

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, or March 30, 1999, 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 individual lots or residential housing units within a residential housing development for sale or lease; where land is offered for sale or lease 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 or residential housing units covered by each individual offering, as being offered for sale or lease as part of a common promotional plan. State and county roads are not considered property boundaries.
3. Developer. Any person or group of persons who directly or indirectly, sells or leases or offers to sell or lease, any lots, residential housing units, or recreational camping sites, but [shall] not to include any licensed broker or licensed salesman who is not a shareholder, director, officer, or employee 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) Applicability. 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) Exemptions. 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 or March 30, 1999;
  3. Residential housing developments with less than fifteen (15) lots, in existence prior to March 30, 1999 [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 20-6.040, 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 five (5) of this rule.

(D) Approval. 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.

(E) Alternative Determination.

1. An alternative determination can be requested for a lot or group of lots that were conveyed to a person who is not defined as a developer and that lot or group of lots is within a residential housing development that was in existence prior to [insert effective date of the rule amendment] and was required to receive written approval for the method of wastewater treatment under this rule but did not.
2. An alternative determination under this rule should not be construed as an exemption, waiver, or approval for the method of wastewater treatment but as a process to address noncompliance of this rule.

3. An alternative determination can be given for a lot or group of lots where an onsite wastewater treatment system was installed after it has been demonstrated to the department that the installation of the system was permitted or exempted by the appropriate state or local onsite wastewater administrative authority per the criteria contained in regulations effective at that time and that there is no current violation of the Missouri Clean Water Law or its regulations other than this rule.
4. An alternative determination can be given for an undeveloped lot or group of lots that had been conveyed to a person not defined as a developer; however the determination does not guarantee that the state or local onsite wastewater authority will issue a permit to construct an onsite wastewater treatment system under their current regulations.
5. Using the form provided by the department the requester is asked to provide appropriate information if available that may include, but is not limited to, county name; developers name and contact information; development's name; physical location- section, township and range, latitude and longitude, or physical address; current plat on file with the county recorder's office; lot size; nature of use; reported water supply; documentation related to the installation of the onsite wastewater treatment system; and any other documentation the requester believes appropriate.
6. Alternative determinations will include information concerning proper operation and maintenance of an onsite wastewater treatment system as well as ways to identify a failing system. A lot owner shall notify the state or local onsite wastewater administrative authority when their onsite system is failing and shall address any malfunction(s) within a time set by that authority to minimize impacts to public health and the environment.
7. Lot(s) still under the control of a developer within a residential housing development, that were required to receive written approval for the method of wastewater treatment but did not, shall remain subject to the criteria contained in other sections and subsections of this rule.

(2) Geohydrologic Evaluation.

(A) All developers required to by this rule shall apply for a geohydrologic evaluation pertaining to the use of onsite wastewater treatment facilities from the Department of Natural Resources, [Division of Geology and Land Survey] Missouri Geological 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: zero to two percent (0-2%), three to fourteen percent (3-14%), fifteen to thirty percent (15-30%) and thirty-one percent (31% and greater).
2. A map delineating the depth of acceptable soil into the following categories: less than eighteen inches (18"), eighteen to thirty inches (18-30") over bedrock, eighteen to thirty inches (18-30") over a limiting layer, and greater than thirty inches (30") shall also be provided.
3. Table one (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)		18-30"	18-30"	<18"
>30"	18-30"			
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 **greater than two millimeters (>2mm)**;
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.]

(6) [(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 regulations, 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 *[With] other [Other] law [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 1972, amended 1973, 1987, 1993, 1995.

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.