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**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 nondomestic 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 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) All persons who build, erect, alter, replace, operate, use or maintain wastewater treatment facilities shall pay the appropriate fees as designated in sections 644.052 and 644.053, RSMo (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 or money order and 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 late penalties assessed 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, Division of Management Services, Receipts and Reporting Program, P.O. Box 477, Jefferson City, MO 65102 and construction fees shall be submitted with the application for the construction permit to the appropriate Department of Natural Resources regional office or the Water Pollution Control Program in Jefferson City, Missouri.

(E) Each payment shall identify the following: National Pollutant Discharge Elimination System (NPDES) permit number, payment period and applicant or permittee's 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 file 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) 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) Customers served by any district formed pursuant to the provisions of Section 30(a) of Article VI of the *Missouri Constitution* shall pay fifty percent (50%) of the fees set forth in Appendix A from August 28, 2000 through September 30, 2001. Beginning October 1, 2001, customers of such districts shall pay one hundred percent (100%) of such fees.

(D) 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.

(E) 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 follow:

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.

#### (3) 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), except for facilities requiring mechanical aeration, clarification and regular sludge removal for proper operation; 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.

(D) For general permits issued pursuant to this section and in effect on August 27, 2000, the permittee will be credited thirty dollars (\$30) on each anniversary date of permit issuance that falls between August 27, 2000 and the date the permit expires.

#### (4) 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.





<b>APPENDIX A</b>	
<b>Operating permit—section 644.052, RSMo</b>	
<b>Human sewage discharges—annual fees</b>	
\$100 for a design flow, or an adjusted design flow, under 5,000 gallons per day (gpd)	
\$150 for a design flow between 5,000 and 5,999 gpd	
\$175 for a design flow between 6,000 and 6,999 gpd	
\$200 for a design flow between 7,000 and 7,999 gpd	
\$225 for a design flow between 8,000 and 8,999 gpd	
\$250 for a design flow between 9,000 and 9,999 gpd	
\$375 for a design flow between 10,000 and 10,999 gpd	
\$400 for a design flow between 11,000 and 11,999 gpd	
\$450 for a design flow between 12,000 and 12,999 gpd	
\$500 for a design flow between 13,000 and 13,999 gpd	
\$550 for a design flow between 14,000 and 14,999 gpd	
\$600 for a design flow between 15,000 and 15,999 gpd	
\$650 for a design flow between 16,000 and 16,999 gpd	
\$800 for a design flow between 17,000 and 19,999 gpd	
\$1,000 for a design flow between 20,000 and 22,999 gpd	
\$2,000 for a design flow between 23,000 and 24,999 gpd	
\$2,500 for a design flow between 25,000 and 29,999 gpd	
\$3,000 for a design flow between 30,000 gpd and 1 million gallons per day (1 mgd)	
\$3,500 for a design flow 1 mgd and above	

<b>Sewer connection fees</b>	
<b>Residential connections</b>	
\$0.40 per connection for service areas having > 35,000 customers	
\$0.50 per connection for service areas having 35,000–20,001 customers	
\$0.60 per connection for service areas having 20,000–7,001 customers	
\$0.70 per connection for service areas having 7,000–1,001 customers	
\$0.80 per connection for service areas having < 1,000 customers	
<b>Industrial/commercial connections</b>	
\$3 per connection to public water service lines ≤ 1 inch in diameter or per connection to a private water supply system	
\$10 per connection to public water service lines > 1 inch and ≤ 4 inches in diameter	
\$25 per connection to public water service lines > 4 inches in diameter	
Maximum fee to each industrial/commercial facility is \$700	
Size of the connections shall be measured at the service meter	
Taps for fire suppression and irrigation systems are excluded	

<b>Industrial discharges—annual fees for site-specific permits</b>	
Discharges covered by section 644.052.4, RSMo	
\$3,500 for a design flow under 1 mgd	
\$5,000 for a design flow of 1 mgd or more	
Discharges covered by section 644.052.5, RSMo	
\$1,350 for a design flow under 1 mgd	
\$2,350 for a design flow of 1 mgd or more	
\$5,000 for discharges from concentrated animal feeding operations	



General permits—permit and annual fees
\$300 for the discharge of storm water from a land disturbance site
\$50 annually for the operation of a chemical fertilizer or pesticide facility
\$150 for the operation of an animal feeding operation or a concentrated animal feeding operation
\$150 annually for new permits for the discharge of process wastewater or storm water potentially contaminated by activities not included in the categories above. The fee shall be reduced to \$60 annually after the permit's first renewal

Construction permits—section 644.053, RSMo
\$750 for a wastewater treatment plant under 500,000 gpd design flow
\$2,200 for a wastewater treatment plant of 500,000 gpd or more
\$75 for sewer extension under 1,000 feet long
\$300 for a sewer extension over 1,000 feet long or the construction of a lift station
Permittees proposing to build under more than one (1) construction unit are only required to pay the highest fee

Permit Modifications—section 644.052.7 and 644.052.8
\$200 for modifications to permits on public entities collecting service connection fees under subsections (2)(B) and (2)(C)
All other permits—25% of annual permit fee

Variances—section 644.061.4
\$250 for each petition

*AUTHORITY: section 644.054, RSMo 2000.\* 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.*

*\*Original authority: 644.054, RSMo 1990, amended 1994, 2000.*

**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 discharge 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 lev-

els 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 supplies 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 176  
JEFFERSON CITY, MO 65102

TYPE APPLIED FOR	
CONSTRUCTION	<input type="checkbox"/>
OPERATING	<input type="checkbox"/>
OWNERSHIP TRANSFER	<input type="checkbox"/>

**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	
ADDRESS	CITY	STATE	ZIP CODE
2. FACILITY LOCATION		County	
1/4.	1/4. Sec.	Twp.	Rge.
3. OWNER		TELEPHONE NUMBER	
ADDRESS	CITY	STATE	ZIP CODE
4. OPERATING AUTHORITY NAME:		TELEPHONE NUMBER	
ADDRESS	CITY	STATE	ZIP CODE
5. CHECK ONE OF THE FOLLOWING: <input type="checkbox"/> NEW FACILITY; <input type="checkbox"/> EXPANSION OF EXISTING OPERATION; <input type="checkbox"/> CHANGE FROM DISCHARGE TO NO-DISCHARGE <input type="checkbox"/> 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	

**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



### 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.

1. Upper Bedrock	Rating Number
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 \_\_\_\_\_

Form with sections: SUBDIVISION OR DEVELOPMENT LOCATION, DEVELOPER INFORMATION, REQUESTOR INFORMATION, DEVELOPMENT INFORMATION, SKETCH MUST BE SUBMITTED WITH REQUEST!, COMMENTS, REQUESTOR'S SIGNATURE, PROPERTY OWNER'S SIGNATURE.

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 OGC-9

FIELD					COUNTY				
LOCATION OF FIELD		SECTION(S) _____			TWP _____		RNG _____		
OPERATOR					MONTH		YEAR		
LEASE	TYPE AND NUMBER OF WELLS				PRODUCTION			GRAVITY A.P.L.	AVG. PRICE AT WELLHEAD PER/DDL - MCF
	TYPE*	(1) ACTIVE	(2) INACTIVE	(3) TOTAL	OIL BBLs.	WATER BBLs.	GAS MCFs		
<b>CERTIFICATE</b> ▶ 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									
<b>*TYPE</b> F - Flowing, P - Pumping, SI - Shut In, TA - Temporarily Abandoned, WI - Water Injection, AI - Air-Gas Injection									
<b>NOTE</b> ▶ Total number of wells (col. 3) will equal Active wells (col. 1) plus Inactive wells (col. 2).									

MO 780-0219 (10-87)

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



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)

REMY 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.*