



FILED  
JUN 29 1988  
BARBARA ROBERTS  
SECRETARY OF STATE

CERTIFICATE AND ORDER  
FOR FILING  
**PERMANENT**  
ADMINISTRATIVE RULES WITH THE SECRETARY OF STATE

I HEREBY CERTIFY that the attached copy is a true, full and correct copy of PERMANENT rule(s) adopted on June 24, 1988  
(Date)

by the Water Resources Commission  
(Department) (Division)

to become effective June 29, 1988  
(Date)

The within matter having come before the Water Resources Commission  
(Department) (Division) after

all procedures having been in the required form and conducted in accordance with applicable statutes and rules and being fully advised in the premises:

Notice of Intended Action published in Secretary of State's Bulletin: NO  YES  Date Published: April 15, 1988

NOW THEREFORE, IT IS HEREBY ORDERED THAT the following action be taken: (List Rule Number(s) or Rule Title(s) on Appropriate Lines Below)

Adopted:  
(New Total Rules)

RECEIVED

Amended:  
(Existing Rules)

JUN 29 1988

See attachment

Repealed:  
(Total Rules Only)

LEG. COUNSEL'S OFF.

is Administrative Rules of the Water Resources Commission  
(Department) (Division)

DATED this 29th day of June, 19 88

By: John E. Borden, Jr.  
(Authorized Signer)

Title: Deputy Director

Statutory Authority: ORS \_\_\_\_\_ or

Chapter(s) 183, 536, 537 and 540 Oregon Laws 19 87 or

House Bill(s) \_\_\_\_\_, 19 \_\_\_\_\_ Legislature; or Senate Bill(s) 132, 19 87 Legislature

Subject Matter:  
Amendments to the Well Construction and Maintenance Rules  
OAR 690-200-005 through 690-235-020.

For Further Information Contact Tom Paul Phone: 378-8455  
(Rule Coordinator)

OREGON ADMINISTRATIVE RULES  
for  
CONSTRUCTION and MAINTENANCE of WELLS

prescribed by the  
WATER RESOURCES DEPARTMENT  
adopted by the  
WATER RESOURCES COMMISSION  
on June 24, 1988

(effective June 29, 1988)

OREGON ADMINISTRATIVE RULES  
FOR  
WELL CONSTRUCTION AND MAINTENANCE  
Water Resources Department  
Chapter 690  
Administrative Rule  
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OREGON ADMINISTRATIVE RULES  
CHAPTER 690, DIVISION 200 – WATER RESOURCES DEPARTMENT

**WELL CONSTRUCTION  
AND MAINTENANCE**

DIVISION 200

INTRODUCTION

**Basis For Regulatory Authority**

**690-200-005** (1) The right to reasonable control of the ground waters of the State of Oregon has been declared to belong to the public. Through the provisions of the Ground Water Act of 1955, ORS 537.505 to 537.795, the Water Resources Commission has been charged with the administration of the rights of appropriation and use of the ground water resources of the state and the prevention of waste and contamination of all underground waters. This is primarily accomplished by the licensing of well constructors and the promulgation of rules governing well construction, alteration, abandonment, maintenance and use. Ultimately the landowner of the property where the well is constructed is responsible for the condition of the well.

(2) The following rules apply to all wells which are constructed for the purpose of locating or obtaining water as defined in ORS 537.515(7). Holes which are drilled for elevator shafts, fence posts, power poles, cathode protection, storm water disposal, pits created by removal of rock for construction and sumps are exempt from these rules. When natural flow of water occurs in holes not regulated under these rules, the Water Resources Commission may regulate under separate rules or statutes to protect the ground water from contamination or waste.

(3) In addition to regulating new well construction, alteration, abandonment and maintenance actions, the Water Resources Commission may impose conditions upon the use of any existing well as may be necessary to prevent waste, undue interference with other wells or contamination. Where necessary, the Commission may order discontinuance of use and proper abandonment of any well to accomplish the same objectives.

(4) Except for the Commission's power to adopt rules, the Commission may delegate to the Water Resources Director the exercise or discharge in the Commission's name of any power duty or function of whatever character, vested in or imposed by law upon the Commission. The official act of the Director acting in the Commission's name and by the Commission's authority shall be considered to be an official act of the Commission. In these rules where it says Director, the Commission hereby delegates to the Director full authority to act in the Commission's name.

(5) Under the provisions of ORS 537.780, the Commission is authorized to adopt such procedural rules and regulations as deemed necessary to carry out its function in compliance with the Ground Water Law. In fulfillment of these responsibilities and to ensure the preservation of the public welfare, safety, and health, the Commission has established these rules and regulations as the minimum standards for the construction, alteration, abandonment and maintenance of wells in Oregon.

(6) The rules and regulations set forth herein shall become effective November 1, 1986.

NOTE: If a well is to be constructed to supply a public or community water system, refer to Table II of these rules for information regarding regulations pertaining to municipal, public, community, and public utility water supply systems.

Stat. Auth.: ORS Ch. 183, 536, 537 & 540

Hist.: WRD 3, f. & cf. 2-18-77; WRD 9-1978, f. 12-12-78, cf. 1-1-79; Amended & Renumbered from 690-60-005 by WRD 13-1986, f. 10-7-86, cf. 11-1-86

**General Statement About the Standards**

**690-200-020** (1) The rules and regulations set forth herein provide the minimum standards for the construction, maintenance, and abandonment of wells. After the effective date of adoption of these rules and regulations, no well shall be constructed, altered, or abandoned contrary to the provision of these rules and regulations. Violation of these standards may result in enforcement under OAR Chapter 690, Division 225, including suspension or revocation of a constructor's license, imposition of civil penalties on the landowner or constructor, action on a bond, or other sanctions authorized by law.

(2) Every well shall be designed and constructed to adapt to the existing local geologic and ground water conditions at the well site and shall fully utilize every natural protection to the ground water supply. If prior to or during construction the well constructor becomes aware that adherence to the following minimum well standards will not prevent or eliminate ground water contamination, waste, or loss of artesian pressure, the constructor shall request and obtain written approval from the Director to use construction methods, materials or standards to prevent or eliminate the contamination, waste, or loss. The request shall be in writing and submitted to the Director. Written approval from the Director must be obtained prior to completion of the well.

Stat. Auth.: ORS Ch. 183, 536, 537 & 540

Hist.: WRD 9-1978, f. 12-12-78, cf. 1-1-79; Amended & Renumbered from 690-60-008 and 690-60-040 by WRD 13-1986, f. 10-7-86, cf. 11-1-86

**Special Area Standards**

**690-200-025** If at any time, the Commission finds that different or supplemental standards are required for the safe development of ground water from any particular ground water aquifer or area, special area standards for the construction and maintenance of wells within such areas may be adopted as rules by the Commission. In the absence of such special area standards, these rules constitute the sole administrative standards of the Water Resources Department governing construction, alteration, and abandonment of wells.

Stat. Auth.: ORS Ch. 183, 536, 537, & 540

Hist.: WRD 9-1978, cf. 12-12-78, f. 1-1-79; Amended & Renumbered from 690-60-045 by WRD 13-1986, f. 10-7-86, cf. 11-1-86

**Public Safety**

**690-200-030** No well shall be constructed, maintained, or abandoned in such a manner as to constitute a public health hazard or a menace to public safety.

Stat. Auth.: ORS Ch. 183, 536, 537 & 540

Hist.: WRD 3, f. & cf. 2-18-77; WRD 9-1978, f. 12-12-78, cf. 1-1-79; Renumbered from 690-60-010 by WRD 13-1986, f. 10-7-86, cf. 11-1-86

**OREGON ADMINISTRATIVE RULES**  
**CHAPTER 690, DIVISION 200 - WATER RESOURCES DEPARTMENT**

**Wells Cannot be Used For Disposal of Contaminants**

**690-200-040** No well shall be used as a disposal pit for sewage, industrial waste, or other materials that could contaminate the ground water supply.

Stat. Auth.: ORS Ch. 183, 536, 537 & 540

Hist.: WRD 9-1978, f. 12-12-78, ef. 1-1-79; Amended & Renumbered from 690-62-025 by WRD 13-19863, f. 10-7-86, ef. 11-1-86

**Definitions**

**690-200-050** The following list of definitions apply to these rules for well construction and maintenance. Other rules of the Department may have different meanings for the same words.

- (1) "Abandonment, permanent": means to remove a well from service by completely filling it in such a manner that vertical movement of water within the well bore and within the annular space surrounding the well casing, is effectively and permanently prevented.
- (2) "Abandonment, temporary": means to remove a drilling machine from a well site prior to putting the well into service or returning it to service or subsequent to completing or altering a well, or to remove a well from service with the intent of using it in the future.
- (3) "Access Port": means a minimum 3/4-inch tapped hole and plug or a 3/4-inch capped pipe welded onto the casing in the upper portion of a well casing to permit entry of water-level measuring devices into the well.
- (4) "Airline": means a water level measuring device consisting of a pressure gauge attached to an airtight line or pipe within the well bore extending from land surface to below the pumping level to allow the water level to be computed by measuring the stable air pressure remaining in the line after completely purging water from within the line.
- (5) "Altering a well" means the deepening, reaming, casing, re-casing, perforating, re-perforating, installation of liner pipe, packers, seals, and any other material change in the design or construction of a well.
- (6) "Annular Space": means the cylindrical space between the drillhole wall and the outer well casing.
- (7) "Aquifer": means a geologic formation, group of formations, or part of a formation that contains saturated and permeable material capable of transmitting water in sufficient quantity to supply wells or springs; the terms water-bearing zone or water-bearing stratum are synonymous with the term aquifer.
- (8) "Artesian Aquifer": means an aquifer in which ground water is under sufficient head to rise above the level at which it was first encountered whether or not the water flows at land surface. If the water level stands above land surface the well is a flowing artesian well.
- (9) "Bored Well": means a well constructed with the use of earth augers turned either by hand or by power equipment.
- (10) "Buried Slab Type Well": means a dug well in which well casing is used to case the upper hole. A slab, sealed with cement grout, is placed between the upper hole and lower drill hole, and the remainder of the annulus is filled with concrete.
- (11) "Casing": means the outer tubing, pipe, or conduit, welded or screw coupled, and installed in the borehole during or after drilling to support the sides of the well and prevent caving, to shut off water, gas, or contaminated fluids from entering the hole, and to prevent waste of ground water. The

term "Casing" does not include slotted or perforated pipe, well screens, or liner pipe.

(12) "Casing Seal": means the watertight seal established in the well bore between the well casing and the drillhole wall to prevent the inflow and movement of surface water or shallow ground water in the well annulus, or to prevent the outflow or movement of water under artesian or hydrostatic pressures.

(13) "Clay": means a fine-grained, inorganic material having plastic properties and with a predominant grain size of less than 0.005 mm.

(14) "Commission": means the Water Resources Commission.

(15) "Committee": means the Ground Water Advisory Committee created by ORS 536.090.

(16) "Community Well": means a well, whether publicly or privately owned, which serves or is intended to serve more than three residences for residences or other connections for the purpose of supplying water for drinking, culinary, or household uses.

(17) "Confining Formation": means the "impermeable" stratum immediately overlying an artesian (confined) aquifer.

(18) "Consolidated Formation": means materials that have become firm through natural rock-forming processes. It includes such materials as basalt, sandstone, hard claystone, conglomerate, and granite.

(19) "Contamination": means an impairment of water quality by chemicals, radionuclides, biologic organisms or other extraneous matter whether or not it affects the potential or intended beneficial use of water.

(20) "Department": means the Water Resources Department.

(21) "Director": means the Director of the Department or the Director's authorized deputies or officers.

(22) "Domestic Well": means a well used to serve no more than three residences for the purpose of supplying water for drinking, culinary, or household uses, and which is not used as a public water supply.

(23) "Drawdown": means the difference in vertical distance between the pumping level and the static water level in a well.

(24) "Drive Point Well": means a well constructed by driving into the ground a well-point fitted to the end of a pipe section or series of pipe sections.

(25) "Dug Well": means a well in which the excavation is made by the use of picks, shovels, spades or digging equipment such as backhoes, clam shell buckets, or sand buckets.

(26) "Figure": when used herein refers to an illustration and is made a part of the primary article and section by reference.

(27) "Filter Pack Well": means a well in which the area immediately surrounding the well screen or perforated pipe within the water-producing zone is filled with graded coarser material.

(28) "Ground Water Geologist": means an individual licensed by the state to practice geology.

(29) "Grout": means either approved cement or bentonite sealing material used to fill an annular space of a well.

(30) "Grout Pipe": means a pipe which is used to place grout at the bottom of the sealing interval of a well.

(31) "Hydrologist": means an individual who studies the properties, distribution, and circulation of water and is licensed by the state to practice engineering.

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(32) "Jetted Well": means a well in which the drillhole excavation is made by the use of a high velocity jet of water.

(33) "Leakage": means leakage of surface and/or subsurface water around the well casing.

(34) "Liner Pipe": means the inner tubing, pipe, or conduit installed inside the well casing or lower well bore, and used to protect against caving formations and is not permanently affixed to the drillhole wall or casing.

(35) "Lower Drillhole": means that part of the well bore extending below the surface seal interval in a well.

(36) "Mineralized Water": means any naturally occurring ground water containing an amount of dissolved chemical constituents limiting the beneficial uses to which the water may be applied.

(37) "Municipal or Quasi-Municipal Well": means a well owned by a municipality or nonprofit corporation that may be used as a community or public water supply.

(38) "Order": means any action satisfying the definition given in ORS Chapter 183 or any other action so designated in ORS Chapter 537.505 to 537.795.

(39) "Perched Ground Water": means ground water held above the regional or main water table by a less permeable underlying earth or rock material.

(40) "Permeability": means the ability of material to transmit fluid, usually described in units of gallons per day per square foot of cross-section area. It is related to the effectiveness with which pore spaces transmit fluids.

(41) "Person": includes individuals, corporations, associations, firms, partnerships, joint stock companies, public and municipal corporations, political subdivisions, the state and any agencies thereof, and the Federal Government and any agencies thereof.

(42) "Petcock Valve": is a valve used to contain pressure and when opened to drain the line or pipe.

(43) "Pitless Adaptor": means a commercially manufactured unit or device designed for attachment to one or more openings through a well casing, which will permit water service pipes to pass through the wall of a well casing or extension thereof and prevent entrance of contaminants into the well or water supply.

(44) "Pitless Unit": means a commercially manufactured unit extending the upper terminal of the well casing to above land surface, constructed and installed so as to prevent the entrance of contaminants into the well and to protect the ground water supply, conduct water from the well, and provide full access to the well and water system parts therein.

(45) "Porosity": means the ratio of the volume of voids in the geologic formation being drilled to the overall volume of the material without regard to size, shape, inter-connection, or arrangement of openings.

(46) "Potable Water": means water which is sufficiently free from biological, chemical, physical, or radiological impurities so that users thereof will not be exposed to or threatened with exposure to disease or harmful physiological effects and which has no taste or odor properties that would make it unpalatable to humans for drinking purposes.

(47) "Potentiometric Surface": means the level to which water will rise in tightly cased wells.

(48) "Pressure Grouting": means a process by which a cement grout is confined within the drillhole or casing by the use of retaining plugs in packers and by which sufficient pressure is applied to drive the grout slurry into the annular space or zone to be grouted.

(49) "Public-At-Large": means a person not actively engaged in the well industry.

(50) "Public Health Hazard": means a condition whereby there are sufficient types and amounts of biological, chemical, or physical, including radiological, agents relating to water which are likely to cause human illness, disorders, or disability. These include, but are not limited to pathogenic viruses, bacteria, parasites, toxic chemicals, and radioactive isotopes.

(51) "Public Well": means a well, whether publicly or privately owned other than a municipal well, where water is provided for or is available through the single user for public consumption including, but not limited to, a school, a farm labor camp, an industrial establishment, a recreational facility, a restaurant, a motel, or a group care home.

(52) "Pumping Level": means the level of the water surface in a well while it is being pumped or bailed.

(53) "Pump Test": means the procedure involving pumping water for a specified period of time to determine the yield characteristics of a well.

(54) "Refusal to Renew": means a provision in an order that prohibits renewal of a well constructor's license, for a specified term not to exceed one year from the expiration date of the current license.

(55) "Respondent": means the person against whom an enforcement action is taken.

(56) "Revoke": means termination of a well constructor's license.

(57) "Rough Drilling Log": means a record kept on the well site of the information needed to complete the well report for the well being constructed.

(58) "Sand": means a detrital material having a prevalent grain size ranging from 2 millimeters to 0.06 millimeters.

(59) "Silt": means an unconsolidated clastic sediment composed predominantly of particles between 0.06 and 0.005 mm in diameter.

(60) "Static Water Level": means the stabilized level or elevation of water surface in a well not being pumped.

(61) "Stratum": means a bed or layer of a formation that consists throughout of approximately the same type of consolidated or unconsolidated material.

(62) "Sump": means a hole dug to a depth of ten feet or less with a diameter greater than ten feet in which water is sought or encountered.

(63) "Suspension": means the temporary removal of the privilege to construct wells under an existing license for a period of time not to exceed one year.

(64) "Tremie Pipe": See Grout Pipe.

(65) "Unconsolidated Formation": means naturally occurring, loosely cemented, or poorly indurated materials including clay, sand, silt, and gravel.

(66) "Upper Drillhole": means that part of the well bore extending from land surface to the bottom of the surface seal interval.

(67) "Violation": means an infraction of any statute, rule, standard, order, license, compliance schedule, or any part thereof and includes both acts and omissions.

(68) "Water Level": See Static Water Level.

(69) "Water Table": means the upper surface of an unconfined water body, the surface of which is at atmospheric pressure and fluctuates seasonally. The water table is defined by the levels at which water stands in wells that penetrate the water body.

OREGON ADMINISTRATIVE RULES

CHAPTER 690, DIVISION 200 - WATER RESOURCES DEPARTMENT

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(70) "Water Well": See Well.

(71) "Well": means any artificial opening or artificially altered natural opening, however made, by which ground water is sought or through which ground water flows under natural pressure, or is artificially withdrawn or injected. This definition shall not include a natural spring, or wells drilled for the purpose of exploration or production of oil or gas. Prospecting or exploration for geothermal resources as defined in ORS 522.005 or production of geothermal resources derived from a depth greater than 2,000 feet as

defined in ORS 522.055 is regulated by the Department of Geology and Mineral Industries.

(72) "Well Constructor": means any person who has a current, effective well constructor license issued in accordance with ORS 537.747(3).

(73) "Well Drilling Machine": means any power-driven percussion, rotary, boring, digging, or augering machine used in the construction or alteration of wells.

Stat. Auth.: ORS Ch. 183, 536, 537 & 540

Hist.: WRD 9, f. & ef. 12-9-77; WRD 9-1978, f. 12-12-78, ef. 1-1-79; WRD 12-1982, f. & ef. 12-14-82; Amended & Renumbered from 690-60-050 & 690-64-000 by WRD 13-1986, f. 10-7-86, ef. 11-1-86

Oregon Administrative Rules  
for  
WELL CONSTRUCTION AND MAINTENANCE  
Water Resources Department  
Chapter 690

Division 200

INTRODUCTION

**Basis for Regulatory Authority**

690-200-005(1) The right to reasonable control of the ground waters of the State of Oregon has been declared to belong to the public. Through the provisions of the Ground Water Act of 1955, ORS 537.505 to 537.795, the Water Resources Commission has been charged with the administration of the rights of appropriation and use of the ground water resources of the state and the prevention of waste and contamination of all underground waters. This is primarily accomplished by the licensing of well constructors and the promulgation of rules governing well construction, alteration, abandonment, maintenance and use. Ultimately the landowner of the property where the well is constructed is responsible for the condition and use of the well.

(2) The following rules apply to all wells which are constructed for the purpose of locating or obtaining water as defined in ORS 537.515(7). Holes which are drilled for elevator shafts, fence posts, power poles, cathode protection, storm water disposal, pits created by removal of rock for construction and sumps are exempt from these rules. When natural flow of water occurs in holes not regulated under these rules, the Water Resources Commission may regulate under separate rules or statutes to protect the ground water from contamination or waste.

(3) In addition to regulating new well construction, alteration, abandonment and maintenance actions, the Water Resources Commission may impose conditions upon the use of any existing well as may be necessary to prevent waste, undue interference with other wells or contamination. Where necessary, the Commission may order discontinuance of use and proper abandonment of any well to accomplish the same objectives.

(4) Except for the Commission's power to adopt rules, the Commission may delegate to the Water Resources Director the exercise or discharge in the Commission's name of any power, duty or function of whatever character, vested in or imposed by law upon the Commission. The official act of the Director acting in the Commission's name and by the Commission's authority shall be considered to be an official act of the Commission. In these rules where it says Director, the Commission hereby delegates to the Director full authority to act in the Commission's name.

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(5) Under the provisions of ORS 537.780, the Commission is authorized to adopt such procedural rules and regulations as deemed necessary to carry out its function in compliance with the Ground Water Law. In fulfillment of these responsibilities and to ensure the preservation of the public welfare, safety, and health, the Commission has established these rules and regulations as the minimum standards for the construction, alteration, abandonment and maintenance of wells in Oregon.

(6) The rules and regulations set forth herein shall become effective [November 1, 1986] June 29, 1988.

NOTE: If a well is to be constructed to supply a public or community water system, refer to Table III of these rules for information regarding regulations pertaining to municipal, public, community, and public utility water supply systems.

#### **General Statement About the Standards**

690-200-020(1) The rules and regulations set forth herein provide the minimum standards for the construction, maintenance, and abandonment of wells. After the effective date of adoption of these rules and regulations, no well shall be constructed, altered, or abandoned contrary to the provisions of these rules and regulations. Violation of these standards may result in enforcement under OAR chapter 690, Division 225, including suspension or revocation of a constructor's license, imposition of civil penalties on the landowner or constructor, action on a bond, or other sanctions authorized by law.

(2) Every well shall be designed and constructed to adapt to the existing local geologic and ground water conditions at the well site and shall fully utilize every natural protection to the ground water supply. If prior to or during construction the well constructor becomes aware that adherence to the following minimum well standards will not prevent or eliminate ground water contamination, waste, or loss of artesian pressure, the constructor shall request and obtain written approval from the Director to use construction methods, materials or standards to prevent or eliminate the contamination, waste, or loss. The request shall be in writing and submitted to the Director. Written approval from the Director must be obtained prior to completion of the well.

#### **Special Area Standards**

690-200-025 If at any time, the Commission finds that different or supplemental standards are required for the safe development of ground water from any particular ground water aquifer or area, special area standards for the construction and

rules by the Commission. In the absence of such special area standards, these rules constitute the sole administrative standards of the Water Resources Department governing construction, alteration, and abandonment of wells.

#### Restrictions on Well Construction and Use in Critical Ground Water Areas or Areas Withdrawn by Commission Order

690-200-027 The use of ground water is restricted in Critical Ground Water Areas or Withdrawal Areas established by Commission Order, under ORS 537.735 and 536.410. Before constructing a well, the constructor shall determine whether the proposed well site is within a Critical Ground Water or Withdrawal Area. (Refer to Map Figure 19, 1988.)

If the well is within a Critical Ground Water or Withdrawal Area, the constructor shall contact the watermaster for the county where the well is to be constructed for more information. (Refer to Appendix III.)

Construction of wells in violation of a critical ground water or withdrawal orders are subject to enforcement action as described in OAR 690 Division 225.

#### Public Safety

690-200-030 No well shall be constructed, maintained, or abandoned in such a manner as to constitute a public health hazard or a menace to public safety.

#### Wells Cannot be Used For Disposal of Contaminants

690-200-040 No well shall be used as a disposal pit for sewage, industrial waste, or other materials that could contaminate the ground water supply.

#### Definitions

690-200-050 The Water Resources Commission uses the definitions of the words listed below in the administration and enforcement of Oregon's Ground Water Law and the Rules and Regulations for the Construction and Alteration of Wells. No other definitions of these same words apply. [The following list of definitions apply to these rules for well construction and maintenance. Other rules of the Department may have different meanings for the same words.]

(1) "Abandonment, permanent": means to remove a well from service by completely filling it in such a manner that vertical

movement of water within the well bore and within the annular space surrounding the well casing, is effectively and permanently prevented.

(2) "Abandonment, temporary": means to remove a drilling machine from a well site prior to putting the well into service or returning it to service or subsequent to completing or altering a well, or to remove a well from service with the intent of using it in the future.

(3) "Access Port": means a minimum 3/4-inch tapped hole and plug or a 3/4-inch capped pipe welded onto the casing in the upper portion of a well casing to permit entry of water-level measuring devices into the well.

(4) "Airline": means a water level measuring device consisting of a pressure gauge attached to an airtight line or pipe within the well bore extending from land surface to below the pumping level to allow the water level to be computed by measuring the stable air pressure remaining in the line after completely purging water from within the line.

(5) "Altering a well": means the deepening, reaming, casing, re-casing, perforating, re-perforating, installation of liner pipe, packers, seals, and any other material change in the design or construction of a well.

(6) "Annular Space": means the cylindrical space between the drillhole wall and the outer well casing.

(7) "Aquifer": means a geologic formation, group of formations, or part of a formation that contains saturated and permeable material capable of transmitting water in sufficient quantity to supply wells or springs; the terms water-bearing zone or water-bearing stratum are synonymous with the term aquifer.

(8) "Artesian Aquifer": means an aquifer in which ground water is under sufficient head to rise above the level at which it was first encountered whether or not the water flows at land surface. If the water level stands above land surface the well is a flowing artesian well.

(9) "Bored Well": means a well constructed with the use of earth augers turned either by hand or by power equipment.

(10) "Buried Slab Type Well": means a dug well in which well casing is used to case the upper hole. A slab, sealed with cement grout, is placed between the upper hole and lower drill[ ]hole, and the remainder of the annulus is filled with concrete.

(11) "Casing": means the outer tubing, pipe, or conduit, welded or screw coupled, and installed in the borehole during or after drilling to support the sides of the well and prevent caving, to shut off water, gas, or contaminated fluids from entering the hole, and to prevent waste of ground water. The term "casing" does not include slotted or perforated pipe, well screens, or liner pipe.

(12) "Casing Seal": means the watertight seal established in the well bore between the well casing and the drillhole wall to prevent the inflow and movement of surface water or shallow ground water in the well annulus, or to prevent the outflow or



movement of water under artesian or hydrostatic pressures.

(13) "Clay": means a fine-grained, inorganic material having plastic properties and with a predominant grain size of less than 0.005 mm.

(14) "Commission": means the Water Resources Commission.

(15) "Committee": means the Ground Water Advisory Committee created by ORS 536.090.

(16) "Community Well": means a well, whether publicly or privately owned, which serves or is intended to serve more than three connections for residences or other connections for the purpose of supplying water for drinking, culinary, or household uses.

(17) "Confined Animal Feeding or Holding Area": Means the concentrated confined feeding or holding of animals or poultry, including but not limited to horse, cattle, sheep, swine feeding, dairy confinement areas, slaughterhouse or shipping terminal holding pens where the animal waste is allowed to build up on the ground and where the concentration of animals has destroyed the vegetative cover. Areas where animals and animal waste is confined in buildings are exempt.

[[17]18) "Confining Formation": means the "impermeable" stratum immediately overlying an artesian (confined) aquifer.

[[18]19) "Consolidated Formation": means materials that have become firm through natural rock-forming processes. It includes such materials as basalt, sandstone, hard claystone, conglomerate, and granite.

[[19]20) "Contamination": means an impairment of water quality by chemicals, radionuclides, biologic organisms or other extraneous matter whether or not it affects the potential or intended beneficial use of water.

[[20]21) "Department": means the Water Resources Department.

[[21]22) "Director": means the Director of the Department or the Director's authorized deputies or officers.

[[22]23) "Domestic Well": means a well used to serve no more than three residences for the purpose of supplying water for drinking, culinary, or household uses, and which is not used as a public water supply.

[[23]24) "Drawdown": means the difference in vertical distance between the pumping level and the static water level in a well.

[[24]25) "Drive Point Well": means a well constructed by driving into the ground a well-point fitted to the end of a pipe section or series of pipe sections.

[[25]26) "Dug Well": means a well in which the excavation is made by the use of picks, shovels, spades or digging equipment such as backhoes, clam shell buckets, or sand buckets.

[[26]27) "Figure": when used herein refers to an illustration and is made a part of the primary article and section by reference.

[[27]28) "Filter Pack Well": means a well in which the area immediately surrounding the well screen or perforated pipe within

the water-producing zone is filled with graded coarser material.

([28]29) "Ground Water Geologist": means an individual licensed by the state to practice geology.

([29]30) "Grout": means either approved cement or bentonite sealing material used to fill an annular space of a well.

([30]31) "Grout Pipe": means a pipe which is used to place grout at the bottom of the sealing interval of a well.

(32) "Hazardous Waste": means a substance as defined by ORS Chapter 466.005.

(33) "Hazardous waste disposal site": means a geographical site in which or upon which hazardous waste is disposed.

(34) "Hazardous waste storage site": means the geographical site upon which hazardous waste is stored.

(35) "Hazardous waste treatment site": means the geographical site upon which or a facility in which hazardous waste is treated.

[(31) "Hydrologist": means an individual who studies the properties, distribution, and circulation of water and is licensed by the state to practice engineering.]

(36) "Impermeable": means a material that limits the passage of water.

(37) "Impermeable Sealing Material": Means neat cement, concrete or bentonite which is used to fill the open annulus between the lower and upper sealing intervals.

([32]38) "Jetted Well": means a well in which the drillhole excavation is made by the use of a high velocity jet of water.

([33]39) "Leakage": means leakage of surface and/or subsurface water around the well casing.

([34]40) "Liner Pipe": means the inner tubing pipe, or conduit installed inside the well casing or lower well bore, and used to protect against caving formations and is not permanently affixed to the drillhole wall or casing.

([35]41) "Lower Drillhole": means that part of the well bore extending below the surface seal interval in a well.

([36]42) "Mineralized Water": means any naturally occurring ground water containing an amount of dissolved chemical constituents limiting the beneficial uses to which the water may be applied.

([37]43) "Municipal or Quasi-Municipal Well": means a well owned by a municipality or nonprofit corporation that may be used as a community or public water supply.

([38]44) "Order": means any action satisfying the definition given in ORS Chapter 183 or any other action so designated in ORS Chapter 537.505 to 537.795.

([39]45) "Perched Ground Water": means ground water held above the regional or main water table by a less permeable underlying earth or rock material.

([40]46) "Permeability": means the ability of material to transmit fluid, usually described in units of gallons per day per square foot of cross-section area. It is related to the effectiveness with which pore spaces transmit fluids.

[[41]47) "Person": includes individuals, corporations, associations, firms, partnerships, joint stock companies, public and municipal corporations, political subdivisions, the state and any agencies thereof, and the Federal Government and any agencies thereof.

[[42]48) "Petcock Valve": is a valve used to contain pressure and when opened to drain the line or pipe.

[[43]49) "Pitless Adaptor": means a commercially manufactured unit or device designed for attachment to one or more openings through a well casing, which will permit water service pipes to pass through the wall of a well casing or extension thereof and prevent entrance of contaminants into the well or water supply.

[[44]50) "Pitless Unit": means a commercially manufactured unit extending the upper terminal of the well casing to above land surface, constructed and installed so as to prevent the entrance of contaminants into the well and to protect the ground water supply, conduct water from the well, and provide full access to the well and water system parts therein.

[[45]51) "Porosity": means the ratio of the volume of voids in the geologic formation being drilled to the overall volume of the material without regard to size, shape, inter[-]connection, or arrangement of openings.

[[46]52) "Potable Water": means water which is sufficiently free from biological, chemical, physical, or radiological impurities so that users thereof will not be exposed to or threatened with exposure to disease or harmful physiological effects [and which has no taste or odor properties that would make it unpalatable to humans for drinking purposes].

[[47]53) "Potentiometric Surface": means the level to which water will rise in tightly cased wells.

[[48]54) "Pressure Grouting": means a process by which a cement grout is confined within the drillhole or casing by the use of retaining plugs or packers and by which sufficient pressure is applied to drive the grout slurry into the annular space or zone to be grouted.

[[49]55) "Public-At-Large": means a person not actively engaged in the well industry.

[[50]56) "Public Health Hazard": means a condition whereby there are sufficient types and amounts of biological, chemical, or physical, including radiological, agents relating to water which are likely to cause human illness, disorders, or disability. These include, but are not limited to pathogenic viruses, bacteria, parasites, toxic chemicals, and radioactive isotopes.

[[51]57) "Public Well": means a well, whether publicly or privately owned other than a municipal well, where water is provided for or is available through the single user for public consumption including, but not limited to, a school, a farm labor camp, an industrial establishment, a recreational facility, a restaurant, a motel, or a group care home.

[[52]58) "Pumping Level": means the level of the water

surface in a well while it is being pumped or bailed.

[[53]59) "Pump Test": means the procedure involving pumping water for a specified period of time to determine the yield characteristics of [a well] an aquifer.

[[54]60) "Refusal to Renew": means a provision in an order that prohibits renewal of a well constructor's license, for a specified term not to exceed one year from the expiration date of the current license.

[[55]61) "Respondent": means the person against whom an enforcement action is taken.

[[56]62) "Revoke": means termination of a well constructor's license.

[[57]63) "Rough Drilling Log": means a record kept on the well site of the information needed to complete the well report for the well being constructed.

[[58]64) "Sand": means a detrital material having a prevalent grain size ranging from 2 millimeters to 0.06 millimeters.

[[59]65) "Silt": means an unconsolidated clastic sediment composed predominantly of particles between 0.06 and 0.005 mm in diameter.

[[60]66) "Static Water Level": means the stabilized level or elevation of the water surface in a well not being pumped.

[[61]67) "Stratum": means a bed or layer of a formation that consists throughout of approximately the same type of consolidated or unconsolidated material.

[[62]68) "Sump": means a hole dug to a depth of ten feet or less with a diameter greater than ten feet in which water is sought or encountered.

[[63]69) "Suspension": means the temporary removal of the privilege to construct wells under an existing license for a period of time not to exceed one year.

[[64]70) "Tremie Pipe": See Grout Pipe.

[[65]71) "Unconsolidated Formation": means naturally occurring, loosely cemented, or poorly indurated materials including clay, sand, silt, and gravel.

[[66]72) "Upper Drillhole": means that part of the well bore extending from land surface to the bottom of the surface seal interval.

[[67]73) "Violation": means an infraction of any statute, rule, standard, order, license, compliance schedule, or any part thereof and includes both acts and omissions.

[[68]74) "Water Level": See Static Water Level

[[69]75) "Water Table": means the upper surface of an unconfined water body, the surface of which is at atmospheric pressure and fluctuates seasonally. The water table is defined by the levels at which water stands in wells that penetrate the water body.

[[70]76) "Water Well": See Well

[[71]77) "Well": means any artificial opening or artificially altered natural opening, however made, by which ground water is sought or through which ground water flows under

natural pressure, or is artificially withdrawn or injected. This definition shall not include a natural spring, or wells drilled for the purpose of exploration or production of oil or gas. Prospecting or exploration for geothermal resources as defined in ORS 522.005 or production of geothermal resources derived from a depth greater than 2,000 feet as defined in ORS 522.055 is regulated by the Department of Geology and Mineral Industries.

([72]78) "Well Constructor": means any person who has a current, effective well constructor license issued in accordance with ORS 537.747(3).

([73]79) "Well Drilling Machine": means any power-driven percussion, rotary, boring, digging, or augering machine used in the construction or alteration of wells.

## DIVISION 205

### LICENSING

#### License or Permit Required to Construct Wells

690-205-005(1) [No person shall construct, alter or abandon a well for another, unless the person is a bonded well constructor or is employed, and supervised in accordance with this rule, by a bonded well constructor.

(2) An unbonded well constructor may preform any and all actions associated with construction, alteration, or abandonment of a well for another person when employed by a bonded well constructor.

(3) A person possessing a trainee card and in the employ of a bonded well constructor may operate without direct well site supervision to the extent permitted by OAR 690-205-020.

(4) Property owners holding a landowner's water well construction permit and bond may construct, alter, or abandon wells on their property in accordance with OAR 690-205-050.

(5) Other persons may operate well drilling equipment or otherwise act to construct, alter, or abandon a well only while directly supervised on site by a well constructor.

(6) Any action to construct, alter, or abandon a well not in conformance with this rule is a violation subject to sanctions under OAR 690, Division 225.] Any person who constructs, alters or abandons wells for another person shall have a Well Constructor License.

(2) If a person advertises services and/or enters into contracts for the construction, alteration or abandonment of wells for another person, that person shall furnish a \$4,000 Well Constructor Bond to the Water Resources Commission.

(3) A property owner who constructs, alters, or abandons a well on their own property shall have a Landowner Well Permit as

described in OAR 690-205-040 for each well on which work is done.

### Well Constructor License Examination

690-205-010(1) The Water Resources Department administers the written examination required under ORS 537.747. The Department schedules the examination on the second Monday of every month. The examination tests the applicants knowledge of:

(a) Oregon laws and administrative rules on the use of ground water, well constructor licensing requirements, the construction of wells and preparing and filing Well Reports;

(b) Groundwater geology, the occurrence and movement of ground water, and the design, construction and development of wells; and

(c) Types, uses and maintenance of drilling tools and equipment, drilling problems and corrective procedures, repair of faulty wells, sealing of wells and safety rules and practices.

### Well Constructor Licens[ing]e, Experience Requirements and Trainee Card

690-205-020(1) License. To qualify for a Well Constructor License, a person shall:

(a) Be at least 18 years old;

(b) Pass a written examination;

[(a) The experience requirement of ORS 537.747(3) shall be satisfied by at least 52 weeks of active well construction on a minimum of 15 wells, accomplished within one 36-month calendar period. The experience need not have been obtained in Oregon] (c) Have the equivalent of one year (52 weeks) of experience on a minimum of fifteen wells during the previous 36 month period. The experience shall be in well construction, alteration, or abandonment. The following are acceptable as evidence of experience:

(A) Well reports, or rough well logs with applicant's name entered, for each of the 15 wells. The name, address and telephone number of the person responsible for the construction of each well shall be included on each report or log.

(B) Income tax returns showing source of drilling income for a period of time, or workman's compensation account information or the equivalent may be established to satisfy the 52 weeks of active construction requirement.

(C) Any other evidence the Director may deem suitable.

(D) A license held in another state shall not substitute for required evidence of experience.

(d) Pay a license fee.

[(1) Trainee. A person who passes the water well

constructor's examination but does not have sufficient experience to qualify for a license shall be issued a Trainee card: (2) Persons who satisfy all requirements of ORS 537.747(3) shall be issued a well constructor's license in the form of a constructor's card.] (2) Trainee. If an applicant passes the written well constructor examination, but can not meet the experience requirement, the Commission will issue a trainee card. To qualify for a well constructor trainee card, a person must:

- (a) Be at least 18 years old;
- (b) Pass a written examination; and
- (c) Be supervised by a person who holds a Well Constructor license.

(3) Special conditions apply to any person who holds a Well Constructor Trainee Card:

(a) A trainee may operate a cable tool drilling machine without a well constructor physically present at the well site only if:

(A) The constructor can reach the well site within two hours if so requested by an authorized representative of the Department; and

(B) The constructor has signed the rough drilling log within [the previous] eight working hours prior to the representative's visit.

(b) A constructor must physically be on the site at all times when a cable tool drilling machine is:

- (A) Drilling within a flowing artesian well;
- (B) Setting or advancing casing;
- (C) Setting liner;
- (D) Perforating casing;
- (E) Setting well screens;
- (F) Placing packers;
- (G) Constructing casing seals.

(c) A trainee may operate a non-cable tool drilling machine without a well constructor physically present at the well site only during the following events:

- (A) Air test or pump test of the well;
  - (B) Gravel packing operations;
  - (C) Developing a completed well;
  - (D) Removal of the drill stem from the well.
- (d) And only if:

(A) The constructor can reach the site within one hour if so requested by an authorized representative of the Department; and

(B) The constructor has signed the rough drilling log within [the previous] eight working hours prior to the representative's visit.

(e) The watermaster in whose jurisdiction the well is being constructed has the authority to:

(A) Grant an extension to the time limits stated above when a request, showing good cause, is received from the bonded

constructor in advance for each particular well.

(B) Place additional restrictions on the trainee, including requiring the constructor to be on the site at all times while the drilling machine is operating, when the Watermaster determines that either the drilling environment or the knowledge and/or experience of the trainee warrant closer supervision.

(f) For a trainee to operate a drilling machine without a licensed well constructor present, the trainee's card must be endorsed with the name of the bonded well constructor responsible for the construction of the well.

(4) [(2)] Persons who satisfy all requirements of ORS 537.747(3) shall be issued a well constructor's license in the form of a constructor's card. The responsibilities for issuing and securing a Well Constructor license or trainee card belong to the following:

(a) The well constructor license applicant is responsible for:

(A) Completing an application for new or renewed licenses or trainee card;

(B) Submitting the application to the Water Resources Department along with the required fees; and

(C) Carrying the license or trainee card whenever constructing, altering, or abandoning any well.

(b) The Water Resources Department is responsible for:

(A) Designing and providing Well Constructor license and trainee cards;

(B) Designing and providing application forms for new and renewed licenses and trainee cards;

(C) Processing, approving and endorsing applications for licenses and trainee cards; and

(D) Returning approved and endorsed application forms to applicants with partially completed license or trainee cards.

[(3)](5) Bonded well constructor. For a person to possess a bonded well constructor's card the person must provide to the Director a properly executed well constructor's bond. The Water Resources Director will endorse the constructor's card with the number of the bond and the name of the bonding company. Such endorsements shall remain effective only while the appropriate bond remains in effect.

[(4) Holders of either a trainee card, a well constructor card, or a bonded well constructor card shall carry the card when operating a well drilling machine. All cardholders shall display their cards upon demand by any duly authorized Water Resources Department employe.]

(6) Representatives of the Water Resources Commission may ask anyone constructing, altering, or abandoning a well to present their license or trainee card as proof of eligibility to construct, alter, or abandon wells in the State of Oregon. Cardholders shall display their cards when requested.



## Term of Well Constructor License and License Fees

690-205-025(1) The Department issues all well constructor licenses. License fees are established by ORS 537.747. The amount of the fee depends on the term of the license. A penalty applies to late renewals.

(2) The well constructor must choose whether to license for one or five years. Fees for new licenses and renewal licenses are the same. The fee for a one year license is \$50. The fee for a five-year license is \$200. All licenses expire on June 30 of the first or fifth years respectively.

(3) A \$50 penalty applies when a licensee renews their license after the expiration date. There is no charge for a Trainee Card.

~~[(5)]~~(4) Well constructors who have not made arrangements with the Water Resources Department to pay civil penalties which are assessed against them, shall not be issued a license renewal until after arrangements for payment have been agreed to by the Department.

## Contracting for Services

690-205-030 Only bonded well constructors may advertise services or enter into a contract, either written or verbal, to construct, alter, or abandon a well. Any written bid for a project which includes the construction, alteration or abandonment of a well must provide:

(1) A bid or estimate for the work associated with well construction signed by a bonded well constructor, licensed and bonded in the State of Oregon; and

(2) A statement by the general contractor that the work will be completed in accordance with Oregon Ground Water Law (ORS chapter 537) and the Rules and Regulations for the Construction and Maintenance of [Water] Wells in Oregon (OAR chapter 690).

## Well Constructor['s] and Landowner Well Bonds

690-205-040(1) [The well constructor bond required under ORS 537.753 shall run to the State of Oregon and shall be executed by the well constructor, as principal, and by a corporation which is licensed by the State Insurance Commission to transact the business of fidelity and surety insurance, as surety. The bond shall be on a form provided by the Water Resources Department.] The Water Resources Commission shall only accept bonds from corporations licensed by the Oregon Department of Insurance and Finance to issue fidelity and surety insurance.

(2) If the issuing corporation cancels a bond, the corporation shall provide notice of cancellation to the Water Resources Commission by registered or certified mail. The cancellation shall not take effect earlier than the 30th day after the date of mailing in accordance with ORS 743.755(2).

(3) [Whenever the Water Resources Director issues a final enforcement order for the activities of a bonded well constructor that may place the bond in jeopardy,] When issuing a final enforcement order that may place a bond in jeopardy, the Director may mail a copy of the [final] order to the address of record of the [bonding] surety company issuing the bond.

#### **Landowner [Water] Well Construction Permit, Fee and Bond**

690-205-050(1) [A landowner's water well construction permit is required for each well to be constructed by a landowner without the services of a bonded well constructor. The Water Resources Director shall issue a permit for each well to be constructed upon receipt of the following.] The Water Resources Commission requires a permit, permit fee, and bond for each well constructed, altered, or abandoned by a landowner, unless the landowner is a bonded well constructor.

(2) To receive a Landowner Well permit, a person must submit the following to the Director:

(a) A completed application [for each proposed well. An application shall be considered complete if it contains the name, address and phone number of the landowner; the name and address of the surety company issuing the bond; the location of the proposed well by township, range, section, and county tax lot number;] form provided by the Commission, containing:

(A) The property owner's name, address and telephone number;

(B) The surety company's name, address, and telephone number;

(C) The proposed location of the well by township, range, and section; and

(D) The proposed use of the water from the well.

(b) A properly executed landowner's water well bond for \$2000 to the State of Oregon; and

(c) A \$25 permit fee.

(3) Only the owner of record, a member of the immediate family of the owner of record, or a full time employe of the owner of record, (whose main duties are other than the construction of wells), may operate a well drilling machine under a landowner's permit.

## Well Drilling Machines

690-205-060(1) All well drilling machines being operated other than under a landowner's permit shall be plainly marked with the bonded well constructor's license number or shall have permanently affixed on each side of the vehicle either the name of the bonded constructor or the name of the well drilling business.

(2) In all cases, the license number of the bonded well constructor shall be removed from the drilling machine immediately upon change of ownership or change of control of the drilling machine. Good quality paint or commercial decal numbers shall be used in placing each identification number on the drilling rig. In no case shall the [contractor's] constructor's license number be inscribed with crayon, chalk, marking keel, pencil, or other temporary markings.

## Well Construction Notice Required (Start Card)

690-205-070(1) Each bonded well constructor licensed to operate in the State of Oregon and each landowner holding a landowner's permit shall provide notice as required in ORS 537.762 before commencing the construction, alteration or abandonment of any well. The notice card shall contain the name and post office address of the customer for which work is to be performed, the street address of the well, and the approximate location of the well; and in the case of a new well, the proposed depth, diameter of the well, and the purpose or use of the water. Forms for making these reports will be furnished by the Water Resources Department.

(2) Each notice shall be delivered to the post office or delivered to the Watermaster within whose jurisdiction the well is being constructed, altered or abandoned no later than the day construction, alteration, or abandonment is commenced. The Watermaster may provide an alternate means of notification. If an alternative means of notification is used, the notice card must be mailed or delivered to the Watermaster within one week of beginning work on the well.

(3) Once received by the department, the notice card will be confidential for a period of one year after it is received or until the well report required by OAR 690-205-080 is received whichever is shorter.

(4) The notice card may be used in an administrative enforcement action at any time including the period of confidentiality. Once the card is used for enforcement reasons it is no longer confidential.

## **Well Report Required (Well Log)**

690-205-080(1) A well report (well log) shall be prepared for each well constructed, altered or abandoned including unsuccessful wells and wells exempt from appropriation permit requirements under ORS 537.545. The log shall be certified as correct by signature of the well constructor constructing the well. The completed log shall also be certified by the bonded well constructor responsible for construction of the well. A well report must be submitted by each constructor (if more than one) or each bonded constructor (if drilling responsibility is shifted to a different bonded constructor), showing the work performed by each constructor or bonded constructor.

(2) The log shall be prepared in quadruplicate on forms furnished by the Water Resources Department. The original and first copy shall be furnished to the Director, the second copy shall be retained by the well constructor, and the third copy shall be given to the customer who contracted for the construction of the well.

(3) The bonded well constructor shall file the well log with the Director within 30 days after the completion of the construction, abandonment, or alteration.

(4) The trainee or well constructor operating the well drilling machine shall maintain a rough log of all geologic strata encountered and all materials used in the construction of the well. This log shall be available for inspection by the Watermaster or an authorized agent of the Water Resources Department at any time before the Well Report is received by the Department.

(5) In the event a constructor shall leave any equipment in a well the bonded constructor shall enter this fact on the Well Report.

(6) A copy of any special authorizations or temporary special standards issued by the Director shall be attached to the well report.

## **DIVISION 210**

### **Well Construction Standards**

#### **Standards Apply to All Methods of Well Construction**

690-210-005 The following well construction standards apply to all methods of well construction. The methods include but are not limited to drilling, driving, jetting, boring, and digging. Additional standards will apply to some methods as specified in the following regulations.

## Regulations of Other Agencies May Also Apply

690-210-020 Wells constructed by some methods may not produce water of suitable quality for use as public, community, municipal, or public utility supplies. Regulations administered by other agencies may apply in addition to those in this chapter (See Appendix 1, Part II).

### Placement of Wells

690-210-030(1) No person shall construct a well within 50 feet of any septic tank; [or within] 100 feet of a sewage disposal area; 50 feet of a closed sewage or storm drainage system; 50 feet of a confined animal feeding or holding operation or animal waste holding pond, lagoon, or other animal waste storage site; 100 feet of any sewage sludge disposal area; or 500 feet of a hazardous waste storage, disposal or treatment unit without written permission of the Director. The constructor should consider whether greater distances are required for the protection of the ground water depending on the topography and local geology.

(2) A new well may be constructed at the site of an abandoned septic tank or drain field one year after the septic tank or drain field is taken out of use. The abandoned septic tank shall be pumped by a DEQ licensed sewage disposal business to remove all contents. Following pumping, the tank shall be filled with reject sand, bar run gravel or other material approved by the on site sub-surface sewage permitting agent. The delivery line between the building and the tank shall be permanently capped or filled with cement grout. In no event shall a well be constructed through an abandoned septic tank or drain line. The new well shall be located to meet other setbacks as directed in section (1) of this rule.

([2]3) Application to the Director for permission to construct a well closer than [50 feet of a septic tank or 100 feet of a sewage disposal area] the setback distances stated in section (1) of this rule shall include:

(a) A description of physical characteristics of the site which makes such location necessary; and

(b) A description of additional steps to be taken, over and above the minimum standards in these rules, which will assure adequate protection to the ground water resource.

([3]4) The Director may approve location of a well closer than [50 feet of a septic tank or 100 feet of a sewage disposal area] the setback distances stated in section (1) of this rule only upon a determination that the additional precautions to be taken and specific physical characteristics of the site allow the proposed location without threat of cross-contamination of the ground water resource.