or during public hearings conducted by the federal agency, the DNR will proceed to issue its certification.

2. If the comments are not resolved during negotiations sessions or during public hearings conducted by the federal agency, the DNR shall review the comments and proceed as follows:

A. If the comments are determined to be valid comments, the DNR shall either deny certification or issue a certification that is conditioned upon the applicant meeting certain requirements or performing certain actions to prevent or minimize water quality problems; or

B. If the comments are determined to be invalid or not having substantial effects upon water quality, the DNR shall issue its certification.

(5) Applications for water quality certifications have a sixty (60)-day period in which they must be issued or denied. This period starts when an application is received by the department. Applications for water quality certification for activities requiring individually certified nationwide permits have a thirty (30)-day but no more than sixty (60)-day period in which they must be issued or denied. Either of these periods may be extended by mutual agreement of the applicant and the department. Submission of an incomplete application may result in the denial of water quality certification without prejudice. A complete application consists of the sufficient application submitted to the COE, topographical maps, location maps, engineering plans, project diagrams, and where applicable, mitigation plans. If a water quality certification action has not been taken within sixty (60) days of the date that the application has been received by the department, and the department and applicant have not agreed to extend the certification period, water quality certification will be deemed to have been waived for the activity contained in the application.

(6) Water quality certifications that are issued for general permits and are accepted by the COE become effective upon issuance. Water quality certifications that are issued for individual certifications and for certifications for general permits that have not been accepted



by the COE shall become effective upon signature and returned with applicable fees.

(7) The issuance, conditional issuance or denial of certification under subparagraph (4)(B)2.A. or B. of this rule may be appealed to the Missouri Clean Water Commission through procedures outlined in the *Revised Statutes of Missouri*, Chapter 644. The appeal shall be a contested case and notice of the appeal shall be filed with the commission within thirty (30) days of service of notice to the applicant of denial or grant of the requested certification as specified in 10 CSR 20-6.020(5).

(8) Effective Date. This rule becomes effective immediately upon adoption and compliance with the requirements of subsection 644.036.3 of the Missouri Clean Water Law.

AUTHORITY: section 644.026, RSMo 2000. Original rule filed Feb. 10, 1978, effective July 13, 1978. Amended: Filed May 11, 1984, effective Oct. 15, 1984. Amended: Filed Nov. 9, 2000, effective July 30, 2001.*

**Original authority: 644.026, RSMo 1972, amended 1973, 1987, 1993, 1995, 2000.*

10 CSR 20-6.070 Groundwater Heat Pump Operating Permits

PURPOSE: This rule sets forth the requirements and process of application for operating permits and the terms and conditions for the permits.

(1) Permits—General Information.

(A) All persons who build, erect, alter, replace, operate, use or maintain existing or proposed groundwater heat pump injection/withdrawal wells that inject more than six hundred thousand (600,000) British thermal units (BTUs) per hour (also termed as fifty (50) tons of capacity) shall apply to the department for the permits required by section 577.155, RSMo and these regulations. The department shall issue these permits in order to enforce section 577.155, RSMo and the Missouri Clean Water Law and regulations.

(B) The following are exempt from permit regulations:

1. Groundwater heat pump injection wells designed for up to eight (8) single family residents where the combined injection rate is less than six hundred thousand (600,000) BTUs per hour;

2. All other groundwater heat pump injection wells that have a combined injection

rate of less than six hundred thousand (600,000) BTUs per hour unless there is a potable water well, not owned by the owner of the heat pump, within one thousand feet (1000') which uses the same aquifer, strata or depth as a source;

3. Any sampling well constructed in conjunction with any injection/withdrawal well; and

4. Heat pumps constructed in such a way so as to not utilize groundwater, such as lateral line systems.

(C) Nothing in these regulations shall prevent the department from taking action where the department finds that any activity exempted under subsection (1)(B) causes pollution of waters of the state, places, or permits to be placed, a water contaminant in a place where it is reasonably certain to cause pollution of any waters of the state or the activity otherwise violates section 577.155, RSMo, the Missouri Clean Water Law or these regulations.

(D) Drillers of injection/withdrawal wells shall comply with 10 CSR 23-5.060 Construction Standards for Open Loop Heat Pump Systems That Use Groundwater and 10 CSR 23-3 Well Construction Code.

(E) Owners or operators of injection wells exempted from the permit requirements of subsection (1)(B) are required, upon notification by the department, to submit injection well inventory information on forms supplied by the department. The completed form shall be returned to the department no later than ninety (90) days following the receipt of notification.

(2) Application.

(A) An application for an original operating permit or renewal of a former operating permit shall be made by letter for each injection/withdrawal well. The application may be supplemented with copies of information submitted for other federal or state permits. Each application must be accompanied by a filing fee of seventy-five dollars (\$75).

(B) Each application shall contain the following:

1. Name and address of the company(s), organization(s), owner(s) or operator of the injection/withdrawal well;

2. Description of structure or process, or both, that will utilize the injection/withdrawal well;

3. Estimated depth of well, aquifer to be used (or anticipated aquifer), casing and related well construction data as recommended by the office of the state geologist;

4. Exact location of the proposed injection withdrawal well and any other wells that exist within two thousand feet (2000') shown

on a seven and one-half (7 1/2) minute United States Geological Survey (USGS) topographic quadrangle map. This map shall also indicate the depth of each well;

5. Maximum, minimum and average volume of water that will be injected or withdrawn on a daily basis;

6. Maximum, minimum and average temperature differential of injected/withdrawn water;

7. Computations showing how the temperature differentials were calculated;

8. General specifications of the installation including the heat exchange unit, pump and other structures;

9. Application fee of seventy-five dollars (\$75). When a check used for an application is returned to the department as nonnegotiable, review of the application shall cease and the applicant shall be notified. No further action shall be taken on the application until the fees have been resubmitted in the form of a cashier's check or money order payable to the State of Missouri;

10. If the injection/withdrawal well is located within one thousand feet (1000') of any potable water well, the application shall include a registered professional geologist's or registered professional geologic engineer's recommendation and justification on the number and location of sampling wells if any are deemed necessary, and an estimate of the effect, in degrees Fahrenheit (F°), on all wells located within one thousand feet (1000'); and

11. A copy of the certified heat pump well drillers' report to the Department of Natural Resources' Division of Geology and Land Survey.

(C) All applications must be signed as follows:

1. For a corporation—by an officer of at least the level of plant manager;

2. For a partnership or sole proprietorship—by a general partner or the proprietor; or

3. For a municipal, state, federal or other public facility—by either a principal executive officer or ranking public official or his/her designee.

(D) All other reports required by the department shall be signed by a person designated in subsection (2)(C) of this rule or a duly authorized representative, where—

1. The representative so authorized is responsible for the overall operation of the facility from which the injection/withdrawal occurs; and

2. The authorization is made in writing by a person designated in subsection (2)(C) of this rule and is submitted to the director.



(E) Any changes in the written authorization which occur after the issuance of a permit shall be reported to the department by submitting a new written authorization which meets the requirements of subsection (2)(D) of this rule.

(F) If an application is incomplete or otherwise deficient, the applicant shall be notified of the deficiency and processing of the application may be discontinued until the application has corrected all deficiencies.

(G) Applications shall be mailed to Water Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102.

(3) Operating Permits.

(A) Persons who build, erect, alter, replace, operate, use or maintain groundwater heat pump injection/withdrawal wells that are not exempted shall obtain an operating permit from the department.

(B) Applications for an original operating permit must be received by the department at least one hundred twenty (120) days before construction of the injection/withdrawal well begins. Applications shall include the earliest date on which the injection/withdrawal is to begin. The department will issue or deny the permit within one hundred twenty (120) days of receipt of the complete application as specified in section (2). No person shall operate an injection/withdrawal well without a valid operating permit, unless s/he is exempted under subsection (1)(B).

(C) Applications for the renewal of operating permits must be received at least one hundred twenty (120) days before the expiration date of the present operating permit. The department will issue or deny the permit within one hundred twenty (120) days of receipt of the complete application as specified in section (2).

(D) The public notice requirements at 10 CSR 20-6.020 shall apply.

(4) Terms and Conditions of Permit.

(A) The following shall be incorporated as terms and conditions of all permits:

1. All injection/withdrawals shall be consistent with the terms and conditions of the permit;

2. The permit may be modified or revoked after reasonable notice for causes including, but not limited to:

A. A violation of any term or condition of the permit;

B. A misrepresentation or failure to disclose fully all relevant facts in obtaining a permit;

C. A change in the operation, size or capacity of the permitted facility; or

D. An increase of more than ten degrees Fahrenheit (10°F) in any nearby potable water well that was in existence when the original operating permit was issued.

3. The injection/withdrawal permit may be issued for a period up to five (5) years. The permit may not be modified so as to extend the term of the permit beyond five (5) years after its issuance;

4. Permittees shall operate and maintain facilities to comply with section 577.155, RSMo, the Missouri Clean Water Law, corresponding regulations and applicable permit conditions;

5. For the purpose of inspecting for compliance with the Clean Water Law and these regulations, authorized representatives of the department shall be allowed by the permittee, upon presentation of credentials and at reasonable times, to—

A. Enter upon permittee's premises in which a groundwater heat pump injection/withdrawal well is located or in which any records are required to be kept under terms and conditions of the permit;

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

C. Inspect any sampling wells, monitoring equipment or method required in the permit; and

D. Sample for permit compliance;

6. Facility expansions, production increases or process modifications which will result in a new or substantially different injection/withdrawal must be reported sixty (60) days before the facility or process modification begins. Notification may be accomplished by application for a new permit, or by submission of notice to the department;

7. Copies of well location, driller's logs, sample logs, casing schedule, volume of water, temperature, water quality and other information developed or determined for the completed installation shall be sent to the Missouri Department of Natural Resources (DNR), Water Pollution Control Program and to the Missouri DNR, Division of Geology and Land Survey;

8. Maximum, minimum and average water temperature measurements shall be made and recorded monthly for each injection/withdrawal well and each monitoring well;

9. Maximum, minimum and average injection/withdrawal rates shall be measured and recorded monthly;

10. Total dissolved solids shall be measured and recorded monthly for each injection/withdrawal well and each monitoring well; and

11. A yearly report shall be submitted to the agencies listed in paragraphs (4)(A)4. and 7. which contains the following information:

A. Volume of water withdrawn and injected;

B. Temperature records for each monitoring well; and

C. Copies of water quality analyses performed.

(5) Prohibitions.

(A) No permit shall be issued where the terms and conditions of the permit do not comply with applicable guidelines or requirements of section 577.155, RSMo the Missouri Clean Water Law and corresponding regulations or the Federal Clean Water Act and federal regulations.

(B) No permit shall be issued where the permit conditions do not ensure compliance with the applicable water quality requirements of any other affected states.

(C) No permit shall be issued for the discharge of any pollutant, except thermal discharges; those pollutants contained in the withdrawal water may be reinjected.

(D) No permit shall be issued for the discharge of any radiological, chemical or biological warfare agent or radioactive waste.

(E) No permit shall be issued for the construction or operation of a new injection/withdrawal well which could degrade the usefulness of water withdrawn from earlier permitted wells.

(6) Permits Transferable.

(A) Subject to section (3), an operating permit may be transferred upon submission to the department of an application to transfer signed by a new owner. Until, such time as the permit is officially transferred, the original permittee remains responsible for complying with the terms and conditions of the existing permit.

(B) The department, within thirty (30) days of receipt of the application, shall notify the new applicant of its intent to revoke and reissue or transfer the permit.

AUTHORITY: section 577.155, RSMo 1994. Original rule filed Nov. 10, 1980, effective April 11, 1981. Amended: Filed March 9, 1984, effective Oct. 1, 1984. Amended: Filed March 1, 1996, effective Nov. 30, 1996.*

**Original authority: 577.155, RSMo 1971, amended 1976, 1980.*



MISSOURI DEPARTMENT OF NATURAL RESOURCES
MISSOURI OIL AND GAS COUNCIL
MONTHLY WELL STATUS AND PRODUCTION REPORT

FORM DGC 5

FIELD _____	COUNTY _____
-------------	--------------

LOCATION OF FIELD	SECTION(S) _____	TWP _____	RNG _____
--------------------------	------------------	-----------	-----------

OPERATOR _____	MONTH _____	YEAR _____
----------------	-------------	------------

LEASE	TYPE AND NUMBER OF WELLS			PRODUCTION			GRAVITY A.P.I.	AVG. PRICE AT WELLHEAD PER/BBL. - MCF
	TYPE*	(1) ACTIVE	(2) INACTIVE	(3) TOTAL	OIL BBLs.	WATER BBLs.		

CERTIFICATE ▶ I, the undersigned, state that I am the _____ of the _____ (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

SIGNATURE _____

***TYPE** F - Flowing, P - Pumping, SI - Shut In, TA - Temporarily Abandoned, WI - Water Injection, AI - Air-Gas Injection

NOTE ▶ Total number of wells (col. 3) will equal Active wells (col. 1) plus Inactive wells (col. 2).



MISSOURI DEPARTMENT OF NATURAL RESOURCES
 MISSOURI OIL AND GAS COUNCIL
MONTHLY REPORT OF DISPOSAL OF PRODUCED WATER

FORM OGC 10

DATE		OPERATOR			LEASE	
LOCATION		SECTION(S)			T R	
					COUNTY	
LEASE		WELL NO.	WATER BBLs.	WATER TYPE*	DISPOSAL METHOD**	REMARKS

CERTIFICATE: I, THE UNDERSIGNED, STATE THAT I AM THE _____ OF THE _____ (COMPANY) AND THAT I AM AUTHORIZED BY SAID COMPANY TO MAKE THIS REPORT, AND THAT THIS REPORT WAS PREPARED UNDER MY SUPERVISION AND DIRECTION AND THAT THE FACTS STATED THEREIN ARE TRUE, CORRECT AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

*WATER TYPE F - FRESH M - MINERALS S - SALT

**DISPOSAL METHOD E - EVAPORATION PIT I - INJECTION (SAME OR ANOTHER STRATA SPECIFY) S - SURFACE RUNOFF, R - RIVER, CREEK, O - OTHER (EXPLAIN)

MO 780-0220 (3-88)

REMIT TWO COPIES TO: MISSOURI OIL AND GAS COUNCIL, P O BOX 250, ROLLA, MO 65401

10 CSR 20-6.080 Signatures for Construction Permits, Operating Permits and Groundwater Heat Pump Injection/Withdrawal Wells

PURPOSE: This rule sets forth the authorization for the director of the Department of Natural Resources, in his/her capacity of administering Department of Natural Resources program, to delegate the review, reevaluation and approval/denial of construction permits, operating permits and permits to withdraw/inject water from/into subsurface wells.

(1) It is the responsibility of the Department of Natural Resources (DNR) to issue or deny Clean Water Commission permits. Authority to issue/deny Clean Water Commission permits rests with the director of DNR acting in his/her capacity of administering DNR programs. This authority may be delegated by letter from the director of the DNR to his/her designee. Denial of a Clean Water Commission permit will be by a certified letter that states—

- (A) The permit is being denied;
- (B) The reason(s) that the permit is being denied;
- (C) Any action that the permittee could take to mitigate the denial and eventually secure the permit; and
- (D) The permittee's right to appeal the staff denial to the Clean Water Commission within thirty (30) days.

AUTHORITY: section 644.026, RSMo Supp. 1987. Original rule filed Jan. 13, 1981, effective May 11, 1981.*

**Original authority: 644.026, RSMo 1972, amended 1973, 1987.*

10 CSR 20-6.090 Class III Mineral Resources Injection/Production Well Operating Permits

PURPOSE: This regulation controls the construction and operations of mineral resources injection/production wells.

- (1) Permits—General.
- (A) This rule shall apply to Class III injection/production wells used for the extraction of minerals including:
- 1. Sulfur mining by the Frasch process;
 - 2. *In-situ* production of uranium or other metals. This category includes only *in-situ* production from ore bodies which have not been conventionally mined;
 - 3. *In-situ* combustion of fossil fuel; fossil fuels include coal, tar sands, oil shale and

any other fossil fuel which can be mined by this process; and

4. Solution mining of salts or potash.

(B) This rule does not apply to wells used by generators of hazardous wastes or of radioactive wastes, by owners or operators of hazardous waste management facilities or by owners or operators of radioactive waste disposal sites to dispose of hazardous waste or radioactive waste into or above any underground formation. These types of wells are expressly forbidden under section 577.155, RSMo.

(C) All persons who build, erect, alter, replace, operate, use or maintain existing or proposed Class III injection/production wells shall apply to the department for permits required by these regulations using application forms provided by the department. The department shall issue these permits in order to enforce the Missouri Clean Water Law and regulations.

(D) Nothing in these regulations shall prevent the department from taking action where the department finds that any activity that places, or permits to be placed, a water contaminant where it is reasonably certain to cause pollution of any waters of the state, or the activity otherwise violates Chapter 644, RSMo, the Missouri Clean Water Law or these regulations.

(E) Any information submitted to the department pursuant to these regulations may be claimed as confidential by the applicant. Any claim must be asserted at the time of submission in the manner prescribed on the application form or instructions or, in the case of other submissions, by stamping the words confidential business information on each page containing the information. If no claim is made at the time of submission, the department may make the information available to the public without further notice. Claims of confidentiality for the following information will be denied:

- 1. The name and address of any permit applicant or permittee; and
- 2. Information which deals with the existence, absence or level of contaminants in drinking water.

(F) The permittee shall give advance notice to the director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

(G) Applicants shall keep records of all data used to complete permit applications and any supplemental information submitted under these regulations for a period extending from the date the application is signed to the date the permit expires. The records shall be maintained at least three (3) years from the date the application is signed.

(2) Application.

(A) An application for an operating permit shall be made for each injection/production well. The application may be supplemented with copies of information submitted for other federal or state permits.

(B) Each application shall contain the following:

- 1. Name and address of the companies, organization(s), owner(s) or operators of the proposed well, ownership status and status as a federal, state, private or other entity;
- 2. The activities conducted by the applicant which require the applicant to obtain permits under the Resource Conservation and Recovery Act (RCRA), the Underground Injection Control (UIC) program under the Safe Drinking Water Act, the National Pollutant Discharge Elimination System (NPDES) program under the Clean Water Act or the Prevention of Significant Deterioration (PSD) program under the Clean Air Act;
- 3. Name, mailing address and location of the facility for which the application is submitted;
- 4. Up to four (4) standard industrial classification (SIC) codes which best reflect the principal products or services provided by the facility;
- 5. A listing of all permits or construction approvals received or applied for under any of the following programs:
 - A. Hazardous Waste Management program under RCRA;
 - B. UIC program under the Safe Drinking Water Act;
 - C. NPDES program under the Clean Water Act;
 - D. PSD program under the Clean Air Act;
 - E. Nonattainment program under the Clean Air Act;
 - F. National Emission Standards for Hazardous Pollutants (NESHAPS) preconstruction approval under the Clean Air Act;
 - G. Dredge and fill permits under Section 404 of the Clean Water Act; or
 - H. Other relevant environmental permits, including state permits;
- 6. Description of the process that will be used for the mineral extractions, including injection/withdrawal procedures;
- 7. Estimated depth of the well, casing lengths and weights, intervals to be cemented and related well construction data as recommended by the office of the state geologist;
- 8. Exact location of the well including a legal description to the nearest section line as



determined by a registered surveyor, a narrative description using locally recognized features and an accompanying topographic or similar map extending one (1) mile beyond the boundary of the facility property depicting the facility and each of its intake and discharge structures, each of its treatment, storage or disposal facilities, each well where fluids from the facility are injected underground and those wells, springs, surface water bodies and drinking water wells listed in public records or otherwise known to the applicant within one-quarter (1/4) mile of the facility property boundary;

9. A brief description of the nature of the business;

10. Maximum and average volume of injected fluids and injection pressure that will be used on a daily basis;

11. Application fee of seventy-five dollars (\$75). When a check used for an application is returned to the department as non-negotiable, review of the application shall cease and the applicant shall be notified. No further action shall be taken on the application until the fees have been resubmitted in the form of a cashier's check or money order payable to the state of Missouri;

12. Recommendation and justification on the number and location of sampling wells by a registered professional engineer or a qualified geologist as defined by sections 256.501 and 256.503, RSMo;

13. Where injection is into a formation which contains water with less than ten thousand milligrams per liter (10,000 mg/l) total dissolved solids (TDS), monitoring wells shall be completed into the injection zone and into any underground sources of drinking water above the injection zone which could be affected by the mining operation. These wells shall be located in a fashion as to detect any excursion of injection fluids, process by-products or formation fluids outside the mining area or zone. If the operation may be affected by a subsidence or catastrophic collapse, the monitoring wells shall be located so that they will not be physically affected;

14. Where injection is into a formation which does not contain water with less than ten thousand (10,000) mg/l TDS, no monitoring wells are necessary in the injection zone;

15. Where the injection wells penetrate an underground source of drinking water (USDW) in an area subject to subsidence or catastrophic collapse, an adequate number of monitoring wells shall be completed into the USDW to detect any movement of injected fluids, process by-products or formation fluids into a USDW. The monitoring wells shall

be located outside the physical influence of the subsidence or catastrophic collapse;

16. In determining the number, location, construction and frequency of sampling of the monitoring wells, the following criteria shall be considered:

A. Population relying on the USDW affected or potentially affected by the injection operation;

B. Proximity of the injection operation to points of withdrawal of drinking water;

C. Local geology and hydrology;

D. Operating pressures and whether a negative pressure is being maintained;

E. Nature and volume of the injected fluid, the formation water and the process by-products; and

F. Injection well density;

17. Map(s) describing an area of review for each Class III injection/production well or group of wells. The area of review shall be determined by a registered professional engineer or a qualified geologist as defined by sections 256.501 and 256.503, RSMo. The area of review shall be that area the radius of which is determined by the lateral distance from a Class III injection/production well or perimeter of a group of wells in which the pressure in the injection zone may cause the migration of injection or formation, or both, fluid into an USDW or into an improperly constructed, plugged or abandoned well or test hole.

A. The radius of the area of review may be calculated using a mathematical model (for example, modified Thesis equation) and shall be calculated for an injection time period at least equal to the expected life of the well(s). The owner or operator must demonstrate to the director that the mathematical model used and the calculated area of review are appropriate for the known hydrologic properties of the underlying formations.

B. A fixed radius around the well or the perimeter of a group of wells of not less than one-half (1/2) mile may be used. In determining the fixed radius, the following factors shall be taken into consideration: chemistry of injected and formation fluids, hydrogeology, population and groundwater use and dependence, and historical practices in the area.

C. If the area of review is determined by a mathematical model pursuant to subparagraph (2)(B)8.A., the permissible radius is the result of the calculation even if it is less than one-half (1/2) mile.

D. Nothing in this section shall prevent the director from imposing alternate areas of review when geologic or hydrologic conditions render a calculated or fixed area a

potential threat to an underground source of drinking water;

18. A mapped and tabulated inventory of all known water supply, injection/production, abandoned and test wells, including field names or numbers and locations of the wells, public water systems, within the area of review and a separate tabulation of all the wells, which penetrate the injection zone listing each well's type, construction method, date drilled, location, depth and record of plugging or completion, or both, shall be submitted with the applications and shall include a description of all corrective action(s) proposed to be performed to render wells penetrating the injection zone sealed, plugged or otherwise impervious to the migration of fluids into or between well bores, USDWs or different aquifers. The applicant is responsible for the inventory and corrective action requirements of this section and shall extend every reasonable effort to locate all wells within the area of review of the applicant well(s);

19. A plan for plugging and abandonment. Where the plan meets the requirements of this paragraph, the director shall incorporate it into the permit as a condition. Where the director's review of an application indicates that the permittee's plan is inadequate, the director shall require the applicant to revise the plan, prescribe conditions meeting the requirements of this paragraph or deny the application. For purposes of this paragraph, temporary intermittent cessation of injection operations is not abandonment;

20. Prior to granting approval for the plugging and abandonment of a Class III well, the director shall consider the following information:

A. The type and number of plugs to be used;

B. The placement of each plug including the elevation of the top and bottom;

C. The type, grade and quantity of cement to be used; and

D. The method of placement of the plugs;

21. The permittee is required to maintain financial responsibility and resources to close, plug and abandon the underground injection operation in a manner prescribed by the director. The permittee must show evidence of financial responsibility to the director by the submission surety bond or other adequate assurance such as financial statements or other materials acceptable to the director;

22. Maps and cross sections indicating the vertical limits of all USDWs within the area of review, their position relative to the injection formation and the direction of water



movement, where known, in every underground source of drinking water which may be affected by the proposed injection;

23. Maps and cross sections detailing the geologic structure of the local area;

24. Generalized map and cross sections illustrating the regional geologic setting;

25. Qualitative analysis and ranges in concentrations of all constituents of injected fluids. The applicant may request confidentiality as specified in subsection (1)(E). If the information is proprietary, an applicant, in lieu of the ranges in concentrations, may choose to submit maximum concentrations which shall not be exceeded. In this case the applicant shall retain records of the undisclosed concentrations and provide them upon request to the director as part of any enforcement investigation;

26. Proposed formation testing program to obtain the information required by paragraph (2)(D)4.;

27. Proposed stimulation program;

28. Schematic or other appropriate drawings of the surface and subsurface construction details of the well;

29. Plans, including maps, for meeting the monitoring requirements of subsection (4)(D);

30. Expected changes in pressure, native fluid displacement and direction of movement of injection fluid;

31. Contingency plans to cope with all shut-ins or well failures so as to prevent the migration of contaminating fluids into the USDW;

32. A certificate that the applicant has assured, through a performance bond or other appropriate means, the resources necessary to close, plug or abandon the well as required by paragraph (2)(B)19.;

33. The corrective action proposed to be taken under paragraph (2)(B)18.;

34. Where the injection zone is a formation which is naturally water-bearing, the following information concerning the injection zone shall be determined or calculated for new Class III wells or projects:

A. Fluid pressure;

B. Fracture pressure; and

C. Physical and chemical characteristics of the formation fluids;

35. Where the injection formation is not a water-bearing formation, only the information in subparagraph (2)(B)34.B. must be submitted;

36. Where the permittee becomes aware that s/he failed to submit any relevant facts in a permit application, or has submitted incorrect information in a permit application or in any report to the director, the permittee shall promptly submit the facts or information; and

37. Data sufficient to allow the department to carry out aquifer exemption procedures under the Safe Drinking Water Act, UIC program. The information shall be sufficient to demonstrate that the aquifer is expected to be mineral or hydrocarbon producing. Information for the proposed project, such as a map and general description of the mining zone, general information on the mineralogy and geochemistry of the mining zone, analysis for the amenability of the mining zone to the proposed mining method and a timetable of planned development of the mining zone shall be considered by the director.

(C) All applications must be signed as follows:

1. For a corporation—by an officer of at least the level of vice president;

2. For a partnership or sole proprietorship—by a general partner or the proprietor respectively; or

3. For a municipality, state, federal or other public agency—by either a principal executive officer or ranking elected official.

(D) All other reports required by the department shall be signed by a person designated in subsection (2)(C) of this rule or a duly authorized representative, where—

1. The representative so authorized is responsible for the overall operation of the facility from which the injection occurs; and

2. The authorization is made in writing by a person designated in subsection (2)(C) of this rule and is submitted to the director.

(E) Any changes in the written authorization which occur after the issuance of a permit shall be reported to the department by submitting a written authorization which meets the requirements of subsection (2)(D).

(F) If an application is incomplete or otherwise deficient, the applicant shall be notified of the deficiency and processing of the application may be discontinued until the applicant has corrected all deficiencies.

(G) Any person signing a document under subsection (2)(C) or (D) shall make the following certification:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

(H) Applications shall be mailed to—Water Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102.

(I) Prior to granting approval for the operation of a Class III well, the director shall consider the following information:

1. All available logging and testing data on the well;

2. A satisfactory demonstration of mechanical integrity;

3. The anticipated maximum pressure and flow rate at which the permittee will operate;

4. The results of the formation testing program;

5. The actual injection procedures; and

6. The status of corrective action on defective wells in the area of review.

(3) Operating Permits.

(A) Persons who build, erect, alter, replace, operate, use or maintain Class III injection/production wells shall obtain an operating permit from the department.

(B) Applications for an original operating permit must be received by the department at least sixty (60) days before construction of the well begins. Applications shall include the earliest date on which injection/production is to begin. The department will issue or deny the permit within sixty (60) days of receipt of the complete application as specified in section (2). No person shall operate an injection/production well without a valid operating permit. If the department fails to issue or deny the permit within the allotted time, the applicant may request a hearing before the Missouri Clean Water Commission. The commission may either require the department to issue or deny the permit at, or within, a specified time following the hearing or extend the permit review period another sixty (60) days following the hearing.

(C) Applications for the renewal of operating permits must be received at least sixty (60) days before the expiration date of the present operating permit. The department will issue or deny the permit within sixty (60) days of receipt of the application.

(D) The director may issue a permit on an area basis, rather than for each well individually, provided that the permit is for injection wells—

1. Described and identified by location in permit application(s) if they are existing wells, except that the director may accept a single description of wells with substantially the same characteristics;

2. Located within the same well field, facility site, reservoir, project or similar unit in the same state; and

3. Operated by a single owner or operator.

(E) Area permits shall specify—



1. The area within which underground injections are authorized; and

2. The requirements for construction, monitoring, reporting, operation and abandonment for all wells authorized by the permit.

(F) The area permit may authorize the permittee to construct and operate, convert or plug and abandon wells within the permit area provided—

1. The permittee notifies the director at a time as the permit requires;

2. The additional well satisfies the criteria in subsection (3)(D) and meets the requirements specified in the permit under subsection (3)(E); and

3. The cumulative effects of drilling and operation of additional injection wells are considered by the director during evaluation of the area permit application and are acceptable to the director.

(G) If the director determines that any well constructed pursuant to subsection (3)(F) does not satisfy any of the requirements of paragraphs (3)(F)1. and 2., the director may modify or terminate the permit or take enforcement action. If the director determines that cumulative effects are unacceptable, the permit may be modified or terminated.

(4) Terms and Conditions of Permits.

(A) The following shall be incorporated as terms and conditions of all permits:

1. All operations shall be consistent with the terms and conditions of the permit and shall comply with the Clean Water Law; corresponding regulations and applicable permit conditions;

2. The permit may be modified or revoked after reasonable notice for causes including, but not limited to:

A. Material and substantial alterations or additions to the permitted facility or activity which occurred after permit issuance, which justify the application of permit conditions that are different or absent in the existing permit;

B. New information received by the director, including information indicating that cumulative effects on the environment are unacceptable;

C. The standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued;

D. Good cause, as determined by the director, exists for modification of a compliance schedule, such as an act of God, strike, flood or materials shortage or other events over which the permittee has little or no con-

trol and for which there is no reasonably available remedy; and

E. Notification of a proposed transfer of the permit has been received by the director;

3. Suitability of the facility will not be considered at the time of permit modification or revocation and reissuance unless new information or standards indicate that a threat to human health or the environment exists which was unknown at the time of permit issuance;

4. The permit may be issued for a period of up to five (5) years. The permit may not be modified so as to extend the term of the permit beyond five (5) years after its issuance. If the permittee wishes to continue an activity regulated by the permit after the expiration date of the permit, the permittee must apply for and obtain a new permit prior to the expiration date of the permit in effect;

5. The director may terminate a permit during its term or deny a permit renewal application for the following causes:

A. Noncompliance by the permittee with any condition of the permit;

B. The permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts or the permittee's misrepresentation of any relevant facts at any time; or

C. A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination;

6. For the purpose of inspecting for compliance with the Clean Water Law and these regulations, authorized representatives of the department shall be allowed by the permittee, upon presentation of credentials and at reasonable times, to—

A. Enter upon permittee's premises in which Class III injection/production well is located or in which any records are required to be kept under terms and conditions of the permit;

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

C. Inspect any sampling wells, monitoring equipment or method required in the permit; and

D. Sample for permit compliance;

7. Facility expansions, production increases or process modifications which will result in a new substantially different operation must be reported sixty (60) days before the facility or process modification begins. Notification may be accomplished by application for a new permit or by submission of notice to the department;

8. Copies of well location, driller's logs, sample logs, casing schedule, volume of water, temperature, water quality, cement records and other information developed or determined for the completed installation shall be sent to the Missouri Department of Natural Resources, Water Pollution Control Program and to the Missouri Department of Natural Resources, Division of Geology and Land Survey;

9. Maximum and average injection/withdrawal volumes and pressures shall be measured and recorded semi-monthly;

10. Total dissolved solids shall be measured and recorded semi-monthly for each injection/production well and each monitoring well;

11. A quarterly report shall be submitted to the agencies listed in paragraph (4)(A)8. which contains the following information:

A. Volume and pressure of fluids injected and withdrawn; and

B. Copies of water quality analyses performed; and

12. Information on compliance and non-compliance shall be submitted as follows:

A. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule pertaining to this permit shall be submitted no later than thirty (30) days following each schedule date. The permittee shall report any noncompliance which may endanger health or the environment, including information which indicates that any contaminant may cause an endangerment to a USDW, or noncompliance with a permit condition or malfunction of the injection system which may cause fluid migration into or between USDWs. This information shall be provided orally within twenty-four (24) hours from the time the permittee becomes aware of the circumstances. A written submission also shall be provided within five (5) days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause, the period of noncompliance, including exact dates and times and if the noncompliance has not been corrected, the anticipated time it is expected to continue, and steps taken or planned to reduce, eliminate and prevent recurrence of the noncompliance; and

B. The permittee shall report all instances of noncompliance not reported under other sections of this rule at the time monitoring reports are submitted. The reports shall contain the information listed in subparagraph (4)(A)12.A.

(B) No owner or operator shall construct, operate, maintain, convert, plug or abandon any Class III injection/production well or conduct any other activity in a manner that allows the movement of fluid containing any contaminant into USDWs. The applicant for a permit shall have the burden of showing that the requirements of this section are met through a demonstration of mechanical integrity. Demonstration of the absence of significant leaks shall utilize at least one (1) of the following procedures: a pressure test with liquid or gas; monitoring of annulus pressure in wells injecting at a positive pressure following an initial pressure test; or any other test(s) that the state geologist considers effective. Demonstration of the absence of significant migration of fluids in channels adjacent to the well bore shall utilize at least two (2) of the following procedures: noise logs, temperature surveys, cement records demonstrating the presence of adequate cement to prevent migration (used only if the nature of casing precludes the use of noise logs or temperature surveys); or any other test(s) approved by Environmental Protection Agency (EPA) and that the state geologist considers effective. Mechanical integrity must be demonstrated before operations may begin. Documentation of successful demonstration of mechanical integrity shall be submitted to the department or the department may witness the demonstrations. Scheduling of witnessed demonstrations of mechanical integrity shall be at the reasonable convenience of the applicant. Nothing in this rule shall prevent the director from rescheduling a test at a reasonable time convenient to the applicant when necessary to allow department personnel to witness the test(s).

(C) For Class III injection/production wells—if any water quality monitoring of any USDW indicates the movement of any contaminant into the USDW, the director shall prescribe the additional requirements for construction, corrective action, operation, monitoring or reporting (including closure of the injection/production well) as are necessary to prevent this movement. These additional requirements shall be imposed by modifying the permit in accordance with this regulation or the permit may be terminated.

(D) Monitoring requirements, at a minimum, shall specify—

1. Monitoring of the nature of injected fluids with sufficient frequency to yield representative data on its characteristics. Whenever the injection fluid is modified to the extent that the analysis required by paragraph (2)(B)25. is incorrect or incomplete, a new analysis as required by paragraph (2)(B)25. shall be provided to the director;

2. Monitoring of injection pressure and either flow rate or volume semi-monthly, or metering and daily recording of injected and produced fluid volumes as appropriate;

3. Monitoring of the fluid level in the injection zone semi-monthly where appropriate and monitoring of the parameters chosen to measure water quality in the monitoring wells required by paragraph (2)(B)13. semi-monthly; and

4. Quarterly monitoring of wells required by paragraph (2)(B)15.

(E) Reporting requirements, at a minimum, shall include:

1. Quarterly reporting to the director on required monitoring;

2. Results of mechanical integrity tests and any other periodic test required by the department reported with the first regular quarterly report after the completion of the test; and

3. Monitoring may be reported on a project or field basis rather than individual well basis where manifold monitoring is used.

(5) Prohibitions.

(A) No permit shall be issued where the terms and conditions of the permit do not comply with applicable guidelines or requirements of the Clean Water Law and corresponding regulations or relevant federal laws.

(B) No permit shall be issued where the permit conditions do not ensure compliance with the applicable water quality requirements of any other affected states.

(C) No permit shall be issued for the discharge of any pollutant not necessary to the extraction process, except thermal discharges; those produced pollutants contained in the formation water may be reinjected into a formation of the same TDS concentration.

(D) No permit shall be issued for the discharge of any radiological, chemical or biological warfare agent or radioactive waste.

(E) No permit shall be issued for the construction or operation of a new injection/production well which would degrade the usefulness of water withdrawn from earlier permitted wells.

(F) No permit shall be issued for a well utilizing annular injection or production.

(G) No well shall be operated so that fluid pressures in the injection zone exceed the fracture pressure calculated or known for that formation.

(H) New injection wells may not commence injection until construction is complete and—

1. The permittee has submitted notice of completion of construction to the director and—

- A. The director has inspected or otherwise reviewed the new injection well and finds it is in compliance with the conditions of the permit; or

- B. The permittee has not received notice from the director of the intent to inspect or otherwise review the new injection well within thirteen (13) days of the date of the notice in paragraph (5)(H)1. of this rule, in which case prior inspection or review is waived and the permittee may commence injection.

(I) No operation shall commence until corrective actions outlined in paragraph (2)(B)18. and those required by the department have been completed.

(6) Class III Injection/Production Well Construction Requirements.

(A) All new injection/production wells shall be cased and cemented to prevent the migration of fluids into or between USDWs or potential sources of drinking water. The casing and cement used in construction of each newly drilled well shall be designed for the life of the well. In determining and specifying casing and cementing requirements, the following factors shall be considered:

1. Depth to the injection/production zone;

2. Injection pressure, external pressure, internal pressure, axial loading;

3. Borehole size;

4. Size and grade of all casing strings including wall thickness, diameter, nominal weight, length, joint specification and construction material;

5. Corrosiveness of injection/production and formation fluids or combinations;

6. Lithology of injection/production and confining zones; and

7. Type and grade of cement.

(B) Each well or group of wells utilizing a positive displacement pump shall be equipped with both high and low safety switches which will shut down the pump in case of pressure increase over the authorized pressure or sudden pressure loss.

(C) Appropriate logs and other tests shall be conducted during the drilling and construction of new injection/production wells. A descriptive report shall be prepared by a qualified log analyst and submitted to the director. The logs and test appropriate to each type of well shall be determined on the intended function, depth, construction and other characteristics of the well, availability of similar data in the area of the drilling site and the need for additional information that may arise from time-to-time as the construction of the well progresses. At a minimum, the logs and test shall include deviation



checks conducted on all holes where pilot holes and reaming are used at sufficiently frequent intervals to assure that vertical avenues for fluid migration in the form of diverging holes are not created during drilling.

(7) Permits Transferable.

(A) Subject to section (3), an opening permit may be transferred upon submission to the department of an application to transfer signed by a new owner. Until that time as the permit is officially transferred, the original permittee remains responsible for complying with the terms and conditions of the existing permit.

(B) Within thirty (30) days of receipt of the application the department, shall notify the new applicant of the intent to revoke and reissue or transfer the permit.

(8) Plugging and Abandonment.

(A) Prior to abandoning Class III wells the well shall be plugged with cement in a manner which will not allow the movement of fluids between one (1) aquifer or formation and another. The director may allow Class III wells to use other plugging materials if s/he is satisfied that the materials will prevent movement of fluids into or between USDWs.

(B) Placement of the cement plugs shall be accomplished by one (1) of the following:

1. The balance method;
2. The dump method;
3. The two (2)-plug method; or

4. An alternative method approved by the director which will reliably provide a comparable level of protection.

(C) The well to be abandoned shall be in a state of static equilibrium with the mud weight equalized top to bottom, either by circulating the mud in the well at least once or by a comparable method prescribed by the director prior to the placement of the cement plug(s).

(D) The director shall prescribe aquifer cleanup and monitoring where s/he deems it necessary and feasible to insure adequate protection of USDWs.

(E) The permittee shall notify the director at the times as the permit requires before conversion or abandonment of the well or in the case of area permits before closure of the project.

AUTHORITY: section 644.026, RSMo Supp. 1987. Original rule filed Nov. 9, 1983, effective June 1, 1984.*

**Original authority: 644.026, RSMo 1972, amended 1973, 1987.*

**Instructions for Forms UIC- I & II—Application for Class V Permit**

Please read these instructions carefully before completing the application. Return a signed application to the Division of Geology and Land Survey at the Rolla, Missouri address on the front page of form UIC-I. Also return a signed application along with appropriate filing fees to the Water Pollution Control Program at the Jefferson City, Missouri address, also listed on the front page of form UIC-I.

Form UIC-I**1.10—Construction Permit Application**

Check only if application is for a permit to construct an injection/recovery well system.

1.20—Operating Permit Application

Check only if application is for a permit to operate an injection/recovery well system.

Contact the Department of Natural Resources at one of the front page locations if you are uncertain which type of permit applies. Division of Geology and Land Survey injection well application (forms OGC-I) and Water Pollution Control form UIC-II must be submitted for each well (see "additional forms" below).

2.10—Name of Facility—The site specific name of the facility where the injection/recovery operation is to be conducted.

2.20—Facility Address—Site specific as in 2.10.

2.30—Present Operating Permit Number—Include only the facility's NPDES or UIC permit number(s) if one or more are in effect. If multiple Class V permits are presently in effect, attach a separate list.

2.40—Construction permit number—Provide the UIC **construction** permit number that the injection/recovery system was constructed under, if this application is for an operating permit for the same facility.

2.50—Owner—The name of the individual, institution, agency or corporation which owns the facility.

2.60—Operating Authority—The name of the person or organization responsible for the injection/recovery operation, including if appropriate: the owner, the facility, a consultant, a contractor, or a government agency.

2.70—Facility contact—The individual within the facility or operating authority, most able to supply information about the direct operation of the injection/recovery operation.

2.80—Additional Forms

1. DGLS Form 3-I

For well depth, casing and other completion information.

2. DGLS Form 4-I

For survey and well location information.

3. DGLS Form 11

For injection system information.

2.90—Certification—Self-explanatory.

**UIC Form II—Purpose, Process and Materials****1.00—Facility Name**

The site specific name of the facility where the injection/recovery operation is to be conducted.

2.00—Purpose of Injection/Recovery

Attach separate pages if needed. Include all or portions of an engineering report containing information needed by the owner, operating authority, and the Department of Natural Resources to fully describe the purpose of the injection/recovery operation.

2.10—Description of Injection/Recovery Process

Attach separate pages if needed. Include all or portions of the engineering report required by 2.00 above, or submit a separate detailed description of all elements of the production, treatment and injection system required to allow the owner, operating authority or the Department of Natural Resources to adequately review the system.

The engineering report should contain, at a minimum: a description of the injection and recovery well pattern; a description of the injection zone including details of lithology, hydrology, and unique features of the injection zone and relevant formations; injection and recovery time frames; systems for transporting, storing, mixing, metering, and introducing injection materials; recovery fluid gathering systems, treatment or recycling, and disposal systems; injection pressures and volumes; production rates; emergency plans for power or hydraulic loss; detailed description of all material to be injected and the purposes they serve in the operation; and any other information required by the owner, operating authority, or the Department of Natural Resources.

2.20—Biological Agents

List and describe all biological agents to be injected, including: scientific names; whether or not the agents are native to the formations involved; list of available literature relevant to the use of the agents for the injection operation; their population and nutrient dynamics under proposed operating conditions; discussion and supporting literature regarding potential health and/or environmental impacts of the agents and their metabolites in and downgradient of the injection zone, and after completion of the operation; results of laboratory tests conducted by or for the facility relevant to the injection/recovery operation.

3.00—Hazardous Waste—Will the process involve Hazardous Wastes as defined by federal and state hazardous waste laws?**3.10—Surface Discharge**

If needed, contact the Water Pollution Control Program at the front page address for an NPDES permit application at least 180 days prior to any planned discharge.

4.00—Data Sheets for Injected Material

Provide information for each unique injection material. If materials are to be mixed prior to batch injection, provide analyses of the batch conditions. Otherwise provide analyses for each material if materials are to be injected sequentially, or manifold mixed during injection.

Certification (page 2 of UIC—II)—Self-explanatory



Form UIC-1—Application For Class V Permit—All Applicants

Do Not Attempt To Complete This Form Before Reading The Accompanying Instructions

MISSOURI DEPARTMENT OF NATURAL RESOURCES

Division of Geology and Land Survey
P.O. Box 250
Rolla, MO 65401

Division of Environmental Quality
P.O. Box 1368
Jefferson City, MO 65102

- 1.10—Construction permit application ... A \$25.00 filing fee must accompany each application for a construction permit.
1.20—Operating permit application ... A \$75.00 filing fee must accompany each application for an operating permit.

Filing fees must be in the form of check, bank draft, or money order, payable to the State of Missouri. Cash will not be accepted.

2.10—Name of Facility: _____

2.20—Facility Address: _____
Street City State Zip Code

2.30—This facility is now in operation under Missouri Operating Permit Number _____

2.40—This is a new facility and was constructed under Missouri Construction Permit Number _____
(Complete only if this facility does not have an operating permit.)

2.50—Owner Name _____ Phone _____
Address _____
Street City State Zip Code

2.60—Operating Authority Name _____
Address _____
Street City State Zip Code

2.70—Facility Contact Name _____ Phone _____
Title _____

- 2.80—Additional forms necessary to complete this application.
a. For each injection or withdrawal well, the following forms must be completed.
1. Injection Well Permit Application (DGLS Form 3-I).
2. Well Location Plat (DGLS Form 4-I).
3. Injection Well Schematic (DGLS Form 11).
b. Water Pollution Control Form UIC-II.

2.90—I certify that I am familiar with the information contained in the application, that to the best of my knowledge and belief such information is true, complete and accurate, and if granted this permit, I agree to abide by the Missouri Clean Water Law and all rules, regulations, orders and decisions, subject to any legitimate appeal available to applicant under the Missouri Clean Water Law, of the Missouri Clean Water Commission.

Applicant's Signature (see instructions)

Date: _____



Form UIC-II—Application For Class V Permit (All Applicants)

Do Not Attempt To Complete This Form Before Reading The Accompanying Instructions

Division of Geology and Land Survey
P.O. Box 250
Rolla, MO 65401

Division of Environmental Quality
P.O. Box 176
Jefferson City, MO 65102

1.00—Name of facility _____

2.00—Brief description of purpose of injection.
(Attach Engineering Report)

2.10—Brief description of facilities to accomplish injection.
(Attach Engineering Report)

2.20 If biological agents are to be introduced in this process, a biological profile and literature research must be submitted with this application.

3.00—Will this process involve a hazardous waste as defined in 10 CSR 25-4.010? Yes No

3.10—Will process result in discharge to surface water? Yes No If yes, an NPDES permit must be obtained.

4.00—Complete data sheets (pages 3—7) for each material to be injected subsurface.

I certify that I am familiar with the information contained in the application, that to the best of my knowledge and belief such information is true, complete and accurate, and if granted this permit, I agree to abide by the Missouri Clean Water Law and all rules, regulations, orders and decisions, subject to any legitimate appeal available to applicant under the Missouri Clean Water Law, of the Missouri Clean Water Commission.

Applicant's Signature (see instructions)

Date: _____



Sec. 4.00 Data sheets for _____ material to be injected.

Part A— You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each material to be injected.

Pollutant	MAXIMUM DAILY VALUE	
	(1) Concentration	(2) Mass
	Biochemical Oxygen Demand (BOD)	
Chemical Oxygen Demand (COD)		
Total Organic Carbon (TOC)		
Total Suspended Solids (TSS)		
Ammonia (asn)		
Flow	VALUE	
Temperature (winter)	VALUE	
Temperature (summer)	VALUE	
pH	MINIMUM	MAXIMUM



Part B— Mark “X” in column “a” for each pollutant you know or have reason to believe is present. Mark “X” in column “b” for each pollutant you believe to be absent. If you mark column “a” for any pollutant, you must provide the results of at least one analysis for that pollutant. Complete one table for each well. See the instructions for additional details and requirements.

1.

Pollutant and Cas No. (if available)	Mark ‘X’		Maximum Daily Value	
	a.	b.	(1) Concentration	(2) Mass
	believed present	believed absent		
Bromide (24959-67-9)				
Chlorine Total Residual				
Color				
Fecal Coliform				
Fluoride (16984-48-8)				
Nitrate—Nitrite (as N)				
Nitrogen Total Organic (as N)				
Oil and Grease				
Phosphorus (as P) Total (7723-14-0)				
Radioactivity				
Alpha Total				
Beta Total				
Radium Total				

2.

Pollutant and Cas No. (if available)	Mark ‘X’		Maximum Daily Value	
	a.	b.	(1) Concentration	(2) Mass
	believed present	believed absent		
Sulfate (as SO ⁴) (14808-79-8)				
Sulfide (as S)				
Sulfite (as SO ³) (14265-45-3)				
Surfactants				
Aluminum Total (7429-90-5)				
Barium Total (7440-39-3)				
Boron Total (7440-48-4)				
Cobalt Total (7440-48-4)				
Iron Total (7439-89-6)				
Magnesium Total (7439-95-4)				
Molybdenum Total (7439-98-7)				
Manganese Total (7439-96-5)				
Tin Total (7440-31-5)				
Titanium Total (7440-32-6)				



3.

Pollutant and Cas No. (if available)	Mark 'X'		Maximum Daily Value	
	a.	b.	(1) Concentration	(2) Mass
	believed present	believed absent		
METALS, CYANIDE, AND TOTAL PHENOLS				
1M. Antimony. Total (7440-36-0)				
2M. Arsenic. Total (7440-38-2)				
3M. Beryllium. Total (7440-41-7)				
4M. Cadmium. Total (7440 43 9)				
5M. Chromium. Total (7440-47-3)				
6M. Copper. Total (7550-50-8)				
7M. Lead. Total (7439-97-6)				
8M. Mercury. Total (7439-97-6)				
9M. Nickel. Total (7440-02-0)				
10M. Selenium. Total (7782-49-2)				
11M. Silver. Total (7440-22-4)				
12M. Thallium. Total (7440-28-0)				
13M. Zinc. Total (7440-66-6)				
14M. Cyanide. Total (57-12-5)				
15M. Phenols. Total				

4.

Pollutant and Cas No. (if available)	Mark 'X'		Maximum Daily Value	
	a.	b.	(1) Concentration	(2) Mass
	believed present	believed absent		
GC/MS FRACTION—VOLATILE COMPOUNDS				
1V. Acrolein (107-02-8)				
2V. Acrylonitrile (107-13-1)				
3V. Benzene (71-43-2)				
4V. Bis (Chloro-methyl) Ether (542-88-1)				
5V. Bromoform (75-25-2)				
6V. Carbon Tetrachloride (56-23-5)				
7V. Chlorobenzene (108-90-7)				
8V. Chlorodibromomethane (124-48-1)				
9V. Chloroethane (75-00-3)				
10V. 2-Chloroethylvinyl Ether (110-75-8)				
11V. Chloroform (67-66-3)				
12V. Dichlorobromomethane (75-27-4)				
13V. Dichlorodifluoromethane (75-71-8)				
14V. 1,1-Dichloroethane (75-34-3)				
15V. 1,2-Dichloroethane (107-06-2)				
16V. 1,1-Dichloroethylene (75-35-4)				
17V. 1,2-Dichloropropane (78-87-5)				
18V. 1,2-Dichloropropylene (542-75-6)				
19V. Ethylbenzene (100-41-4)				
20V. Methyl Bromide (74-83-9)				
21V. Methyl Chloride (74-87-3)				



4. (continued)

Pollutant and Cas No. (if available)	Mark 'X'		Maximum Daily Value	
	a.	b.	(1) Concentration	(2) Mass
	believed present	believed absent		
GC/MS Fraction-Volatile Compounds (continued)				
22V. Methylene Chloride (75-09-2)				
23V. 1,1,2,2-Tetrachloroethane (79-34-5)				
24V. Tetrachloroethylene (127-18-4)				
25V. Toluene (108-83-3)				
26V. 1,2-Trans-Dichloroethylene (156-60-5)				
27V. 1,1,1-Trichloroethane (71-55-5)				
28V. 1,1,2-Trichloroethane (79-00-5)				
29V. Trichloroethylene (79-01-6)				
30V. Trichlorofluoromethane (75-89-4)				
31V. Vinyl Chloride (75-01-4)				
5. GC/MS Fraction-Acid Compounds				
1A. 2-Chloropheno (95-57-8)				
2A. 2,4-Dichloropheno (120-83-2)				
3A. 2,4-Dimethylpheno (105-67-9)				
4A. 4,6-Dinitro O Cresol (534-52-1)				
5A. 2,4-Dinitrophenal (51-28-1)				
6A. 2-nitrophenol (100-02-7)				
7A. 4-nitrophenol (88-75-5)				
8A. P-Chloro-M Cresal (59-50-7)				
9A. Pentachlorophenol (87-86-5)				
10A. Phenol (108-95-2)				
11A. 2,4,6-Trichlorophenol (88-06-2)				

6.

Pollutant and Cas No. (if available)	Mark 'X'		Maximum Daily Value	
	a.	b.	(1) Concentration	(2) Mass
	believed present	believed absent		
GC/MS Fraction-Base/Neutral Compounds				
1B. Acenaphthene (83-32-9)				
2B. Acenaphthylene (208-96-8)				
3B. Anthracene (120-12-7)				
4B. Benzidine (542-88-1)				
5B. Benzo (a) Anthracene (56-55-3)				
6B. Benzo (a) Pyrene (50-32-8)				
7B. 3,4-Benzo-fluoranthene (205-99-2)				
8B. Benzo (ghi) Perylene (191-24-2)				
9B. Benzo (k) Fluoranthene (207-08-9)				
10B. Bis (2-Chloroethoxy) Methane (111-91-1)				
11B. Bis (2-Chloroethyl) Ether (111-44-4)				
12B. Bis (2-Chloroisopropyl) Ether (39638-32-9)				
13B. Bis (2-Chloroethyl) Phthalate (117-81-7)				
14B. 4-Bromophenyl Phenyl Ether (101-55-3)				
15B. Butyl Benzyl Phthalate (85-68-7)				
16B. 2-Chloronaphthalene (91-58-7)				
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)				
18B. Chrysene (218-01-9)				
19B. Dibenzo (a,h) Anthracene (53-70-3)				
20B. 1,2-Dichlorobenzene (95-50-1)				
21B. 1,3-Dichlorobenzene (541-73-1)				



6. (continued)

Pollutant and Cas No. (if available)	Mark 'X'		Maximum Daily Value	
	a.	b.	(1) Concentration	(2) Mass
	believed present	believed absent		
GC/MS Fraction-Base/Neutral Compounds (continued)				
22B. 1,4-Dichlorobenzene (106-94-1)				
23B. 3,3-Dichlorobenzidine (91-94-1)				
24B. Diethyl Phthalate (84-66-2)				
25B. Dimethyl Phthalate (131-11-3)				
26B. Di-N-Butyl Phthalate (84-74-2)				
27B. 2,4-Dinitrotoluene (121-14-2)				
28B. 2,6-Dinitrotoluene (606-20-2)				
29B. Di-N-Octyl Phthalate(117-84-0)				
30B. 1,2-Diphenhydrazine(as Azobenzene) (122-66-7)				
31B. Fluoranthene (206-44-0)				
32B. Fluorene (86-73-7)				
33B. Hexachlorobenzene (118-71-1)				
34B. Hexachlorobutadiene (87-68-3)				
35B. Hexachlorocyclopentadiene (77-47-4)				
36B. Hexachloroethane (67-72-1)				
37B. Indeno (1,2,3-c-d) Pyrene (193-39-5)				
38B. Isophorone (78-59-1)				
39B. Naphthalene (91-20-3)				
40B. Bitrobenzene (98-95-3)				
41B. N-Nitrosodimethylamine (62-75-9)				
42B. N-Nitrosodimethylpropylamine (621-63-7)				
43B. N-Nitrosodiphenylamine (86-30-6)				
44B. Phenanthrene (85-01-8)				
45B. Pyrene (129-00-0)				
46B. 1,2,4-Trichlorobenzene (120-82-1)				

7.

Pollutant and Cas No. (if available)	Mark 'X'		Maximum Daily Value	
	a.	b.	(1) Concentration	(2) Mass
	believed present	believed absent		
GC/MS Fraction—Pesticides				
1P. Aldrin (309-00-2)				
2P. α BHC (319-84-6)				
3P. β-BHC (319-85-7)				
4P. γ-BHC (58-89-9)				
5P. δ-BHC (319-86-8)				
6P. Chlordane (57-74-9)				
7P. 4,4-DDT (50-29-3)				
8P. 4,4'-DDE (72-55-9)				
9P. 4,4' DDD (72-54-8)				
10P. Dieldrin (60-57-1)				
11P. α-Endosulfan (115-29-7)				
12P. β-Endosulfan (115-29-7)				
13P. Endosulfan Sulfate (1031-07-8)				
14P. Endrin (72-20-8)				
15P. Endrin Aldehyde (7421-93-4)				
16P. Heptachlor (76-44-8)				
17P. Heptachlor Epoxide (1024-57-3)				
18P. PCB-1242 (53469-21-9)				
19P. PCB-1254 11097-69-1				
20P. PCB-1221 (11104-28-2)				
21P. PCB-1232 (11141-16-5)				
22P. PCB-1248 (12672-29-6)				
23P. PCB-1260 (11096-82-5)				
24P. PCB-1016 (12674-11-2)				
25P. Toxaphene (8001-35-2)				
8. Dioxin				
2,3,7,8-Tetra-chlorodibenzo-P-Dioxin (1764-01-6)				Describe Results



10 CSR 20-6.100 General Pretreatment Regulation

PURPOSE: This rule sets forth procedures to prevent the introduction of pollutants into publicly-owned treatment works which will interfere with the operation of publicly-owned treatment works, including interference with its use or disposal of municipal sludge, to prevent the introduction of pollutants into publicly-owned treatment works which will pass through the treatment works or otherwise be incompatible with these works, and to improve opportunities to recycle and reclaim municipal and industrial wastewaters and sludges.

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. This material as incorporated by reference in this rule shall be maintained by the agency at its headquarters and shall be made available to the public for inspection and copying at no more than the actual cost of reproduction. This note applies only to the reference material. The entire text of the rule is printed here.

(1) The Environmental Protection Agency federal regulations, 40 CFR Parts 403 through 471, inclusive, that are in effect as of January 1, 2011, herein incorporated by reference, are available by writing to the Office of the Federal Register and the National Archives and Records Administration, Superintendent of Documents, Pittsburgh, PA 15250-7954. This rule does not incorporate any subsequent amendments or additions. The substitution of terms set forth shall apply in this rule in addition to any other modifications set forth in this rule.

(2) Provisions Incorporated.

(A) The provisions of the *General Pretreatment Regulations for Existing and New Sources of Pollution*, 40 CFR Part 403, as in effect January 1, 2011, are hereby adopted and incorporated by reference, not including any later amendments or additions, subject to the additions, modifications, and substitutions set forth in 10 CSR 20-6.100(4) through (13).

(B) The provisions of the following rules, as in effect January 1, 2011, are hereby adopted and incorporated by reference, not including any later amendments or additions, subject to the additions, modifications, or substitutions set forth in 10 CSR 20-6.100(4) through (13). The rules in this list refer to

only the rules that contain pretreatment standards or limitations for industrial facilities that discharge to the local publicly-owned treatment works.

40 CFR Part 406 Grain Mills Point Source Category
 40 CFR Part 413 Electroplating Point Source Category
 40 CFR Part 414 Organic Chemicals, Plastics, and Synthetic Fibers
 40 CFR Part 415 Inorganic Chemicals Manufacturing Point Source Category
 40 CFR Part 417 Soap and Detergent Manufacturing Point Source Category
 40 CFR Part 418 Fertilizer Manufacturing Point Source Category
 40 CFR Part 419 Petroleum Refining Point Source Category
 40 CFR Part 420 Iron and Steel Manufacturing Point Source Category
 40 CFR Part 421 Nonferrous Metals Manufacturing Point Source Category
 40 CFR Part 423 Steam Electric Power Generating Point Source Category
 40 CFR Part 425 Leather Tanning and Finishing Point Source Category
 40 CFR Part 426 Glass Manufacturing Point Source Category
 40 CFR Part 428 Rubber Manufacturing Point Source Category
 40 CFR Part 429 Timber Products Processing Point Source Category
 40 CFR Part 430 Pulp, Paper, and Paperboard Point Source Category
 40 CFR Part 433 Metal Finishing Point Source Category
 40 CFR Part 435 Oil and Gas Extraction Point Source Category
 40 CFR Part 437 Centralized Waste Treatment Point Source Category
 40 CFR Part 439 Pharmaceutical Manufacturing Point Source Category
 40 CFR Part 442 Transportation Equipment Cleaning Point Source Category
 40 CFR Part 443 Effluent Limitations Guidelines for Existing Sources and Standards of Performance and Pretreatment Standards for New Sources for the Paving and Roofing Materials (Tars and Asphalt) Point Source Category
 40 CFR Part 444 Waste Combustors Point Source Category
 40 CFR Part 446 Paint Formulating Point Source Category
 40 CFR Part 447 Ink Formulating Point Source Category
 40 CFR Part 455 Pesticide Chemicals
 40 CFR Part 458 Carbon Black Manufacturing Point Source Category
 40 CFR Part 461 Battery Manufacturing Point Source Category

40 CFR Part 464 Metal Molding and Casting Point Source Category
 40 CFR Part 465 Coil Coating Point Source Category
 40 CFR Part 466 Porcelain Enameling Point Source Category
 40 CFR Part 467 Aluminum Forming Point Source Category
 40 CFR Part 468 Copper Forming Point Source Category
 40 CFR Part 469 Electrical and Electronic Components Point Source Category
 40 CFR Part 471 Nonferrous Metals Forming and Metal Powders Point Source Category

Note: 40 CFR Part 412 Concentrated Animal Feeding Operations (CAFO) Point Source Category has been adopted at 10 CSR 20-6.300(4)(C).

(3) Federal statutes and regulations that are cited in 40 CFR Parts 403 through 471 that are not specifically adopted by reference shall be used as guidelines in interpreting the federal regulations in Parts 403 through 471.

(4) The "director" as used in the provisions of the *Code of Federal Regulations* which are incorporated by reference, means the director of staff of the Missouri Clean Water Commission or that person's delegated representative.

(5) In the provisions of 40 CFR Part 403, following all occurrences of the citation to 40 CFR Part 136, add the phrase "or 10 CSR 20-7.015(9)(A)2."

(6) In lieu of 40 CFR Section 403.4, the following shall apply:

(A) Local Law. The provisions of 10 CSR 20-6.100 shall not supersede any pretreatment requirements, including any standards or prohibitions established by any local law, as long as the local requirements are not less stringent than any set forth in the pretreatment requirements of 10 CSR 20-6.100 or other requirements or prohibitions established by the state or federal government.

(7) State Enforcement Actions. In lieu of 40 CFR Section 403.5(e), the following shall apply:

(A) If, within thirty (30) days after notice of an interference or pass-through violation has been sent by the state to the publically-owned treatment works (POTW) and to persons or groups who have requested the notice, the POTW fails to commence appropriate enforcement action to correct the violation, the state may take appropriate enforcement action.



(8) Substitute “Missouri Clean Water Commission” for “Regional Administrator” in 40 CFR Section 403.6(a)(5).

(9) Substitute “Missouri Clean Water Law, Chapter 644, Water Pollution, Powers and Duties of the Commission—rules, procedure. Section 644.026(13), RSMo,” for “section 402(b)(1)(C) of the Act” in 40 CFR Section 403.8(e).

(10) Substitute “Missouri Department of Natural Resources” for the term “agency” in the 40 CFR Section 403.16.

(11) Confidentiality.

(A) In lieu of 40 CFR Section 403.14(a), the following shall apply:

1. Authorities. Any claim for confidentiality to the control authority must be in accordance with the Missouri Sunshine Law, Chapter 610, RSMo. If no claim is made at the time of submission, the control authority may make the information available to the public without further notice.

(B) The provisions of 40 CFR Section 403.14(c) are omitted.

(12) Pretreatment Authorization. Where the director is also the control authority, the director may issue a pretreatment authorization to a categorical industrial user which discharges industrial process wastewater to a POTW. This authorization will be used to set forth the conditions governing the user’s discharge to the POTW, where the POTW does not have an approved pretreatment program or the POTW has not issued discharge permits that meet the requirements set forth in 10 CSR 20-6.100(2) and (3).

(13) Judicial Relief.

(A) The director shall have authority to seek judicial relief pursuant to Missouri Clean Water Law, Chapter 644, including section 644.076, RSMo, for noncompliance by industrial users when the POTW has failed to act or has acted to seek such relief but has sought judicial relief which the director finds to be insufficient. The procedures for notice to dischargers where the POTW is seeking *ex parte* temporary judicial injunctive relief will be governed by applicable state or federal law and not by this provision.

(B) The director shall have authority to seek judicial relief pursuant to the Missouri Clean Water Law, Chapter 644, including section 644.076, RSMo, for noncompliance by industrial users where the director is the control authority.

AUTHORITY: section 644.041, RSMo 2000. Original rule filed Feb. 1, 1988, effective*

June 13, 1988. Amended: Filed March 1, 1996, effective Nov. 30, 1996. Rescinded and readopted: Filed Nov. 9, 2011, effective Oct. 30, 2012.

**Original authority: 644.041, RSMo 1972, amended 1973.*

10 CSR 20-6.200 Storm Water Regulations

PURPOSE: This rule sets forth the requirements and process of application for permits for storm water discharges and the terms and conditions for the permits.

(1) Storm Water Permits—General.

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

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

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

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

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

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

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

6. Agricultural storm water discharges and irrigation return flows;

7. Sites that disturb less than one (1) acre of total land area which are not part of a common plan or sale. Land disturbance activity on an individual residential building

lot is not considered as part of the overall subdivision unless the activity is by the developer to improve the lot for sale;

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

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

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

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

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

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

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

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

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

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

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



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

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

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

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

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

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

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

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

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

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

B. In some cases, the department may recognize, either in an individual permit or in a general permit that another governmental entity is responsible under a permit for implementing one (1) or more of the minimum control measures for a small MS4. Where the department recognizes these dual responsibilities, the department may not

require the MS4 to include such minimum control measure(s) in their program. The MS4 permit may be modified to include the requirement to implement a minimum control measure if the other entity fails to implement it;

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

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

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

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

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

A. Industrial materials and activities protected by storm resistant shelter. No exposure means that all industrial materials and

activities are protected by a storm resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff. Industrial materials or activities include, but are not limited to, material handling equipment or activities, industrial machinery, raw materials, intermediate products, by-products, final products, or waste products. Material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product, or waste product. To qualify a permit exclusion under this paragraph, the operator of the discharge must:

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

(II) Complete and sign a certification that storm water is not contaminated by exposure to industrial materials and activities from the entire facility, except as provided in paragraph (1)(A)2. of this rule;

(III) Re-submit the signed certification to the department once every five (5) years;

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

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

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

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

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

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

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

(C) Definitions.

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



disposal, or drainage from raw material storage.

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

A. State-approved standard specifications and permit programs;

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

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

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

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

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

G. Inlet and outlet protection;

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

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

J. Other proven methods for controlling runoff and sedimentation;

3. Copetitioner. A person with apportioned legal, financial, and administrative responsibility based on land area under its control for filing Part 1 and Part 2 of a state

operating permit for the discharge of storm water from municipal separate storm sewer systems. A copetitioner becomes a copetitioner once the permit is issued.

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

5. *De minimis* water contaminant source. A water contaminant source, point source, or wastewater treatment facility that is determined by the department to pose a negligible potential impact on waters of the state, even in the event of the malfunction of wastewater treatment controls or material handling procedures.

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

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

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

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

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

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

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

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

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

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

(III) The quantity and nature of pol-

lutants discharged to the waters of the state;

(IV) The nature of the receiving waters; or

(V) Other relevant factors; and

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

11. MS4 means:

A. A municipal separate storm sewer system.

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

13. Major outfall. A major municipal separate storm sewer outfall.

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

15. Medium municipal separate storm sewer system. All municipal separate storm sewers that are either—

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

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

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

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

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



(IV) The nature of the receiving waters;

(V) Other relevant factors; or

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

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

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

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

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

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

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

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

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

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

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

21. Process wastewater. Any water

which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, by-product, or waste product.

22. Receiving waters. Waters of the state as defined in this rule.

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

24. Regulated MS4 means:

A. A MS4 which serves a population of one thousand (1,000) or more within an urbanized area, or any MS4 located outside of an urbanized area serving a jurisdiction with a population of at least ten thousand (10,000) and a population density of one thousand (1,000) people per square mile or greater.

B. A MS4 which is designated by the department when it is determined that the discharges from the MS4 have caused or have the potential to cause an adverse impact on water quality. An application shall be submitted within one hundred eighty (180) days of the designation by the department.

25. Runoff coefficient. The fraction of total rainfall that will appear at a conveyance as runoff.

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

27. Significant material or activity associated with industrial activity.

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

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

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

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

28. Small construction activity means:

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

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

29. Small municipal separate storm sewer system means:

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

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

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



30. Small MS4 means:

A. A small municipal separate storm sewer system.

31. Storm water means storm water runoff, snowmelt runoff and surface runoff, and drainage.

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

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

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

(A) For the listed industries identified in subsection (2)(B) of this rule, the term includes, but is not limited to: storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; sites used for the application or disposal of process wastewaters; sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials and intermediate and finished products unless material is in closed cars or trailers and the loading/unloading operation does not expose material to storm water or otherwise pose risk of storm water contamination and areas where industrial activity has taken place in the past and where significant materials remain and are exposed to storm water.

(B) Industries subject to this requirement include:

1. Facilities classified with the following primary standard industry classification (SIC) are considered to be included in this paragraph: 10, Metal Mining; 12, Coal Mining; 13, Oil and Gas Extraction; 14, Non-metallic Minerals; 24, Lumber and Wood Products; 26, Paper and Allied Products; 28, Chemical and Allied Products; 29, Petroleum Refining; 311, Leather Tanning and Finish-

ing; 32, Stone, Clay, Glass, Concrete; 33, Primary Metal Industries; 3441, Fabricated Structural Metal; 373, Ship and Boat Building and Repair; and industries regulated under section 644.052.4, RSMo, except for those SICs addressed in paragraph (2)(B)4. of this rule;

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

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

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

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

C. Facilities involved in the recycling of materials including metal scrap yards, battery re-claimers, salvage yards, and automobile junk yards, including those with an SIC classification of 5015 and 5093;

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

E. Treatment works treating domestic sewage, or any other sewage sludge or wastewater treatment device or system, used in the storage treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that is located within the confines of the facility, with a design flow of 1.0 million gallons per day (mgd) or more or required to have an approved pretreatment program under 10 CSR 20-6.100; and

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

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

(C) Application Requirements for Storm Water Discharges Associated With Industrial Activity.

1. Individual application. Dischargers of storm water associated with industrial activity shall apply for an individual permit or seek coverage under a promulgated storm water general permit. Facilities that are required to obtain an individual permit, or any discharge of storm water which the director is evaluating for designation under this paragraph and is not a municipal separate storm sewer, shall submit a state operating permit application in accordance with the following requirements:

A. A site plan map showing topography or indicating the outline of drainage areas served by the outfall(s) covered in the application if a topographic map is unavailable of the facility including: facility property line, each of its drainage and discharge structures, the drainage area of each storm water outfall, paved areas and buildings within the drainage



area of each storm water outfall that drain to a storm water outfall, and those that do not drain to a storm water outfall, each past or present area used for outdoor storage or disposal of significant materials, each existing structural control measure to reduce pollutants in storm water runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied, each of its hazardous waste treatment, storage or disposal facilities (including each area not required to have an RCRA permit which is used for accumulating hazardous waste under 10 CSR 25-5.262; each well where fluids from the facility are injected underground; springs and sink holes and other surface water bodies which receive storm water discharges from the facility;

B. An estimate of the area of impervious surfaces (including paved areas and building roofs) and the total area drained by each outfall, if known, and a narrative description of the following: significant materials that in the three (3) years prior to the submittal of this application have been treated, stored, or disposed in a manner to allow exposure to storm water; method of treatment, storage, or disposal of materials; materials management practices employed in the three (3) years prior to the submittal of this application to minimize contact by these materials with storm water runoff; materials loading and access areas; outdoor vehicle maintenance and cleaning areas; the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of the treatment the storm water receives, including the ultimate disposal of any solid or fluid waste other than by discharge;

C. A certification that all outfalls that should contain storm water discharges associated with industrial activity have been tested or evaluated for the presence of nonstorm water discharges which are not covered by a state operating permit. Tests for nonstorm water discharges may include smoke tests and dye tests as well as other appropriate tests or analysis. The certification shall include a description of the method used, the date of any testing and the on-site drainage points that directly were observed during a test;

D. Existing information regarding significant leaks or spills of toxic or hazardous pollutants at the facility that have taken place within the three (3) years prior to the submittal of this application;

E. Quantitative data based on samples collected during storm events from all out-

falls containing a storm water discharge associated with industrial activity shall be submitted. When an applicant has two (2) or more outfalls that are similar in nature, an individual outfall can be designated as representative and samples only collected from the representative outfall. Quantitative data will be submitted for the following parameters:

(I) Any pollutant limited in an effluent guideline to which the facility is subject;

(II) Any pollutant listed in the facility's state operating permit for its process wastewater (if the facility is operating under an existing state operating permit);

(III) Oil and grease, pH, biochemical oxygen demands (BOD₅), chemical oxygen demands (COD), total suspended solids (TSS), conductivity, total phosphorus, total Kjeldahl nitrogen, and nitrate plus nitrite nitrogen;

(IV) Any information on the discharge required by the appropriate application form;

(V) Flow measurements or estimates of the flow rate, the total amount of discharge for the storm event(s) sampled, and the method of flow measurement or estimation; and

(VI) The date and duration (in hours) of the storm event(s) sampled, rainfall measurements of the storm event which generated the sampled runoff, and the duration between the storm event sampled and the end of the previous measurable (greater than one-tenth inch (0.1") rainfall) storm event (in hours), at least one-tenth inch (0.1") of rainfall per storm water event are required to be considered a valid storm water event. The reporting rainfall station, if possible, should be within one (1) mile of the sampled outfall and shall be capable of providing rainfall measurements in at least tenths of an inch;

F. Sampling and flow measurements or estimates shall be made to assess both the initial discharge loading and the total loading through the outfall during the measured rainfall event. A grab sample shall be taken within the first sixty (60) minutes of discharge. Sampling shall continue at the frequency of at least one (1) sample each sixty (60)-minute period. Sampling should continue for three (3) hours or until discharge ceases, whichever is first. A sample aliquot representing the initial discharge shall be analyzed separate from the event composite sample. The composite sample shall include an aliquot from the initial discharge sample. The composite sample should be flow-weighted using approved procedures. Samples shall be collected, preserved, and analyzed according to 40 CFR, Part 136 or other methods approved by the

department. When analysis is required, grab samples must be used for pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, fecal coliform, and fecal streptococcus;

G. Applicants shall provide other information the director reasonably may require to determine whether to issue a permit; and

H. Within one (1) year after commencement of discharge, operators of new sources or new discharges which are composed in part or entirely of storm water must include estimates for the pollutants or parameters listed in subparagraph (2)(C)1.E. of this rule, unless this data has already been reported under the monitoring requirements of the state operating permit for the discharge.

2. The operator of an existing or new discharge composed entirely of storm water from an oil or gas exploration, production, processing or treatment operation, or transmission facility is not required to submit a permit application in accordance with paragraph (2)(C)1. of this rule, unless the facility—

A. Has a discharge which is contaminated by contact with, or that has come into contact with, any overburden, raw materials, intermediate products, finished product, by-product, or waste products located on the site of the operation;

B. Has had a discharge of storm water resulting in the discharge of a reportable quantity for which notification is or was required at any time since November 16, 1987;

C. Contributes to a violation of a water quality standard.

3. The operator of an existing or new discharge composed entirely of storm water from a mining operation is not required to submit a permit application unless the discharge has come into contact with any overburden, raw material, intermediate products, finished product, by-product, or waste products located on the site of the operations.

(3) Land Disturbance and Small Construction Activity.

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

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

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

3. Proposed measures, including BMPs, to control pollutants in storm water discharges during construction, including a brief



description of applicable state and local erosion and sediment control requirements;

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

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

6. The name of the receiving water.

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

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

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

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

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

2. Legal authority. A description of existing legal authority to control discharges to the municipal separate storm sewer system. When existing legal authority is not suf-

ficient to meet the criteria provided in paragraph (4)(B)1. of this rule, the description shall list additional authorities as will be necessary to meet the criteria and shall include a schedule and commitment to seek the additional authority that will be needed to meet the criteria;

3. Source identification.

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

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

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

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

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

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

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

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

4. Discharge characterization.

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

B. Existing quantitative data describing the volume and quality of discharges from the municipal separate storm sewer, including a description of the major outfalls sampled,

sampling procedures, and analytical methods used.

C. A list of water bodies that receive discharges from the municipal separate storm sewer system, including downstream segments, groundwater, lakes, and wetlands where pollutants from the system discharges may accumulate and cause water degradation and a brief description of known water quality impacts. At a minimum, the description of impacts shall include a description of whether the water bodies receiving discharges have been:

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

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

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

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

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

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

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

D. Field screening. Results of a field screening analysis for illicit connections and illegal dumping for either selected field screening points or major outfalls covered in the permit application. At a minimum, a screening analysis shall include a narrative description, for either each field screening point or major outfall, of visual observations



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

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

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

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

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

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

(e) Hydrological conditions, total drainage area of the site, population density of the site, traffic density, age of the struc-

tures or buildings in the area, history of the area, and land-use types;

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

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

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

E. Characterization plan. Information and a proposed program to meet the requirements of paragraph (4)(B)3. of this

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

5. Management programs.

A. A description of the existing management programs to control pollutants from the municipal separate storm sewer system. The description shall provide information on existing structural and source controls, including operation and maintenance measures for structural controls that are currently being implemented. These controls may include, but are not limited to, procedures to control pollution resulting from construction activities; flood plain management controls; wetland protection measures; BMPs for new subdivisions; and emergency spill response programs. The description may address controls established under state law as well as local requirements.

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

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

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

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

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



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

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

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

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

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

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

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

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

(I) For each outfall or field screening point designated under this part, samples shall be collected of storm water discharges

from three (3) storm events occurring at least one (1) month apart;

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

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

- (a) TSS;
- (b) Total dissolved solids (TDS);
- (c) COD;
- (d) BOD₅;
- (e) Oil and grease;
- (f) Fecal coliform;
- (g) Fecal streptococcus;
- (h) pH;
- (i) Total Kjeldahl nitrogen;
- (j) Nitrate plus nitrite;
- (k) Dissolved phosphorus;
- (l) Total ammonia plus organic nitrogen; and
- (m) Total phosphorus; and

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

B. Estimates of the annual pollutant load of the cumulative discharges to waters of the state from all identified municipal outfalls or field screening points and the event mean concentration of the cumulative discharges to waters of the state from all identified municipal outfalls or field screening points during a storm event as described under paragraphs (4)(A)3. and (4)(B)2. for BOD₅, COD, TSS, dissolved solids, total nitrogen, total ammonia plus organic nitrogen, total phosphorus, dissolved phosphorus, cadmium, copper, lead, and zinc. Estimates shall be accompanied by a description of the procedures for estimating constituent loads and concentrations, including any modeling, data analysis, and calculation methods;

C. A proposed schedule to provide estimates for each major outfall or field screening point identified in either paragraph (4)(A)3. or (4)(B)2. of this rule of the season-

al pollutant load and of the event mean concentration of a representative storm for any constituent detected in any sample required under subparagraph (4)(B)3.A. of this rule; and

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

4. Proposed management program. A proposed management program covers the duration of the permit. It shall include a comprehensive planning process which involves public participation and where necessary intergovernmental coordination to reduce the discharge of pollutants to the maximum extent practicable using BMPs, control techniques and system, design and engineering methods, and other provisions which are appropriate. The program shall also include a description of staff and equipment available to implement the program. Separate proposed programs may be submitted by each copetitioner. Proposed programs may impose controls on a system-wide basis, a watershed basis, a jurisdiction basis, or on individual outfalls. Proposed programs will be considered by the director when developing permit conditions to reduce pollutants in discharges to the maximum extent practicable. Proposed management programs shall describe priorities for implementing controls. These programs shall be based on—

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

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

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



discharges from municipal separate storm sewers after construction is completed;

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

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

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

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

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

(I) A description of a program including inspections, to implement and enforce an ordinance, orders, or similar means to prevent illicit discharges to the municipal separate storm sewer system. This program description shall address all types of illicit discharges, however the following categories of nonstorm water discharges or flows shall be addressed where the discharges are identified by the municipality as sources of pollutants to waters of the state: water line flushing, landscape irrigation, diverted stream flows, rising groundwaters, uncontaminated groundwater infiltration to separate storm sewers, uncontaminated pumped groundwater, discharges from potable water

sources, foundation drains, air-conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and street wash water. Program descriptions shall address discharges or flows from fire fighting only where the discharges or flows are identified as significant sources of pollutants to waters of the state;

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

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

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

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

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

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

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

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

(II) Describe a monitoring program for storm water discharges associated with the industrial facilities identified in this part to be implemented during the term of the permit, including the submission of quantitative data on the following constituents: any pollutants limited in effluent guidelines subcategories, where applicable; any pollutant listed in an existing state operating permit for a facility; oil and grease, COD, pH, BOD₅, TSS, total phosphorus, total Kjeldahl nitrogen, nitrate plus nitrite nitrogen, and any information on parameters that are believed to be present listed on Clean Water Commission Application Form 105D; and

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

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

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

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

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

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

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

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



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

9. Petitions.

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

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

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

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

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

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

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

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

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

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

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

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

G. Identifications of water quality improvements or degradation.

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

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

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

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

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

4. Construction site storm water runoff control. A program to control discharges of storm water and sediment from construction sites and activities must be developed. The program must be designed to protect receiving waters from sediment and other pollutants

such as petroleum products, solid wastes, fertilizers, pesticides, and other construction related chemicals.

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

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

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

(B) Site-Specific Option. Applicants who do not wish to be covered under a general permit for small MS4 discharges can apply for a site-specific permit by submitting the most recent version of Application for Discharge Permit Form A and by submitting program descriptions of the six (6) minimum measures as outlined in paragraphs (5)(A)1.-6. Additional information regarding issues to be addressed in the site-specific permit shall accompany the application. Implementation and enforcement of the six (6) minimum measures will be one of the requirements of any issued permit.

(C) Copermittee Option.

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

2. Applications from copermittees shall include the requirements of either subsection (5)(A) or (B) and in addition shall contain information designating responsibilities of



each coapplicant in regard to development, implementation and enforcement of the six (6) minimum measures.

(6) Permit Requirements.

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

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

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

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

C. State highway systems; and

D. Any other appropriate division or combination of boundaries;

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

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

B. Discharge the same types of wastes;

C. Require the same operating conditions;

D. Require the same or similar monitoring; and

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

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

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

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

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

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

(II) The size of the discharge;

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

(IV) Other relevant factors;

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

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

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

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

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

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

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

A. Information required in a petition must include:

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

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

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

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

(V) A summary of the history of spills, leaks, and complaints relating to sig-

nificant materials used, stored, treated, or disposed of on these facilities; and

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

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

(I) A general permit will be developed;

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

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

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

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

8. A general permit will be issued to cover the geographical area of any city or county government that has a land disturbance program in place that has been approved by the department. The general permit will require that the person(s) disturbing the land comply with the conditions of the locally-approved land disturbance program. Permittees who wish to be covered by this general permit and who comply with the locally-approved program must submit a state general permit and a one hundred fifty dollar (\$150) permit fee to the department. Receipt of the application and fee shall fulfill the state permit requirements for the applicant. In the event the approval of the land disturbance program is withdrawn by the department, all activities started after the withdrawal must be permitted under either a site-specific permit or a statewide general permit that covers the activity if one exists; and

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



site-specific permit or a statewide general permit that covers the activity if one exists.

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

1. Identification of the permit holder; and

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

A. The application and information filed by the permittee;

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

C. Best professional judgment of the permit writer;

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

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

3. Monitoring and reporting requirements; and

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

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

1. Identification of the permit holder;

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

3. Monitoring and reporting requirements.

(D) Terms and Conditions of Permits.

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

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

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

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

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

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

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

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

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

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

AUTHORITY: section 644.026, RSMo 2000 and section 644.036, RSMo Supp. 2008. Original rule filed July 15, 1991, effective Oct. 1, 1992. Amended: Filed Sept. 14, 2001, effective May 30, 2002. Amended: Filed Feb. 3, 2009, effective Oct. 30, 2009.*

**Original authority: 644.026, RSMo 1972, amended 1973, 1987, 1993, 1995, 2000 and 644.036, RSMo 1972, amended 1973, 2000, 2002, 2006.*

10 CSR 20-6.300 Concentrated Animal Feeding Operations

PURPOSE: This rule sets forth the requirements and procedures for operating permits for concentrated animal feeding operations. Minimum federal requirements are incorporated, and additional state requirements are included to provide increased environmental protection of sensitive watersheds.

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. This material as incorporated by reference in this rule shall be maintained by the agency at its headquarters and shall be made available to the public for inspection and copying at no more than the actual cost of reproduction. This note applies only to the reference material. The entire text of the rule is printed here.

(1) Definitions.

(A) Definitions as set forth in 10 CSR 20-

2.010 and 10 CSR 20-8.300 shall apply to the terms when used in this rule unless otherwise defined in subsection (B) below.

(B) Other applicable definitions are incorporated as follows:

1. Animal—Domestic animals, fowls, or other types of livestock except for aquatic animals;

2. Animal unit—A unit of measurement to compare various animal types at an animal feeding operation. One (1) animal unit equals the following: 1.0 beef cow or feeder, cow/calf pair, veal calf, or dairy heifer; 0.5 horse; 0.7 mature dairy cow; 2.5 swine weighing over 55 pounds; 10 swine weighing less than 55 pounds; 10 sheep, lamb, or meat and dairy goats; 30 chicken laying hens or broilers with a wet handling system; 82 chicken laying hens without a wet handling system; 55 turkeys in grow-out phase; 125 chicken broilers, chicken pullets, or turkey poults in brood phase without a wet handling system;

3. Animal unit equivalent—Any unique animal type, not listed, that has a similar manure characteristic as one (1) of the listed animal unit categories. The department shall make the determination of an animal unit equivalent based upon manure characteristics that include manure volume and nutrient concentration;

4. Animal feeding operation (AFO)—A lot, building, or complex at an operating location where animals are stabled or confined and fed or maintained for a total of forty-five (45) days or more in any twelve- (12-) month period, and crops, vegetation, forage growth, or post-harvest residues cannot be sustained over at least fifty percent (50%) of the animal confinement area within the normal crop growing season;

5. Catastrophic storm event—A precipitation event of twenty-four- (24-) hour duration that exceeds the twenty-five- (25-) year, twenty-four- (24-) hour storm event as defined by the most recent publication of the National Weather Service Climate Atlas;

6. Chronic weather event—The chronic weather event will be based upon an evaluation of the ten (10) year return rainfall frequency over a ten- (10-) day, ninety- (90-) day, one hundred eighty- (180-) day, and three hundred sixty-five- (365-) day operating period. It is preferred the University of Missouri's Missouri Climate Center will determine, within a reasonable time frame, when a chronic weather event is occurring for any given county in the state;

7. Class I and Class II operation—An AFO or CAFO's class size is based on the operating level in animal units of an individual animal type at one (1) operating location.



Once a CAFO becomes a Class I operation, the animal units of all confined animals at the operating location are summed to determine whether the operation is Class IA, IB, or IC. Operations that are smaller than the Class II category are considered unclassified. The class categories, sorted by animal type, are presented in the following chart:



1 Animal Unit =

1.0	Beef cow, feeder, veal calf, cow/calf pair, and dairy heifer	10	Sheep, lambs, and meat and dairy goats
0.5	Horses	30	Chicken laying hens, pullets, and broilers with a wet handling system
0.7	Mature Dairy cows		
2.5	Swine weighing over 55 pounds	55	Turkeys in grow-out phase
10	Swine weighing under 55 pounds	82	Chicken laying hens without a wet handling system
5	Ducks with a wet handling system	125	Chicken broilers and pullets, and turkey poults in brood phase, all without a wet handling system
300	Ducks without a wet handling system		

Animal Class Category

Animal Class Category	Class IA 7,000 AUs*	Class IB 3,000 to 6,999 AUs*	Class IC 1,000 to 2,999 AUs*	Class II 300 to 999 AUs*
Beef cows, feeder cattle, veal calves, cow/calf pairs, and dairy heifers	7,000	3,000 to 6,999	1,000 to 2,999	300 to 999
Horses	3,500	1,500 to 3,499	500 to 1,499	150 to 499
Mature Dairy Cows	4,900	2,100 to 4,899	700 to 2,099	200 to 699
Swine weighing over 55 pounds	17,500	7,500 to 17,499	2,500 to 7,499	750 to 2,499
Swine weighing under 55 pounds	70,000	30,000 to 69,999	10,000 to 29,999	3,000 to 9,999
Sheep, lambs, and meat and dairy goats	70,000	30,000 to 69,999	10,000 to 29,999	3,000 to 9,999
Chicken laying hens, pullets, and broilers with a wet handling system	210,000	90,000 to 209,999	30,000 to 89,999	9,000 to 29,999
Chicken laying hens without a wet handling system	574,000	246,000 to 573,999	82,000 to 245,999	24,500 to 81,999
Turkeys in grow-out phase	385,000	165,000 to 384,999	55,000 to 164,999	16,500 to 54,999
Chicken broilers and pullets, and turkey poults in brood phase, all without a wet handling system	875,000	375,000 to 874,999	125,000 to 374,999	37,500 to 124,999
Ducks without a wet handling system	210,000	90,000 to 209,999	30,000 to 89,999	10,000 to 29,999
Ducks with a wet handling system	35,000	15,000 to 34,999	5,000 to 14,999	1,500 to 4,999

*Animal Units



8. Concentrated animal feeding operation (CAFO)—An AFO that meets one (1) of the following criteria:

A. Class I operation;

B. Class II operation where either one (1) of the following conditions are met:

(I) Pollutants are discharged into waters of the state through a manmade ditch, flush system, or other similar man-made device; or

(II) Pollutants are discharged directly into waters of the state which originate outside of and pass over, across, or through the production area or otherwise come into contact with the animals confined in the operation; or

C. An unclassified operation that is designated as a CAFO in accordance with subsection (2)(D) of this rule;

9. Critical watersheds—defined as the following:

A. Watersheds for public drinking water lakes (L1 lakes defined in 10 CSR 20-7.031 and identified in Table G);

B. Watersheds located upstream away from the dam from all drinking water intake structures on lakes including the watershed of Table Rock Lake;

C. Areas in the watershed and within five (5) miles upstream of any stream or river drinking water intake structure, other than those intake structures on the Missouri and Mississippi Rivers; and

D. Watersheds of the Current (headwaters to Northern Ripley County Line), Eleven Point (headwaters to Hwy. 142), and Jacks Fork (headwaters to mouth) Rivers;

10. Discharge—A CAFO is said to discharge when it is designed, constructed, operated, or maintained such that a discharge of process waste to surface waters of the state will occur. A CAFO that discharges could include one (1) that continuously discharges process wastewater to surface waters of the state, as well as one that may only have an intermittent and sporadic discharge. Discharges of agricultural storm water is a non-point source and therefore not included within this definition;

11. Dry process waste—A process waste mixture which may include manure, litter, or compost (including bedding, compost, mortality by-products, or other raw materials which is commingled with manure) and has less than seventy-five percent (75%) moisture content and does not contain any free draining liquids;

12. Flush system—Any animal waste moving or removing system utilizing the force of periodic liquid flushing as the primary mechanism for removing manure from animal containment buildings, as opposed to a

primarily mechanical or automatic device. This definition does not include confinement buildings that utilize deep or shallow under-floor pits with pull plug devices;

13. Land application area—Agricultural land which is under the operational control of the CAFO owner or operator, whether it is owned, rented, or leased, to which manure, litter, or process wastewater from the production area is or may be applied;

14. Multi-year phosphorus application—Phosphorus applied to a field in excess of the crop needs for that year. When multi-year phosphorus applications are followed, no additional manure, litter, or process wastewater is applied to the same land in subsequent years until the applied phosphorus has been removed from the field via harvest and crop removal or until subsequent soil testing allows for nitrogen-based rates;

15. No-discharge operation—A CAFO is considered no-discharge if the operation is designed, constructed, operated, and maintained in a manner such that the CAFO will not discharge to waters of the state. A discharge of agricultural storm water is a non-point source and therefore not included within this definition;

16. Occupied residence—A residential dwelling which is inhabited at least fifty percent (50%) of the year;

17. Operating location—For purposes of determining CAFO classification, an operating location includes all contiguous lands owned, operated, or controlled by one (1) person or by two (2) or more persons jointly or as tenants in common or noncontiguous lands if they use a common area for the land application of wastes. State and county roads are not considered property boundaries for purposes of this rule. Two (2) or more animal feeding operations under a common ownership are considered to be a single animal feeding operation if they adjoin each other or if they use a common area for the land application of wastes;

18. Overflow—The discharge of process wastewater resulting from the filling of wastewater or manure storage structures beyond the point at which no more manure, process wastewater, or stormwater can be contained by the structure;

19. Process wastewater—Water which carries or contains manure, including manure commingled with litter, compost, or other animal production waste materials used in the operation of the CAFO. Also includes water directly or indirectly used in the operation of the CAFO for any or all of the following: spillage or overflow from confined animal or poultry watering systems; washing, cleaning, or flushing pens, barns, manure pits, or other

CAFO facilities; and water resulting from the washing, or spray cooling of confined animals. Process wastewater also includes any water which comes into contact with any raw materials, products, or by-products feed, milk, eggs, or bedding;

20. Production area—The non-vegetated portions of an operation where manure, litter, or process wastewater from the AFO is generated, stored, and/or managed. The production area includes the animal confinement area, the manure storage area, the raw materials storage area, and the waste containment areas. The animal confinement area includes, but is not limited to, open lots, housed lots, feedlots, confinement houses, stall barns, free stall barns, milkrooms, milking centers, cowyards, barnyards, medication pens, walkers, animal walkways, and stables. The manure storage area includes, but is not limited to, lagoons, runoff ponds, storage sheds, stockpiles, under house or pit storages, liquid impoundments, static piles, and composting piles. The raw materials storage area includes, but is not limited to, feed and silage, silos, pads, and bunkers, and bedding materials. The waste containment area includes, but is not limited to, settling basins and areas within berms and diversions which separate uncontaminated storm water. Also included in the definition of production area is any egg washing or egg processing operation and any area used in the storage, treatment, or disposal of animal mortalities;

21. Public building—A building open to and used routinely by the public for public purposes;

22. Vegetated buffer—A narrow, permanent strip of dense perennial vegetation established parallel to the contours of and perpendicular to the dominant slope of the field for the purposes of slowing water runoff, enhancing water infiltration, and minimizing the risk of any potential nutrients or pollutants from leaving the field and reaching surface waters;

23. Waste management system—Includes all structures and equipment, used to collect, store, transfer, or treat manure, litter, and/or process waste water. A waste management system will be considered in operation when animals are placed in confinement; and

24. Wet handling system—Wet handling system is the handling of process wastewater that contains more than seventy five percent (75%) moisture content or has free draining liquids. A wet handling system includes, but is not limited to, lagoons, pits, tanks, all gravity outfall lines, recycle pump stations, recycle force mains, and appurtenances.



(2) Applicability and Application for Coverage.

(A) Scope of Rule. This rule applies solely to manure, litter, and/or process wastewater management systems at concentrated animal feeding operations (CAFOs). CAFOs are point sources and are subject to both state and federal National Pollutant Discharge Elimination System (NPDES) regulations in accordance with sections 640.710 and 644.026, RSMo.

(B) Permit Coverage Required—Any CAFO owner or operator shall obtain one (1) of the operating permits listed below prior to operating a waste management system at a concentrated animal feeding operation unless otherwise exempted under subsection (2)(E) of this rule:

1. NPDES general or site-specific operating permits—Owners or operators of Class I CAFOs that discharge and Class II AFOs that are defined or designated as a CAFO, must obtain an NPDES operating permit. Class I CAFOs that do not discharge may also apply for coverage under an NPDES operating permit;

2. State no-discharge operating permit—Owners or operators of Class I CAFOs that do not discharge and do not apply for coverage under an NPDES operating permit shall obtain and maintain coverage under a state no-discharge operating permit.

(C) CAFO Designation at Class II Size AFOs.

1. The department may designate an AFO as a concentrated animal feeding operation upon determining that it is a significant contributor of pollutants to waters of the state. In making such designation, the department shall consider the following factors:

A. The size of the AFO and the amount of wastes reaching waters of the state;

B. The location of the AFO relative to waters of the state;

C. The means of conveyance of animal wastes and process waste into waters of the state;

D. The slope, vegetation, rainfall, and other factors affecting the likelihood or frequency of discharge of animal wastes manure and process waste into waters of the state; and

E. Other relevant factors.

2. No AFO shall be designated under this section unless the department has conducted an on-site inspection of the operation and determined that the operation should and could be regulated as a concentrated animal feeding operation. In addition, no AFO with number of animals below a Class II size operation may be designated as a CAFO unless—

A. Pollutants are discharged into waters of the state through a manmade ditch, flushing system, or other similar manmade

device; or

B. Pollutants are discharged directly into the waters of the state which originate outside of the AFO and pass over, across, or through the AFO, or otherwise come into direct contact with the animals confined in the operation.

(D) Exemptions.

1. In accordance with section 640.758, RSMo, livestock markets and auctions are exempt from the provisions of 10 CSR 20-6.300(3)(B)–(C), 10 CSR 20-6.300(3)(H), and 10 CSR 20-6.300(7).

2. Permits are not required for nonpoint source discharges, agricultural stormwater discharges, and return flows from irrigated agriculture. A precipitation related discharge of manure, litter, or process wastewater from land application areas under the control of a CAFO is considered an agricultural stormwater discharge when manure, litter, or process wastewater is applied in accordance with site-specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter, or process wastewater.

(E) Operating Permit Applications. This section describes the application process and requirements for CAFO operating permits. A separate application for each operating location must be submitted to the department.

1. The department will not examine the adequacy or efficiency of the structural, mechanical, or electrical components of the waste management systems, only adherence to rules and regulations. The issuance of permits will not include approval of such features.

2. Applications for general operating permits should be submitted at least ninety (90) days prior to the start of operation. Applications for site-specific operating permits shall be submitted at least one hundred eighty (180) days prior to the start of operation. The application shall include at a minimum the following documents:

A. Title page of engineering report or similar document sealed by a professional engineer including name of the operation, date the report was prepared, name and address of firm preparing the report, seal and signature of the engineer, and a statement indicating the project was designed in accordance with 10 CSR 20-8.300;

B. Narrative project summary. This shall describe the existing and any proposed modifications to operating conditions including the number of confinement buildings or areas, the total design capacity in animal units and actual animal numbers for each type of animal, and an explanation of the existing and/or proposed modifications to the waste management system;

C. Include the amount of manure generated annually, storage volume, and days of storage of all manure storage structures, including mortality composters;

D. A recent aerial or topographic map showing the extent of the production area including;

(I) All existing and proposed confinement buildings, open lots, manure storage structures;

(II) Surface waters and areas subject to a one hundred (100) year flood event within or adjacent to the production area; and

(III) Production area setback distances in accordance with 10 CSR 20-8.300(5)(B);

E. Nutrient Management Plan—

(I) NPDES permit – applications shall include the operations' nutrient management plan; or

(II) State no-discharge permit – applications for a new permit shall include the operations' nutrient management plan;

F. Applications for Class I CAFOs shall also include:

(I) An aerial or topographic map that meets the requirement of 10 CSR 20-6.300(3)(C)4.;

(II) Proof of neighbor notice to all parties listed in 10 CSR 20-6.300(3)(C)2.

3. For renewal of NPDES operating permits, a copy of the operations nutrient management plan shall be submitted if it has not previously been submitted.

4. When an application is submitted incomplete or any of the required permit documents are deficient, or if additional information is needed including, but not limited to, engineering design plans, the department will act in one (1) of the following ways:

A. The department may return the entire permit application back to the applicant for re-submittal; or

B. The applicant and/or the applicant's engineer will be notified of the deficiency and will be provided time to address department comments and submit corrections. Processing of the application may be placed on hold until the applicant has corrected identified deficiencies.

5. Applicants who fail to correct deficiencies and/or fail to satisfy all department comments after two (2) certified department comment letters shall have the application returned as incomplete and the permit fee(s) shall be forfeited. The department will grant reasonable time extensions when the applicant requests additional time to respond to department comments, however, such requests must be in writing and must occur within the time frame set by the department.

6. When the department has received all



documents and information necessary for a properly completed operating permit application, including appropriate permit fees, the department will, review the application and said documents for compliance with this regulation and 10 CSR 20-8.300 and, if met, act in one (1) of the following ways:

A. For an operation seeking coverage under the state no-discharge general operating permit the department will issue the state no-discharge general operating permit; or

B. For an operation seeking coverage under the NPDES operating permit the department will post for fifteen (15) days on the department's webpage a notice of the pending CAFO NPDES permit. The notice will include an announcement of the opportunity for public review and comment on the CAFO's nutrient management plan and draft NPDES permit. The department will consider all comments before issuing the operating permit.

(3) Operating Permit Requirements. These requirements apply to all operating permits unless otherwise specified.

(A) General Requirements.

1. All operating permits required by this rule shall be issued in accordance with applicable provisions of 10 CSR 20-6.010, 10 CSR 20-6.011, 10 CSR 20-6.020, and 10 CSR 20-8.300. When the state regulations referenced within these rules are found to be incompatible with the requirements of 10 CSR 20-6.300, the provisions of 10 CSR 20-6.300 will take precedence.

2. In addition to the state requirements found in this rule, all CAFO NPDES permits shall be issued in compliance with applicable federal regulation as set forth in 40 CFR 122.42(e), and 40 CFR 412, Subpart A through Subpart D, July 30, 2012, incorporated by reference, without any later amendments or additions, as published by the Office of the Federal Register, National Archives and Records Administration, Superintendent of Documents, Pittsburgh, PA 15250-7954.

3. Permits shall allow the CAFO to operate at a level of animal units not to exceed its respective class size (i.e., Class IC or IB). When determining the appropriate classification, a rolling twelve- (12-) month average method will be used. The rolling twelve- (12-) month average shall at no time exceed the upper threshold limit of the CAFO's designated class size. CAFOs may change animal numbers and weights within its respective class size; however, such changes must not subsequently violate applicable effluent limitations found in section (4) of this rule or adversely impact the storage and handling capacities of the waste management system and may be sub-

ject to other appropriate conditions or limitations. If a Class I CAFO has reduced animal numbers and is operating as a Class II or smaller AFO, the operation may request termination of their operating permit. The rolling twelve- (12-) month average for the last twelve (12) months shall be submitted with the termination request. The department will then conduct an inspection to determine if the permit can be terminated. If the operation increases animal numbers to the Class I operating size, the owner or operator of the CAFO shall apply for an operating permit.

4. Permits shall require the CAFO operator to provide the recipient of any manure, litter, or process wastewater transfer, a current manure nutrient analysis.

5. Mortalities must not be disposed of in any liquid manure or process wastewater system, unless specifically designed to handle them. Mortalities must be handled in such a way as to prevent the discharge of pollutants to surface waters and prevent the creation of a public health hazard.

(B) Buffer Distances.

1. All Class I concentrated animal feeding operations shall maintain a buffer distance between the nearest animal confinement building or wastewater storage structure and any existing public building or occupied residence. The public building or occupied residence will be considered existing if it is being used prior to the start of the neighbor notice requirements of subsection (C) of this section or thirty (30) days prior to the date the department receives an operating permit application, whichever is later. Buffer distances shall be—

A. One thousand feet (1000') for concentrated animal feeding operations between 1,000 and 2,999 animal units (Class IC operations);

B. Two thousand feet (2,000') for concentrated animal feeding operations between 3,000 and 6,999 animal units (Class IB operations); and

C. Three thousand feet (3,000') for concentrated animal feeding operations equal to or greater than 7,000 animal units (Class IA).

2. When a CAFO proposes an expansion or modification but does not increase to a larger classification size, the buffer distance requirements shall be applicable only to the proposed confinement buildings and wastewater storage structures unless exempted by paragraph 3. of this subsection. Neighbor notice requirements of subsection (C) of this section shall apply to all existing and proposed confinement buildings and wastewater storage structures. If the proposed expansion

or modification results in an increase to a larger classification size, the buffer distance and neighbor notice requirement of the larger classification size will apply to all existing and proposed confinement buildings and wastewater storage structures unless exempted by paragraph 4. of this subsection.

3. A concentrated animal feeding operation and any future modification or expansion of a CAFO is exempt from buffer distance requirements, but not neighbor notice requirements, when it meets all of the following criteria:

A. The CAFO was in existence prior to June 25, 1996; and

B. The CAFO does not expand to a larger classification size.

4. When existing animal feeding operations or concentrated animal feeding operations expand to a larger class size, the buffer distances shall not apply to the portion of the operation in existence as of June 25, 1996.

5. Buffer distances are not applicable to residences owned by the concentrated animal feeding operation or a residence from which a written agreement for operation is obtained from the owner of that residence. When shorter buffer distances are proposed by the operation and allowed by the department, the written agreement for a shorter buffer distance shall be recorded with the county recorder and filed in the chain of title for the property of the land owner agreeing to the shorter buffer distance.

6. The department may, upon review of the information contained in the operating permit application, including, but not limited to, the prevailing winds, topography, and other local environmental factors, authorize a buffer distance which is less than the distance prescribed in this rule. The department's recommendation shall be sent to the governing body of the county in which such site is proposed. The department's authorized buffer distance shall become effective unless the county governing body rejects the department's recommendation by a majority vote at the next meeting of the governing body after the recommendation is received.

(C) Neighbor Notice Requirements.

1. Prior to filing an application for an operating permit with the department for a new or expanding Class I concentrated animal feeding operation, the following information shall be provided by way of a letter to all the parties listed in paragraph (3)(C)2. of this section:

A. The number of animals designed for the operation;

B. A brief summary of the waste handling plan and general layout of the operation;

C. The location and number of acres



of the operation;

D. Name, address, and telephone number of registered agent or owner;

E. Notice that the department will accept written comments for a thirty- (30-) day period. The department will accept written comments from the public for thirty (30) days after receipt of the operating permit application; and

F. The address of the department office receiving comments.

2. The neighbor notice shall be provided to the following:

A. The department's Water Protection Program;

B. The county governing body; and

C. All adjoining owners of property located within one and one-half (1 1/2) times the buffer distances specified in subsection (3)(B). Distances are to be measured from the nearest animal confinement building or wastewater storage structure to the adjoining property line.

3. The operating permit applicant shall submit to the department proof the above notification has been sent. An acceptable form of proof includes copies of mail delivery confirmation receipts, return receipts, or other similar documentation.

4. All concentrated animal feeding operations shall submit, as part of the operating permit application, an aerial or topographic map of the production area. The maps shall show the operation layout, buffer distances, property lines, and property owners within one and one-half (1 1/2) times the buffer distance.

5. The neighbor notice will expire if an operating permit application has not been received by the department within twelve (12) months of initiating the neighbor notice requirements.

(D) Inspections.

1. Permits shall require the following minimum visual inspections at the production area:

A. Weekly inspections of all storm water diversion devices, runoff diversion structures, and devices channeling contaminated storm water to the process wastewater storage;

B. Daily inspection of water lines, including wastewater, drinking water, and cooling water lines that can be visually observed within the production area. The inspection of the drinking water and cooling water lines shall be limited to the lines that possess the ability to leak or drain to wastewater storage structures or may come in contact with any process waste;

C. Weekly inspections of the manure, litter, and process wastewater impoundments.

The inspection will note the level in liquid impoundments as indicated by the depth marker; and

D. Once per day when in use conduct leak inspections on equipment used for land application of manure or process wastewater.

2. Permits shall require the following minimum visual inspections at the land application area:

A. Monitoring of the perimeter of the application fields once per day during land application to ensure that applied wastewater does not run off the fields where applied;

B. Monitor for drifting from spray irrigation; and

C. Hourly inspections of aboveground irrigation pipelines when in use.

3. Permits shall require that any deficiencies found as a result of inspections be corrected as soon as possible.

(E) Record Keeping. This section pertains to all CAFO operating permits. All records required by this section shall be made available to the department upon request.

1. Permits shall require that the permittee maintain the following records for the production area for a period of five (5) years from the date they are created:

A. A copy of construction and operating permits, permit applications, and the nutrient management plan;

B. A once-per-week record documenting the daily visual inspections performed as required in 10 CSR 20-6.300(3)(D) above;

C. Weekly records of the depth of the manure and process wastewater in the liquid impoundments as indicated by the depth marker;

D. Records documenting any actions taken to correct deficiencies. Deficiencies not corrected within thirty (30) days shall be accompanied by an explanation of the factors preventing immediate correction;

E. Records of mortalities management and practices used by the operation which verify compliance with 10 CSR 20-6.300(3)(A)5. above;

F. Records of the date, time, and estimated volume of any overflow; and

G. Records of the date, recipient name and address, and approximate amount of manure, litter, or process wastewater transferred to another person.

2. Permits shall require that the permittee maintain the following records for the land application area for a period of five (5) years from the date they are created:

A. Expected crop yields;

B. The date(s) manure, litter, or process wastewater is applied to each field;

C. Weather conditions at time of

application and for twenty-four (24) hours prior to and following application;

D. Test methods used to sample and analyze manure, litter, process wastewater, and soil;

E. Results from manure, litter, process wastewater, and soil sampling;

F. Explanation of the basis for determining manure application rates, as provided in the technical standards;

G. Calculations showing the total nitrogen and phosphorus to be applied to each field, including sources other than manure, litter, or process wastewater;

H. Total amount of nitrogen and phosphorus actually applied to each field, including documentation of calculations for the total amount applied;

I. The method used to apply the manure, litter, or process wastewater; and

J. Date(s) of manure application equipment inspection.

(F) Annual Reports. This section is required for NPDES operating permits only.

1. NPDES operating permits shall require the submission of an annual report that includes:

A. The number and type of animals confined at the operation;

B. Estimated amount of total manure, litter, and process wastewater generated by the operation in the previous twelve (12) months;

C. Estimated amount of total manure, litter, and process wastewater transferred to other persons by the operation in the previous twelve (12) months;

D. Total number of acres for land application covered by the nutrient management plan;

E. Total number of acres under control of the operation that were used for land application of manure, litter, and process wastewater in the previous twelve (12) months;

F. Summary of all manure, litter, and process wastewater discharges from the production area to waters of the state that have occurred in the previous twelve (12) months, including date, time, and approximate volume;

G. A statement indicating whether the current version of the CAFO's nutrient management plan was developed or approved by a certified nutrient management planner; and

H. The actual crop(s) planted and actual yield(s) for each field, the actual nitrogen and phosphorus content of the manure, litter, and process wastewater, the data used to calculate and the results of annual calculations for maximum amount of manure, litter, and process wastewater to be applied, the amount of manure, litter, and process wastewater applied to each field during the previous



twelve (12) months, the results of any soil tests for nitrogen and phosphorus taken during the previous twelve (12) months, and the amount of any supplemental fertilizer applied during the previous twelve (12) months.

(G) Best Management Practices (BMPs)—Each CAFO subject to 10 CSR 20-6.300, that land applies manure, litter, or process wastewater must do so in accordance with the following practices:

1. Nutrient management plan. Operating permits shall require a nutrient management plan be developed and implemented according to the requirements of 10 CSR 20-6.300(5). The plan must also incorporate the requirements of paragraph (3)(G)2. below. The CAFO must begin implementation of the plan upon the date of operating permit coverage;

2. Manure, litter, and process wastewater applied to the land application area must minimize phosphorus and nitrogen transport from the field to surface waters in compliance with the *Missouri Concentrated Animal Feeding Operation Nutrient Management Technical Standard (NMTS)* approved by the Clean Water Commission on March 4, 2009, in accordance with 40 CFR 123.36, as published by the Missouri Department of Natural Resources, Division of Environmental Quality, Water Protection Program, PO Box 176, Jefferson City, MO 65102-0176, which is hereby incorporated by reference into this rule without any later amendments or additions, or an alternative but equally protective standard subsequently approved by the department that includes, but is not limited to, the following:

A. Include a field-specific assessment of the potential for phosphorus transport from the field to surface waters and address the form, source, amount, timing, and method of application of nutrients on each field to achieve realistic production goals, while minimizing nitrogen and phosphorus movement to surface waters;

B. Include appropriate flexibilities for any CAFO to implement nutrient management practices to comply with the technical standards, including consideration of multi-year phosphorus application on fields that do not have a high potential for phosphorus runoff to surface water, phased implementation of phosphorus-based nutrient management, and other components, as determined appropriate by the department;

C. Require that manure be analyzed a minimum of once annually for nitrogen and phosphorus content, and soil be analyzed a minimum of once every five (5) years for phosphorus content. The results of these analyses are to be used in determining appli-

cation rates for manure, litter, and other process wastewater;

D. Include conditions that will ensure manure, litter, and process wastewater applications are conducted in a manner that prevents surface runoff of process wastewater beyond the edge of the field. Such measures will include, but not be limited to, restricting the timing, soil conditions, and placement of manure during land application; and

E. Include appropriate land application setbacks that at a minimum require manure, litter, and process wastewater be land applied not closer than one hundred feet (100') from any down-gradient surface waters, open tile line intake structures, sinkholes, agricultural well heads, or other conduits to surface waters unless the operation complies with one (1) of the following compliance alternatives:

(I) For surface and subsurface applications, a setback consisting of a thirty-five foot- (35'-) wide vegetated buffer where applications of manure, litter, or process wastewater are prohibited; or

(II) The CAFO demonstrates that a setback or buffer is not necessary because implementation of alternative conservation practices or field-specific conditions will provide pollutant reductions equivalent or better than the reductions that would be achieved by the one hundred foot (100') setback;

3. Land application shall occur during daylight hours only. Night time applications shall only occur when the department has approved the night time land application plan.

(H) Additional Requirements for Class IA CAFOs only.

1. The owner or operator of any Class IA concentrated animal feeding operation with a wet handling system which also utilizes a flush system shall employ one (1) or more persons who shall visually inspect the gravity outfall lines, recycle pump stations, recycle force mains, and appurtenances for any release to any containment structure. Visual inspections shall be made at least once per week. The inspections shall also include the structural integrity of the collection system and containment structures along with any unauthorized discharges from the flush and wet handling systems. Records shall be maintained by the facility for a minimum of three (3) years on forms approved by the department.

2. Any unauthorized discharges that cross the property line of the facility, or enter the waters of the state from a Class IA concentrated animal feeding operation with a wet handling system that also utilizes a flush system, shall be reported to the department and to all adjoining property owners of the facility

within twenty-four (24) hours.

3. Class IA concentrated animal feeding operation with a wet handling system which also utilizes a flush system shall receive at least one (1) on-site inspection by the department each quarter.

4. All Class IA concentrated animal feeding operations with a wet handling system which also utilizes a flush system shall have a secondary containment structure(s) or earthen dam(s). The containment structure(s) or earthen dam(s) shall be sized to contain a minimum volume equal to the maximum capacity of flushing in any twenty-four- (24-) hour period from all gravity outfall lines, recycle pump stations, and recycle force mains.

5. All Class IA concentrated animal feeding operations with a wet handling system which also utilizes a flush system shall have an electronic or mechanical shut-off in the event of pipe stoppage or backflow. For new facilities, the shut-off shall be included as part of the construction permit application.

6. Class IA concentrated animal feeding operations (both new and those operations that wish to expand to Class IA size) are prohibited from the watersheds of the Current, Jacks Fork, and Eleven Point Rivers as described in 10 CSR 20-6.300(1)(B)9.D.

7. The owner or operator shall visually inspect once per day any lagoon whose water level is less than twelve (12) inches from the emergency spillway. The inspection shall note the level of water below the emergency spillway. A record of these inspections shall be included with the operations annual report.

(4) Design Standards and Effluent Limitations.

(A) Effluent Limitations Applicable to All Class I CAFOs.

1. New and expanding CAFOs that apply for an operating permit shall have manure, litter, and process wastewater management systems designed and constructed in accordance with the CAFO manure storage design standard rule 10 CSR 20-8.300.

2. Effluent limits for subsurface waters shall be in accordance with 10 CSR 20-7.015(7)(E).

3. NPDES operating permits shall also comply with effluent limitations as set forth in 40 CFR Part 412, Subpart A through Subpart D, July 30, 2012, without any later amendments or additions, as published by the Office of the Federal Register, National Archives and Records Administration, Superintendent of Documents, Pittsburgh, PA 15250-7954, which are hereby incorporated by reference.

4. There shall be no discharge of manure, litter, or process wastewater to waters of the state from a CAFO as a result of

the land application of manure, litter, or process wastewater to land application areas under the operational control of the CAFO, except where it is an agricultural storm water discharge. When manure, litter, or process wastewater has been land applied in accordance with subsection (3)(G) of this rule, a precipitation-related discharge of manure, litter, or process wastewater from land areas under the control of the CAFO is considered to be an agricultural storm water discharge.

5. A chronic weather event is a series of wet weather events and conditions that can delay planting, harvesting, and prevent land application and dewatering practices at wastewater storage structures. When wastewater storage structures are in danger of an overflow due to a chronic weather event, CAFO owners shall take reasonable steps to lower the liquid level in the structure through land application, or other suitable means, to prevent overflow from the storage structure. Reasonable steps may include, but are not limited to, following the department's current guidance on "Wet Weather Management Practices for CAFOs." These practices shall be designed specifically to protect water quality during wet weather periods. A discharge resulting from a land application conducted during wet weather conditions is not considered an agricultural stormwater discharge and is subject to permit requirements. The department will determine, within a reasonable time frame, when a chronic weather event is occurring for any given county in Missouri. The determination will be based upon an evaluation of the one-in-ten (1-in-10) year return rainfall frequency over a ten- (10-) day, ninety- (90-) day, one hundred eighty- (180-) day, and three hundred sixty-five- (365-) day operating period.

(B) Additional Limitations for State No-Discharge Operating Permits.

1. There shall be no discharge of manure, litter, or process wastewater into surface waters of the state from the production area.

2. If at any time a CAFO's waste management system is found to be discharging, the department may revoke the CAFO's no-discharge permit and require the CAFO to seek coverage under an NPDES permit.

3. If a discharge occurs at a CAFO with a state no-discharge permit, the owner or operator must submit to the department for review and approval the following documentation: a description of the discharge, including the date, time, cause, duration, and approximate volume of the discharge, and a detailed explanation of the steps taken by the CAFO to permanently address the cause of the discharge that will ensure that a discharge from this cause does not occur in the future.

4. When a discharge occurs at a CAFO, the CAFO will be allowed to maintain coverage under the no-discharge permit when the following two (2) conditions are met:

A. The department determines that the specific cause has been appropriately corrected so that the CAFO does not discharge; and

B. The CAFO has not had two (2) discharges at a given site for the same cause in any five- (5-) year period.

5. If a CAFO has two (2) separate discharge events brought about by the same cause, the department may terminate the no-discharge permit in which case the CAFO will be required to seek coverage under a NPDES permit.

(C) Effluent Limitations Applicable to Class II and Smaller Sized AFOs. When a Class II or smaller sized AFO is designated as a CAFO by the department, the specific effluent limitations will be based upon the department's best professional judgment. The specific effluent limits shall not be more stringent than those for Class I CAFOs.

(5) Nutrient Management Plans (NMP)—In accordance with paragraph (3)(G)1. of this rule, operating permits shall require the development and implementation of a nutrient management plan. A portion of a CAFO's nutrient management plan includes the documents within a CAFO's operating permit application and annual reports. The plan must comply with the requirements found within the Nutrient Management Technical Standard which will satisfy the criteria in subsections (G), (H), and (I) below. The NMP shall be maintained according to the requirements of paragraph (3)(G)2. of this rule. For NPDES permits only, any revisions to the NMP must be submitted to the department for review with the changes from the previous version identified. Substantial changes to the terms of the NMP incorporated into the NPDES operating will require a permit modification and a fifteen- (15-) day public notice period. The plan must, at a minimum, address the following areas:

(A) Ensure adequate storage of manure, litter, and process wastewater, including procedures to ensure proper operation and maintenance of the storage facilities;

(B) Ensure proper management of mortalities (i.e., dead animals) to ensure that they are not disposed of in a liquid manure, storm water, or process wastewater storage or treatment system that is not specifically designed to treat animal mortalities;

(C) Ensure that clean water is diverted, as appropriate, from the production area. NMPs shall include, as necessary, controls, measures, or BMPs to properly manage storm water runoff at the operation. This would apply only to activities in or around the land application or production area that is under the control of the CAFO owner or operator, whether it is owned, rented, or leased. Examples of such activities could include winter feeding areas, stockpiling of manure and raw materials, or any other regulated CAFO activity that will contribute pollutants to waters of the state;

(D) Prevent direct contact of confined animals with waters of the state;

(E) Ensure that chemicals and other contaminants handled within animal production facilities are not disposed of in any manure, litter, process wastewater, or storm water storage or treatment system unless specifically designed to treat such chemicals and other contaminants;

(F) Identify appropriate site-specific conservation practices to be implemented, including as appropriate buffers or equivalent practices, to control runoff of pollutants to waters of the state;

(G) Identify protocols for appropriate testing of manure, litter, process wastewater, and soil;

(H) Establish protocols to land apply manure, litter, or process wastewater in accordance with site specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter, or process wastewater; and

(I) Identify specific records that will be maintained to document the implementation and management of the minimum elements described in subsections (A) through (H) of this section.

(6) Closure of Waste Storage Structures.

(A) Facilities that cease operation, or plan to close lagoons and other waste storage structures, shall comply with the requirements in this section—

1. Class I concentrated animal feeding operations which cease operation shall continue to maintain a valid operating permit or until all lagoons and waste storage structures are properly closed according to a closure plan approved by the department; and

2. Other concentrated animal feeding operations that cease operation shall either close the waste storage structures in accordance with the closure requirements in subsection (6)(B) of this rule or shall continue to maintain all storage structures so that there is not a discharge to waters of the state.

(B) Closure Requirements—



1. Lagoons and waste storage structures shall be closed by removal and land application of all wastewater and sludge;

2. The removed wastewater and sludge shall be land applied at agricultural rates for fertilizer not to exceed the maximum nutrient utilization of the land application site and vegetation grown and shall be applied at controlled rates so that there will be no discharge to waters of the state; and

3. After removal and proper land application of wastewater and sludge, the earthen basins may be demolished by removing the berms, grading, and establish at least seventy percent (70%) plant density over one hundred percent (100%) of the site so as to provide erosion control, or the basin may be left in place for future use as a farm pond or similar uses.

(7) Concentrated Animal Feeding Operation Indemnity Fund.

(A) Class IA concentrated animal feeding operations utilizing flush systems shall pay an annual fee of ten cents (10¢) per animal unit to the department for deposit in the Concentrated Animal Feeding Operations Indemnity Fund.

(B) The annual fee shall be based upon the animal unit permitted capacity of the facility.

(C) The annual fee shall be collected each year for ten (10) years on the anniversary date of the operating permit. For facilities permitted after June 25, 1996, the annual fee shall commence on the first anniversary of the operating permit. The annual fee for facilities permitted prior to June 25, 1996, shall commence on the first full year anniversary of the permit following June 25, 1996.

(D) In the event the department determines that a Class IA facility has been successfully closed by the owner or operator, all monies paid by such operations into the Concentrated Animal Feeding Operation Indemnity Fund shall be returned to the operation. In no event, however, shall this refund exceed the unencumbered balance in the Concentrated Animal Feeding Operation Indemnity Fund.

(E) The fees referenced in section (7) shall be paid by a check or money order and made payable to the State of Missouri, Concentrated Animal Feeding Operation Indemnity Fund. In the event a check used for the payment of operating fees is returned to the department marked insufficient funds, the person forwarding the check shall be given fifteen (15) days to correct the insufficiency.

(F) Fees shall be submitted to Department of Natural Resources, Water Pollution Control Program, Permit Section, PO Box 176, Jefferson City, MO 65102.

(G) Each payment shall identify the following: state operating permit number, payment period, and permittee's name and address. Persons who own or operate more than one (1) operation may submit one (1) check to cover all annual fees, but are responsible for submitting the appropriate information to allow proper credit for each permit file account.

(H) Annual fees are the responsibility of the permittee. Failure to receive a billing notice is not an excuse for failure to remit the fees.

AUTHORITY: section 640.710, RSMo 2000, and section 644.026, RSMo Supp. 2014. Original rule filed June 1, 1995, effective Jan. 30, 1996. Amended: Filed March 1, 1996, effective Nov. 30, 1996. Amended: Filed July 9, 1998, effective March 30, 1999. Amended: Filed May 12, 2008, effective Feb. 28, 2009. Amended: Filed July 14, 2011, effective April 30, 2012. Amended: Filed Jan. 26, 2016, effective Oct. 30, 2016.*

**Original authority: 640.710, RSMo 1996 and 644.026, RSMo 1972, amended 1973, 1987, 1993, 1995, 2000, 2012, 2014.*