

**Title 10—DEPARTMENT OF NATURAL RESOURCES  
Division 23—Division of Geology and Land Survey  
Chapter 1—Definitions and Organizational Structure**

**10 CSR 23-1.010 Definitions**

*PURPOSE: [This rule defines the words used in the text of the rules promulgated to implement the Water Well Driller's Law.] For the purpose of these rules promulgated pursuant to Missouri Water Well Driller's Act, section 256.600, RSMo, the terms defined in this part have the meanings given them, except where the context clearly indicates otherwise.*

(1) Abandoned well as defined in section 256.603, RSMo means a well shall be deemed abandoned when it is in such a state of disrepair that continued use for the purpose of thermal recovery or obtaining groundwater is impractical and the well has not been in use for a period of two (2) years or more. The term abandoned well includes a test hole or a monitoring well which was drilled in the exploration for minerals or for geological, water quality or hydrologic data from the time that it is no longer used for exploratory purposes and that has not been plugged in accordance with rules pursuant to sections 256.600--256.640, RSMo.

(2) Act means Missouri Water Well Drillers Law, sections 256.600--256.640, RSMo, under which these rules are promulgated.

**(3) Action level means the maximum permissible concentration of a contaminant in water as specified in the Code of Federal Regulations. Action levels are used for contaminants that do not have established maximum contaminant levels.**

**(4[3]) Alluvium means clay, silt, sand, gravel, or similar unconsolidated material deposited by a stream or body of running water.**

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(5[4]) Annular space means the space between two (2)-cylindrical objects one (1) of which surrounds the other, such as the space between a drill hole and a casing pipe or between a casing pipe and liner pipe.

(6[5]) Applicant means any person who applies for a well, heat pump, monitoring well or pump installation contractor permit pursuant to the law.

*[(5) Application for permit means the application submitted by an applicant.]*

**(7) Apprentice means any person who has been issued an apprentice permit per these rules and who, under the supervision of a permitted non-restricted well or pump installation contractor, is obtaining the knowledge, skills, and abilities necessary to apply for a non-restricted permit.**

(8[6]) Aquifer means water-bearing geologic[*al*] material that transmits water in sufficient quantities to supply a well.

(9[7]) Bedrock means competent rock that is not weathered or fractured.

(10[8]) Bentonite means any type of sodium bentonitic clay used in well construction, or plugging of wells, which swells or expands when water is added.

(11[9]) Board, as defined in section 256.603, RSMo means the body created in section 256.605, RSMo.

(12[0]) Casing means an impervious durable pipe placed in a well to prevent the **borehole** [*walls*] from **collapsing** [*caving*] and to **prevent** [*help seal off*] surface drainage or **contaminants from** [*undesirable water, gas or other fluids to prevent their*] entering the well.

(13[1]) Casing Point Request form means a form that [*is supplied by the division and contains name and address information, type of well requested to be drilled, location information and other necessary information.*] **t**[*T*]he **department** [*division*] uses [*the form*] to establish **casing**

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**depth**, construction requirements, **estimated** [*proposed*] total depth of well and **estimated** [*proposed*] yield information for specific types of wells.

(14[2]) Certification report as defined in section 256.603, RSMo means a form to be sent to the **department** [*division*] upon completion of any well which shows the location, static water level, total depth, initial pumpage, hole size, casing size and length, and name of well owner.

(13) Cesspool means an underground pit or container into which raw household sewage or other untreated liquid waste is discharged and from which the liquid seeps into the surrounding soil or is otherwise removed.

**(14) Charitable or Benevolent Organization Water System means a public water system that serves a charitable or benevolent organization. A well for this type of public water system may be drilled to multi-family well standards, as specified in 10 CSR 23-3.030(12), if the water system meets all of the following requirements:**

**(A) Must be a charitable or benevolent organization;**

**(B) Does not regularly serve an average of one hundred (100) or more people for sixty (60) or more days of the year;**

**(C) Does not serve a school or daycare facility; and**

**(D) Is not connected to any structure that is not part of or owned by the charitable or benevolent organization.**

**If all the above requirements are not met, the well must be drilled according to Missouri Public Drinking Water design criteria.**

(15[4]) Chlorination [*(disinfection)*] means the use of [*a*] chlorine [*solution*] to disinfect or sterilize wells, pumps, storage tanks or piping systems. [*Chlorine is an oxidizing disinfectant that kills bacteria on contact.*]

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**(16) Community Water System means a public water system as defined in 10 CSR 60-2.015.**

(17[5]) Completion date means the date that the construction of a new well, *[or]* repair of an existing well, *[or]* the installation of a pump or the plugging of a *[n abandoned ]* well is completed. It shall not mean the date that payment is received for services provided.

*[(16) Construction foundation data means wells drilled to obtain construction foundation data and wells drilled in the construction phase of piers, shafts, caissons, mini-piles, soil and rock anchors, soil and rock grouting procedures on surface water containment structures, and other construction sites that utilize drilling within the structure to be built. The well or drill hole must be excavated and incorporated into the construction project or plugged full-length as a part of the construction project.]*

**(18) Concrete means a slurry mixture with a ratio of ninety-four pounds (94 lbs.) of cement, equal volumes of dry sand and gravel, and five to six (5-6) gallons of water from a known safe and uncontaminated source. The ratio of sand and gravel to cement may not exceed three parts to one (3:1).**

**(19) Cone penetrometer means a device used to gather any subsurface information. The device penetrates the ground surface by direct push as a general method of installation.**

(19[17]) Cuttings means geologic material displaced from the drill hole during drilling.

**(20) Department means the Department of Natural Resources, which includes the director thereof, or the person or division or program within the department delegated the authority to render the decision, order, determination, finding, or other action that is subject to review by the Administrative Hearing Commission.**

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(21[18]) Director means the director of the **Department of Natural Resources** [*Division of Geology and Land Survey*], or authorized representatives, who shall carry out the administrative functions of these rules on behalf of the **department** [*division*].

(22) **Direct-push well means a monitoring well that is ten feet (10') or greater in depth that is installed by pushing or hammering drive rods as opposed to drilling or augering. Direct-push wells tend to be smaller in diameter than their conventionally drilled counterparts leading to differences in annular space, casing, and sealing dimensions. Various screening or data collection devices, such as a cone penetrometer or lysimeter, may be used in a direct-push well.**

(23) **Disinfection means the use of a chemical to sterilize wells, pumps, storage tanks or piping systems.**

*[(19) Division, as defined in section 256.603, RSMo, means the Division of Geology and Land Survey.]*

(24) **Domestic well means a private water supply well equipped with a pump that does not have the capacity to produce more than seventy (70) gallons of water per minute at the surface and that has three (3) or less service connections. A domestic well is not limited to residential usage.**

(25[0]) Driller's log, as defined in section 256.603, RSMo, means a record accurately kept at the time of drilling showing the depth, thickness, character of the different strata penetrated, location of water-bearing strata, depth, size and character of casing installed, together with any other data or information required on the certification report forms.

(26[1]) Drive shoe means the fittings placed at the bottom of the permanent metal casing which enables the driller to more efficiently drive the casing **through the borehole and** into solid rock.

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(27[2]) Established ground surface means the actual finished grade of the surface of the ground at the **well** site *[of the well]*.

(28[3]) Examination, as defined in section 256.603, RSMo, means an assessment of professional competency administered to applicants.

**(29) Excavations for construction foundation data means wells or geotechnical borings drilled in the construction phase of piers, shafts, caissons, mini-piles, soil and rock anchors, soil and rock grouting procedures, on surface water impoundment structures, pressure relief wells and other construction sites that utilize drilling within the structure to be built. For these construction sites, the well or borehole must be excavated or incorporated into the construction project.**

**(30) Extraction well is a monitoring well that is ten feet (10') or greater in depth utilized in the remediation of a site. These include, but are not limited to, the following: wells serving pump and treat systems, including multi-well systems, wells to capture a contaminant plume or alter the direction or magnitude of groundwater movement, and other associated wells. Passive and active methane wells that terminate within landfill trash are exempted from these rules but are regulated by the Missouri Solid Waste Management Program. Passive and active methane and leachate extraction wells that are located outside of trash or extend through trash into the underlying bedrock formations are regulated under these rules.**

**(31) Gas-migration well is a monitoring well that is ten feet (10') or greater in depth and designed for the sampling, detection, and analysis of a gas or a vapor that is potentially present or migrating away from a contaminant source.**

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(32[4]) Geologic[*al*] material means all **earthen** materials penetrated in drilling a well, **including, but not limited to, alluvium, bedrock, glacial drift, residuum, and soil.**

*[(A) Alluvium is a general term for clay, silt, sand, gravel or similar unconsolidated material deposited during comparative recent geologic time by a stream or body of running water as a sorted or semisorted sedimentary deposit.*

*[(B) Dolomite means rock which contains at least fifty percent (50%) or more magnesium carbonates and has a weak reaction with a ten percent (10%) hydrochloric acid (HCl) solution.*

*[(C) Glacial drift (unconsolidated) means a general term applied to all rock material (clay, sand, gravel and boulders) transported by a glacier and deposited directly by or from the ice or by running water emanating from the glacier.*

*[(D) Glacial outwash means a stratified sand and gravel removed or washed out from a glacier by meltwater streams and deposited in front of or beyond the terminal moraine or the margin of an active glacier.*

*[(E) Limestone means rock which contains fifty percent (50%) or more calcium carbonate and has strong reaction with a ten percent (10%) hydrochloric acid (HCl) solution.*

*[(F) Residuum means a product formed from the in-place disintegration and decomposition of bedrock.*

*[(G) Sandstone means cemented or otherwise compacted sediment composed predominately of sand.*

*[(H) Shale means a laminated rock consisting predominantly of clay-sized particles.]*

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**(33) Glacial drift (unconsolidated) means a general term applied to all rock material (clay, silt, sand, gravel and boulders) transported by a glacier and deposited directly by the ice or running water emanating from the glacier.**

**(34) Groundwater means any water beneath the surface of the ground.**

**(3[2]5) Grout means a cement, bentonite or other approved material used to seal the annular space or plug a well. *[cement slurry, sixteen (16) lbs/gal density--one (1) bag Type I cement to six (6) gallons water mix, Type II--V cement mix to manufacturers' specification, high solids twenty percent (20%) or more solids, bentonite slurry, sodium bentonite chips or pellets or any other commercially available grout approved by the division.]***

**(36) Hearing means any presentation to, or consideration by, the Administrative Hearing Commission of evidence or argument on a petition seeking the Administrative Hearing Commission's review of an action by the department.**

**(37[26]) *[Heat exchange or]* H[h]eat pump or geothermal well means any well constructed to utilize the heat exchange properties of either groundwater or *[of ]*geologic material penetrated in the well.**

**(38[27]) Heat pump installation contractor, as defined in section 256.603, RSMo, means any person, including owner, operator or drilling supervisor who engages for compensation in the drilling, boring, coring or construction of any well in the state for extracting thermal energy.**

**(39) High yield bedrock well means a water supply well drilled into bedrock aquifers that is equipped with a pump that has the capacity to produce more than seventy (70) gallons of water per minute and does not supply water to a public water system.**

**(40) High yield unconsolidated material well means a water supply well drilled into alluvial or glacial drift aquifers and is equipped with a pump that has the capacity to produce more**

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than seventy (70) gallons of water per minute and does not supply water to a public water system.

(41) Horizontal closed-loop heat pump well means a trench or pit usually parallel to the horizon and more than ten feet (10') in depth into which a closed-loop pipe is placed for the purpose of heat transfer. Closed-loop heat pump systems installed in trenches or pits ten feet (10') or less in depth are exempt from these rules.

(42) Impact area means land surface area underlain or surrounded by water-bearing units that contain contaminants in groundwater at concentrations above the maximum contaminant level or action level for at least one contaminant of concern.

(43) Injection well is a monitoring well that is ten feet (10') or greater in depth into which fluid or other media is injected, to clean, treat, or prevent contamination of groundwater. All other types of injection wells are defined by the Environmental Protection Agency (EPA); these wells may be regulated by other department programs or state agencies.

(44[28]) Lakes mean *[are defined as]* the major surface water reservoirs in Missouri including Clearwater Lake, Lake of the Ozarks, Stockton Lake, Pomme de Terre Lake, Bull Shoals Lake, Norfolk Lake, Table Rock Lake, Lake Wappapello and Truman Reservoir (see map following 10 CSR 23-6). They are considered a sensitive area under these rules. *[They include: Clearwater Lake, Lake of the Ozarks, Stockton Lake, Pomme de Terre Lake, Bull Shoals Lake, Norfolk Lake, Table Rock Lake, Lake Wappapello and Truman Reservoir (see map following 10 CSR 23-6).]*

(45[29]) Liner means plastic or steel pipe which is smaller in diameter than the casing. *[and used to solve problems encountered in deeper geologic formations or to reconstruct a well.]*

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**(46) Lysimeter is a device used to measure the percolation of water through soils and/or for determining what soluble constituents are in the fluids moving through the soils.**

**(47[30]) Major reconstruction means the alteration or repair of any well that changes the original specifications, **such as** *[casing depths or total] well depth, [of the well; for example:] liner[s]installation[, packers, [or] deepening of well]* or extension of casing above finished grade.**

**(48) Maximum contaminant level means the maximum permissible concentration of a contaminant in drinking water as listed by the National Primary Drinking Water Regulations.**

**(49) Monitoring well means a well that is ten feet (10') or greater in depth which is constructed during assessment, characterization, and/or remediation of a site to obtain site-specific water quality, contaminant movement, or geologic or hydrologic data. This includes but is not limited to:**

**(A) Extraction wells;**

**(B) Injection wells;**

**(C) Soil borings;**

**(D) Direct-push wells;**

**(E) Piezometers;**

**(F) Observation wells;**

**(G) Gas-migration wells; and**

**(H) Subsurface penetrations associated with field screening devices such as cone penetrometers and lysimeters.**

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(50/31) Monitoring well installation contractor, as defined in section 256.603, RSMo, means any person, including owner, operator or drilling supervisor who engages for compensation in the drilling, boring, coring or construction of any well in this state which is drilled for geologic data, water quality or hydrologic data.

**(51) Monitoring well owner means any person who is the party responsible for having a monitoring well drilled or whose name appears on the well registration or certification form. For the purposes of performing the activities required by these rules, the owner may transfer in writing, ownership of the well upon written consent of the transferee to accept liability that those activities are performed.**

**(52) Multi-family well means a private water supply well constructed for the purpose of serving more than three (3) dwellings, but does supply water to public water system except for a charitable or benevolent organization water system.**

**(53) Nested well means a cluster of two (2) or more single riser limited interval monitoring wells installed at different depths in a single borehole with a grout seal separating each screened interval.**

**(54) Nominal diameter means the term used to describe the standard sized for casing. Depending on the wall thickness, the inside diameter of the casing may be less than or greater than the number indicated.**

**(55) Nontransient noncommunity water system means a public water system as defined in 10 CSR 60-2.015.**

**(56) Observation well means any monitoring well that is ten feet (10') or greater in depth, in which the screen intersects a water table, for the specific purpose of determining either the elevation of the water table or the physical, chemical, biological, or radiological**

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**properties of groundwater. Observation wells constructed in the tank pit used as a part of an underground storage tank leak detection system are excluded from this definition.**

**(57) Open-hole completion means a monitoring well cased through all overburden material and upper water producing zones, completed in bedrock, with no well screen or filter pack.**

**(58) Open-loop heat pump water supply well means a well drilled to supply water for the purpose of heat transfer.**

**(59[32])** Packer *[in these rules]* means a rubber or neoprene collar (boot) installed on **the** casing or liner to hold the grout material in the annular space *[and to help affect a seal of the casing]*.

*[(33) Permitted well driller, as defined in section 256.603, RSMo, means any person who holds a permit issued pursuant to the provisions of sections 256.600--256.640, RSMo.]*

**(60[34])** Permittee means a person who is permitted as a well, heat pump, monitoring well or pump installation contractor pursuant to the provision of the law and these rules.

**(61[35])** Person, as defined in section 256.603, RSMo, means any individual, whether or not connected with a firm, partnership, association, corporation or any other group or combination acting as a unit.

**(62) Piezometer means a monitoring well that is ten feet (10') or greater in depth and used to measure the pressure of a fluid or the degree of compressibility of a substance when subjected to pressure or used to collect water samples for laboratory analysis. It is most commonly a small diameter well used to measure the hydraulic head of groundwater in subsurface water-bearing zones. Piezometers used to monitor geotechnical performance of dams are excluded from the requirements of this rule.**

**(63) Pilot hole means a narrow hole drilled into the subsurface to facilitate the insertion of a larger drill bit or other boring tool and primarily used to site a public water supply well.**

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(/3/64) Pitless adapter means a device for above or below ground discharge designed for attachment to one (1) or more openings through a well casing and constructed so as to prevent the entrance of contaminants into the well.

(65/37) Pitless unit means an assembly with cap **that** *[which]* extends from the upper end of the well casing to above grade and is constructed so as to prevent the entrance of contaminants into the well.

(66/38) Plastic means a thermoplastic pipe or casing material composed of either polyvinyl chloride (PVC) or acrylonitrile-butadiene-styrene (ABS).

(67/39) Point of entry means the point when the main water supply line, **after the pressure system, connects** *[hooks up]* to the central plumbing in a **structure or building being served**.

(68/40) Potable water means water **that** *[which]* is safe for human consumption. *[in that it is free from impurities in amounts sufficient to cause disease or harmful physiological effects.]*

(69/41) Pressure grout **means** *[refers to]* the process of **emplacing** *[applying]* grout material under pressure **by pumping grout into** the annular space of a well. *[for the purpose of sealing it and thus preventing vertical movement of fluids through the annular space.]* Grout must be introduced from the bottom of the annular space.

(70/42) Pressure tank or hydropneumatic tank means a closed water storage container constructed to operate under a designed pressure rating to modulate the water system pressure within a selected pressure range.

(71) **Primary contractor means a person engaged for compensation in the business of the construction, alteration, major reconstruction, pump service or plugging of any well or directs or supervises these activities. The primary contractor is equally responsible for the**

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**work performed by the installation contractor, including but not limited to the submittal of all required forms and fees.**

*[(43) Priming means the first filling of a pump with water and action of starting the flow in a pump.]*

**(72) Public water system as defined in 10 CSR 60-2.015 means a system for the provision to the public of piped water for human consumption, if this system has at least fifteen (15) service connections or regularly serves an average of at least twenty-five (25) individuals daily at least sixty (60) days out of the year. This system includes any collection, treatment, storage or distribution facilities used in connection with the system. A public water supply system is either a community water system or noncommunity water system.**

*(73[44])* Pump installation contractor, as defined in section 256.603, RSMo, means any person, firm or corporation engaged in the business of installing or repairing pumps and pumping equipment.

*(74[5])* Pump installation machine *[or service rig]* means any vehicle, hoist or machine used to install or remove pumps or liners from wells.

*(75[46])* Pumps and pumping equipment means **any equipment or** materials used or intended for use in withdrawing or obtaining groundwater *[for any use]*, except as applies to sampling, development, maintenance or testing equipment used or inserted into monitoring wells.

*[including, without limitation, seals and other safeguards to protect the water from pollution and together with plumbing fittings, electric wiring and accessories, and controls provide sanitary water storage facilities. Installation of pumps and pumping equipment means the selection of and the procedure employed in the placement and preparation for operation of pumps and pumping equipment.]* This includes *[the construction involved in making entrance to the well and into the*

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*building served,]* water distribution lines from the well through the pressure tank and water treatment equipment **if installed prior to the pressure tank or switch**, to the *[main]* point of entry **inside or outside the structure or building being served** and establishing proper seals and other safeguards to protect groundwater from pollution, including repairs to existing installations.

(**76***[47]*) Registration report, as defined in section 256.603, RSMo, means a form to be sent to the **department** *[division]* upon completion of plugging of an abandoned well, raising casings, lining wells, deepening of wells, major repairs and alterations and jetted wells.

(**77**) **Residuum means a product formed from the in-place disintegration and decomposition of bedrock.**

(**78**) **Riser pipe means the pipe extending from the well screen into the surface completion of a monitoring well.**

*[48 Scope. For the purposes of these rules promulgated pursuant to Missouri Water Well Drillers Act, section 256.600, RSMo, the terms defined in this part have the meanings given them, except where the context clearly indicates otherwise.]*

(**7***[4]***9**) Screen means a filtering device used to keep sediment from entering a well.

(**8***[5]***0**) Septic tank means a watertight tank of durable materials through which **wastewater** *[sewage]* flows. *[very slowly and in which solids separate from liquid to be decomposed or broken down by bacterial action.]*

(**8***[5]***1**) Service connection means a supply line from the well **for the purposed of conveying water to a point of use** that is connected to one (1) single family dwelling *[or in a farming application it shall]* **and** includes *[all]* additional water hookups for **any** *[the]* outbuildings. If

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the outbuildings are dwellings for persons or additional businesses, then they would be considered additional service connections.

**(82) Service vehicle means any rig or vehicle used for work performed that is regulated by these rules.**

*[(52) Sewage means the water carried waste products from residences, public buildings, including the excrementitious or other discharges from the bodies of human beings or animals.]*

**(8[5]3) Sewer line means a pipe or conduit carrying wastewater to an ultimate point for treatment or discharge.** *[sewage or into which sewage may back up.]*

**(84) Shallow monitoring means obtaining groundwater samples from a monitoring well within five feet (5') of ground surface.**

**(85[4]) Site means a designated area** *[plot of land]* on which **a well or wells** are drilled or are going to be drilled. *[that is not more than forty (40) acres and is owned by a person as defined in section 256.603, RSMo. If larger sites exist, contact the division for reporting requirements.]*

**(86[55]) Static water level means the elevation or level of water** *[distance measured from the established ground surface to the water surface in]* **in a well that is not being affected by withdrawal of water.** *[neither being pumped, nor under the influence of pumping nor flowing under artesian pressure.]*

**(87[56]) Subsurface disposal field, [seepage bed,] drainfield, percolation system or tile absorption field means a system composed of open jointed tile, plastic lines or lines composed of other material buried in[stones and] shallow trenches or beds through which sewage or wastewater** *[septic tank] [effluent]* is disposed. *[The septic tank effluent is applied to land by distribution beneath the surface through the open jointed lines.]*

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(88[57]) Suction line means a pipe or line connected to the inlet side of a pump or pumping equipment. *[or any connection to a well casing that may conduct nonsystem water into the well because of negative pressures.]*

**(89) Surface water means water that rests or flows on the surface of the ground.**

**(90) Temporary well means a monitoring well used for field screening purposes that is ten feet (10') or greater in depth and is plugged within thirty (30) days of completion.**

**(91) Test hole means a hole drilled in the exploration of minerals or for geologic data. This includes, but is not limited to, stratigraphic holes drilled to obtain geologic information for structural studies, seismic shot holes, and industrial mineral exploration holes.**

**(92) Transient noncommunity water system is a public water system as defined in 10 CSR 60-2.015.**

(93[58]) Tremie pipe means a *[small diameter]* conductor pipe, hose or tubing used in the down hole placement of well **grouting** *[construction]* material.

*[(59) Upper termination of the well casing means a point twelve inches (12") or greater above the finished ground surface.]*

(94[60]) Variance means a *[ny]* modification to **any provision** *[the application]* of these rules. A variance may be applied for **as specified** *[through the procedure set out]* in 10 CSR 23-1.040 *[of these rules]*.

**(95) Vertical closed-loop heat pump well means the borehole perpendicular to the horizon deeper than ten feet (10') into which a closed-loop pipe is placed for the purpose of heat transfer.**

*[(61) Water varieties mean--*

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*(A) Groundwater means the water in subsurface zone of saturation. The water that supplies springs and wells is groundwater; and*

*(B) Surface water means water that rests or flows on the surface of the ground.]*

**(96) Water return well means a well constructed for the purpose of returning water that has passed through the heat pump machine to the same aquifer from which it was produced in the open-loop water supply well.**

**(97) Wastewater means waste or other liquids which carry or contain pollutants or water contaminants from any source, including sewage and gray water.**

**(98[62])** Well, as defined in section 256.603, RSMo, means an excavation that is drilled, cored, bored, washed, driven, dug, jetted, trenched or otherwise constructed when the intended use of the excavation is for the acquisition of groundwater supply, for monitoring, thermal exchange or for exploration for minerals or geologic or hydrologic data; but does not include a cistern, an excavation made for the purpose of obtaining or for prospecting for oil or natural gas, or for construction foundation data, dewatering of construction sites or dewatering of existing structures, observation wells used as a part of an underground storage tank leak detection system of a minimal depth, as determined by the board by rule, or for inserting media to repressure oil or natural gas-bearing formations.

**(99[63])** Well certification means the **assignment by the department of certification number to the well after fulfillment of the requirements set forth in 10 CSR 23-3.060, 10 CSR 4.020 or 10 CSR 23-5.020.** *[well certification report form and certification fee have been submitted to the division, the form has been reviewed by the division to verify the well has been constructed in accordance with the rules, and the division has assigned a well certification number to the well. The well certification number will be sent to the well owner by the division].*

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(100[64]) Well drilling machine *[or service rig]* means any machine or device *[such as a cable tool, rotary, hollow rod auger, and the like]* used for **the construction or modification** of wells. *or a hoist, machine or vehicle used in well service which involves the modification to the well casing, screen depth or diameter below the upper termination of the well casing.]* This excludes trenching machines in heat pump applications.

(101[65]) Well installation contractor, as defined in section 256.603, RSMo, means any person, including owner, operator and drilling supervisor who engages for compensation in the drilling, boring, coring or construction of any well in this state. The term, however, shall not include any person who drills, bores, cores or constructs a water well on his/her own property for his/her own use or a person who assists in the construction of a water well under the direct supervision of a permitted well installation contractor and is not primarily responsible for drilling operations.

(102[66]) Well owner, as defined in section 256.603, RSMo, means any person or corporation who is the party responsible for having a well drilled and whose name appears on the well registration or certification form.

(103[67]) Well registration means the **assignment by the department of a registration number to the well after fulfillment of the requirements set forth in 10 CSR 23-3.060, 10 CSR 23-4.020, 10 CSR 23-5.020 or 10 CSR 23-6.060.** *[report form and registration fee have been submitted to the division, the form has been reviewed by the division which documents certain types of activities according to the requirements. If the documented activities meet the requirements then a registration number is assigned by the division and sent to the well owner.]*

(104[68]) Well seal means a device or method used to protect a well casing or water system from the entrance of any external pollutant at the point of entrance into the casing.

**5-6-14** Proposed new language is in **bold**; Language proposed to be removed is in *italics* and [ ]

(105[69]) Well vent means an outlet at the upper terminal of a well casing to allow equalization of air pressure in the well. **The vent must be provided with an appropriate sized screen.** [*and escape of toxic or flammable gasses when present.*]

(106[70]) Yield or production means the quantity of water per unit of time which may flow or be pumped from a well under specified conditions.

DRAFT