Title 56
PUBLIC WORKS
Part I. Water Wells

Chapter 1. Registering Water Wells

§101. Authorization

A. The Louisiana Department of Transportation and Development, Office of Public Works revised the rules, regulations and standards for water well registration, construction, plugging and abandonment, installation of control devises on free flowing wells and licensing of water well contractors and other drillers under the authority given in R.S. 38:2091-38:3098.8.

B. Effective January 1, 2010, in accordance with Act 437 of 2009, The Department of Natural Resources, Office of Conservation, hereafter referred to as "department," is responsible for registering water wells and holes in Louisiana.

C. The rules, regulations and procedures, stated herein, will become effective on November 1, 1985 and supersede the rules, regulations and procedures in effect since July 1, 1975.

AUTHORITY NOTE: Promulgated in accordance with R.S. 38:3091-38:3098.8.

HISTORICAL NOTE: Promulgated by the Department of Transportation and Development, Office of Public Works, LR 1:249 (May 1975), amended LR 11:950 (October 1985), repromulgated by the Department of Transportation and Development, Office of Public Works, LR 31:942 (April 2005), amended by the Department of Natural Resources, Office of Conservation, LR 37:906 (March 2011).

§103. Purpose

A. The purpose of the rules, regulations and procedures for registering water wells and holes, stated herein, is to ensure that water wells and holes are properly constructed; to collect, catalog and store water well construction and drilling data; and to gather data on water resources of the state. The data obtained from the registration forms are stored on computer files and are readily available for use by hydrologists, engineers, geologists, drillers and others who are involved in the administration, development, protection, and the wise use of the ground water resources of the state.

AUTHORITY NOTE: Promulgated in accordance with R.S. 38:2091-38:3098.8.

HISTORICAL NOTE: Promulgated by the Department of Transportation and Development, Office of Public Works, LR 1:249 (May 1975), amended LR 11:950 (October 1985), repromulgated by the Department of Transportation and Development, Office of Public Works, LR 31:942 (April 2005).

§105. Registration of Water Wells and Holes Completed on or after November 1, 1985

A. The contractor who drills or constructs a well or hole on or after November 1, 1985 shall be responsible for registering that well or hole by submitting to the department a completed water well registration Form within 30 calendar days after completing such well or hole. Registration requirements shall apply to all water wells, regardless of yield or use, including but not limited to, public supply, domestic, irrigation/agriculture, power generation, rig-supply, observation, dewatering, monitoring, and heat pump supply wells, as well as test holes, abandoned pilot holes, and heat pump holes. For glossary of terms, refer to §113 of this Chapter.

B. Exemption from Registration. The following wells and holes shall be exempt from registration requirements:

1. wells producing saline water in connection with oil or gas production;
2. driven wells or wells dug by use of hand auger;
3. geotechnical boreholes.

C. Water Well Registration Long Form (DNR-GW-1). The Water Well Registration Long Form (DNR-GW-1) shall be used to register the following types of wells and holes:

1. community public supply wells;
2. noncommunity public supply wells;
3. industrial wells;
4. irrigation/agricultural wells;
5. power generation wells;
6. observation wells;
7. dewatering wells;
8. test holes.

For long form instructions see §117.

D. Water Well Registration Short Form (DNR-GW-1S). The Water Well Registration Short Form (DNR-GW-1S) shall be used to register the following types of wells and holes:

1. domestic wells;
2. rig-supply wells;
3. monitoring wells;
4. heat pump supply wells;
5. heat pump holes (closed loop system);
6. abandoned pilot holes.

For short form instructions see §119.

E. Submission of Water Well Registration Forms

1. The contractor who drills a well or hole shall complete and submit to the department the original copy of the Water Well Registration Form within 30 calendar days after each well or hole has been completed. The owner's copy shall be sent to the owner immediately after completion of the work and the contractor shall retain the contractor's copy for his files.

2. For registration purposes only, the department considers a well or hole completed when it is accepted by the owner or when the contractor has moved his equipment from the site, whichever comes first. Acceptance by the owner or removal of equipment from the site by the contractor does not imply, in any way, acceptance or approval by the state of Louisiana. The department, after reviewing applicable records and/or inspection of the well site, can cause the owner and/or the contractor to do whatever additional work is necessary to bring the well or hole up to standards. The expense for the additional work shall be borne by the owner or the contractor, as the case may be.

3. For the purpose of registering heat pump holes only, one form (DNR-GW-1S) Short Form per project (site) will suffice. Under item marked "remarks," materials and method used to seal the holes shall be indicated. Driller's log description of cuttings should be the typical formations encountered at the site.

4. Registration forms may be submitted to the department on a monthly basis as long as the 30-day limitation is not exceeded. Forms that are illegible, have incomplete items, lack a sketch or directions to the well, do not include latitudinal and longitudinal coordinates or have not been signed and dated will be rejected by the department and will be returned to the contractor for correction and resubmittal. It is the responsibility of the contractor to see to it that the submitted registration forms are actually received by the department.

5. Each registration form shall be personally signed and dated by the contractor who is responsible for drilling the well or hole. For convenience of the contractor, affidavits filed by the contractor to authorize office personnel to sign forms on his behalf will be accepted by the department.

6. Upon receipt of the registration forms, the department will review and process each form, including field inspection, if necessary, and will assign an identification number to each well after which the well is considered registered. The well data will then be entered into the computerized data file and, upon request, the owner and/or the contractor will be informed of the fact of registration and of the assigned identification number.

F. Copies of Available Data Which Shall Be Attached to Registration Forms. The water well contractor who is responsible for drilling a public supply, industrial or power generation water well or test hole, shall attach to the registration form copies of the following items (if available for transmittal) to the department:

1. electrical log or other borehole geophysical log;

2. mechanical analysis of the drill cuttings;

3. chemical analysis of the water;

4. aquifer test results.

G. Registration of Reworked Water Wells

1. Registered wells that are reworked (e.g., removing and replacing the screen; redeveloping the well) need not be registered a second time unless the screen setting is altered or a liner is installed inside the original casing. If the registered well, after reworking, obtains water from an aquifer different from that reported on the original registration form, another registration form shall be submitted by the contractor within 30 calendar days after completion of the work.

2. If an unregistered well is reworked, deepened or changed in any manner or if screen setting is altered, the proper registration form (DNR-GW-1 or DNR-GW-1S) shall be submitted to the department by the contractor no later than 30 calendar days after the work has been completed.

H. Registration of Subcontracted Water Wells. When a water well contractor agrees to construct a water well for a customer but subcontracts the work to another water well contractor, the following registration procedure shall govern:

1. the subcontractor who drills the well shall keep an accurate record of the pertinent data to be used in completing the registration form; however, the name and license number of the original contractor must be shown on the upper right-hand corner of the registration form, and it is the original contractor who is responsible for signing and transmitting the form to the department in accordance with the procedures outlined in §105.E. The subcontractor may write his or his company's name and license number at the space designated for "remarks."

I. Registration of Rig-Supply Water Wells

1. In order to register a rig-supply water well, each registration form must be accompanied by a copy of the "registered" permit plat reflecting the section, township, range and the distances from the section lines to the location of the well (oil, gas, injection, etc.). The plat will be used by the department to verify the latitude and longitude of the well. The water well contractor who drilled the water well shall obtain a copy of the plat from the company in charge of the drilling of the oil or gas well (lessee) or from the operator of the oil or gas drilling rig and shall attach it to the registration form for transmittal to the department. Alternatively, the water well contractor may send the registration form to the lessee with appropriate instructions for them to attach the plat to the registration form and transmit it to the department.

2. The lessee or the operator shall furnish the water well contractor with the required plat in a timely manner so that the 30-day limitation for water well registration is not exceeded.

J. Registration of Monitoring Wells. Although construction of monitoring wells for facilities regulated by the Department of Environmental Quality (DEQ) requires approval from DEQ prior to construction, they shall be registered with the Office of Conservation, like all other water wells, as part of the state's effort to catalog well sites and to collect and provide data on the geohydrological system. In order to register a monitoring well, the drilling contractor, in addition to completing all items on the Water Well Registration Short Form (DNR-GW-1S), must also complete the spaces provided for the latitude and longitude of the well location, as well as the section, township and range.

AUTHORITY NOTE: Promulgated in accordance with R.S. 38:3091-38:3098.8.

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§107. Registration of Water Wells Completed Prior to November 1, 1985

A. Because many water wells have already been inventoried by the department, the procedures for registering wells completed prior to November 1, 1985 are dependent on whether or not the wells have been inventoried and their records are available to the department.

B. Registration of Inventoried Water Wells Completed Prior to November 1, 1985 Whose Records Are Available to the Department

1. The department will obtain from available data a listing, by owner, of wells and pertinent data. A copy of the list will either be sent to the owner for checking and updating, or will be checked and updated by a representative of the department with assistance from the owner.

2. If the list is sent to the owner for checking and updating, the owner shall be responsible for updating the list by indicating the current status of each registered well, by adding wells not on the list and by indicating wells that have been abandoned. The owner shall then certify the list as current and correct and shall return the list to the department within 30 calendar days after receiving the list. When the corrected and certified list is received by the department, the wells added to the list by the owner shall be inventoried and registered by a representative of the department.

3. If, in the opinion of the department, a visit or telephone contact by a representative of the department is preferable and more convenient to the owner than sending a list of wells, a field visit or telephone contact will be made by a representative of the department. After the data are verified and the well locations are checked, any well not on the list will be inventoried and registered by the representative of the department.

4. Upon request, the owner will be sent an updated listing of registered wells for which he is responsible.

C. Registration of Water Wells Completed Prior to November 1, 1985 Which Have Not Been Inventoried and Whose Records Are Not Available to the Department

1. All wells used to supply a public water system regardless of yield, and all other water wells capable of producing more than 50,000 gallons per day, which were constructed on or after July 1, 1975, shall be registered by the owner by completing a water well registration long form (DNR-GW-1) for each well and sending them to the department for verification and registration within 90 calendar days after the effective date of these regulations.

2. The owner may register any uninventoried water well, not covered under Item A of the form, by completing an appropriate registration form and sending it to the department for verification and registration.

3. The department's representative may contact the owner to obtain well data and check and verify the location of wells that have not been inventoried and whose records are not on file with the department. After receiving the pertinent data and locating the wells, the department will register the wells accordingly.

4. The owner shall make available any needed data for registering uninventoried wells and shall permit access to the well sites. Upon request, the owner will be informed of the fact of registration and of the assigned identification number.

AUTHORITY NOTE: Promulgated in accordance with R.S. 38:3091-38:3098.8.

HISTORICAL NOTE: Promulgated by the Department of Transportation and Development, Office of Public Works, LR 1:249 (May 1975), amended LR 11:951 (October 1985), repromulgated by the Department of Transportation and Development, Office of Public Works, LR 31:942 (April 2005), amended by the Department of Natural Resources, Office of Conservation, LR 37:907 (March 2011).

§109. Use of Information Obtained from Registration Forms

A. Information obtained from registration forms will be available to all persons upon request. The well data will be coded and entered into the department's computerized data file and will be integrated with water well data systems operated by other governmental agencies and research groups, as needed. Copies of the registration forms or computerized listings of the registered wells should fulfill the need of water districts, commissions or other state agencies; thus eliminating the need for a second set of registration forms.

AUTHORITY NOTE: Promulgated in accordance with R.S. 38:2091-38:3098.8.

HISTORICAL NOTE: Promulgated by the Department of Transportation and Development, Office of Public Works, LR 1:249 (May 1975), amended LR 11:952 (October 1985), repromulgated by the Department of Transportation and Development, Office of Public Works, LR 31:942 (April 2005).

§111. Enforcement Actions

A. Provisions addressing enforcement of this Chapter appear in R.S. 38:3096, as follows.

1. Whoever knowingly and willingly violates a provision of this Chapter, or a rule, regulation or order of the director or a board hereunder, shall be subject to a civil penalty of not more than $1,000 a day for each day of violation and for each act of violation if a penalty for the violation is not otherwise provided in this Chapter.

a. The place of suit to recover this penalty shall be selected by the director or board, as may be appropriate, in the district court of the parish in which any one of the defendants resides, or in the district court of the parish where the violation took place.

b. Suit shall be at the direction of the director or board, as may be appropriate, and shall be instituted and conducted in his or its name by the attorney general or by the district attorney of the district under the direction of the attorney general.

2. Whoever knowingly and willfully aids or abets a person in the violation of a provision of this Chapter, or in any rule, regulation or order made hereunder shall be subject to the same penalties provided herein for the principal violator.

B. Falsification of Documents. Falsification of documents to evade regulations, as well as penalties for said falsifications, appears in R.S. 38:3095 as follows.

1. No person shall, for the purpose of evading this Chapter or any rule, regulation or order made thereunder:

a. make, or cause to be made, any false entry or statement of fact in any report required to be made by this Chapter, or by any rule, regulation or order made hereunder; or

b. make, or cause to be made, any false entry in an account, record or memorandum kept by any person in connection with the provisions of this Chapter or of any rule, regulation or order made thereunder; or

c. remove out of the jurisdiction of the state or destroy or mutilate, alter, or by any other means, falsify any book, record or the paper pertaining to the matters regulated by this Chapter, or by any rule, regulation or order made thereunder.

2. Whoever violates this Section shall be fined not more than $5,000 or imprisoned not more than six months or both.

3. The penalty provision for falsification of documents required under the provisions of this Chapter are therefore criminal in nature and will be enforced through the district attorney having jurisdiction where said violation occurs. It should also be noted that utilization of the United States Mail in the falsification of documents constitutes a violation of Title 18 of the United States Code (Mail Fraud), and such violations will be referred to the, appropriate United States Attorney.

C. Appeals. An alleged violator may appeal any order of the department by requesting a hearing. The hearing request must be made to the department, in writing, within 30 calendar days of the original order and must be sent by "Certified Mail-Return Receipt Requested." After receiving the request, the department will arrange a hearing to determine what other remedial action will serve to effect compliance with the rules and regulations.

AUTHORITY NOTE: Promulgated in accordance with R.S. 38:2091-38:3098.8.

HISTORICAL NOTE: Promulgated by the Department of Transportation and Development, Office of Public Works, LR 1:249 (May 1975), amended LR 11:952 (October 1985), repromulgated by the Department of Transportation and Development, Office of Public Works, LR 31:942 (April 2005).

§113. Definitions

A. Glossary of Terms. Letter in parentheses is the number of the reference found in §115 which is the source of the definition.

Abandoned Well—a well is considered to be abandoned if:

a. its use has been permanently discontinued;

b. its pumping equipment has been permanently removed;

c. the well is in such a state of disrepair that it cannot be used to supply water, and/or has the potential for transmitting surface contaminants into the aquifer;

d. the well poses potential health or safety hazards; or

e. the well is in such a condition that cannot be placed in the active, standby or inactive status.

Active Well—a well is considered to be active if it is an operating well used to supply water.

Annular Space—the space between the drill hole and the well casing.

Aquifer—a formation, group of formations, or a part of a formation that contains sufficient saturated material to yield significant quantities of water to wells. (E)

Aquifer Test—aquifer or pumping tests are made in water wells to obtain information about the performance and efficiency of the well being pumped, and/or to obtain data from which the hydraulic characteristics of the aquifer can be calculated. The test made to determine hydraulic characteristics of an aquifer is usually referred to as *aquifer test*.

Artesian (Confined Ground Water)—when the water level rises above the top of the aquifer which the well taps, the aquifer is assumed to be *artesian*. An artesian well flows only when the water level is above land surface. (E)

Assistant Secretary—the Assistant Secretary of the Office of Conservation, Department of Natural Resources, or his designee.

Bacteriological Analysis—this analysis, usually for drinking water, consists of a laboratory report indicating the

presence or absence of coliform bacteria in a given water sample, as determined by laboratory procedure.

Bentonite Slurry—a mixture of bentonite and water, weighing not less than 9 pounds per gallon.

Casing—a tubular retaining structure, generally metal or PVC which is installed in a drilled, bored, driven, or augured hole to maintain the well opening.

Cement-Bentonite Slurry—a mixture of cement, bentonite and water, consisting of not more than 8 percent bentonite by dry weight of cement and a maximum of 10 gallons of water per sack (94 pounds) of cement. Additives, in the approved and proper ratio, may be added to the slurry if required.

Chemical Analysis—a chemical analysis is usually a report of dissolved minerals in the water and the water's physical properties, such as temperature and color. The minimum chemical properties that are usually determined are hardness, specific conductance, hydrogen-ion concentration (pH), dissolved solids, chloride, bicarbonate, iron, fluoride and nitrate.

Coarse Ground Bentonite—a processed bentonite used to seal well casings and to plug holes. Coarse ground bentonite is placed by pouring from surface or pumping from the bottom to surface. An approved inorganic polymer may be used to retard swelling of the bentonite.

Community Public Supply Water Well—a public supply well which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents. A community public supply well may be owned by a municipality or community, a water district, a corporation, a private individual or by a local, state or federal governmental agency.

Contaminant—any undesirable physical, chemical, biological, or radiological substance or matter in water. (F)

Contamination—any introduction into water of microorganisms, chemicals, wastes, or waste-water in a concentration that makes the water unfit for its intended use. (D)

Contractor—the word *contractor* in these regulations is used to refer to any person, firm or corporation who is licensed to engage in the business of drilling, reworking or installing water wells, monitoring wells, heat pump wells or holes, geotechnical boreholes, and/or plugging and abandoning wells or holes, excluding oil and gas wells.

Department—the Louisiana Department of Natural Resources, Office of Conservation.

Dewatering Well—a water well installed to dewater an aquifer or lower a water table in order to allow construction or mining activities.

Disinfection—the killing of a large proportion of microorganisms in or on a substance with the probability that all pathogenic microorganisms will be killed.

Ditch—a man-made excavation dug to convey surface water for drainage purposes or irrigation.

Director or a Board—see *Assistant Secretary*.

Domestic Well—a water well used exclusively to supply the household needs of the owner/lessee and his family. Uses may include drinking, cooking, washing, sanitary purposes, lawn and garden watering and caring for pets.

Drawdown—the difference, usually in feet, between the static (nonpumping) water level and the pumping level in a well after the well has been pumped for a specified period of time.

Drill Cuttings—samples of the material obtained during drillings and are the source of lithologic information needed for proper selection of screen openings. A principal objective of drilling test holes is to obtain samples. (A)

Driller—see *Contractor*.

Drilling—the word *drilling* in these regulations is used to refer to the drilling, boring, coring, driving or augering of a well or hole.

Drilling Contractor—see *Contractor*.

Driller's Log—a driller's log is the driller's description of the geologic strata encountered, their thickness and depth. (A)

Drilling Mud—a fluid composed of water and clay (either native clay or a combination of native and commercial clays) used in drilling operations to remove cuttings from the hole, to clean and cool the bit, to reduce friction between the drill stem and the sides of the hole, to seal the sides of the hole, to prevent caving, bridging or loss of circulation, and to prevent the interchange of water between aquifers. When permitted, drilling mud may be used as filler or plugging material, provided it weighs not less than 9 pounds per gallon.

Electrical Log—a record of the resistivity of the subsurface formations and the contained fluid and spontaneous potentials generated in the borehole, both plotted in terms of depth below some datum, such as land surface. Similar logs commonly made in boreholes are the induction logs. Other borehole geophysical logs that also may be available are the gamma ray, caliper and neutron logs.

Flood Prone Area—an area subject to a 100-year flood level as established by the administering agency for the Federal Flood Insurance Program.

Free Flowing Water Well—an artesian well which is allowed to flow, under natural conditions, at or above the ground surface.

Geopressured Aquifer—a term used for an aquifer, especially in the Gulf Coast Area, in which the fluid pressure exceeds the normal hydrostatic pressure of 0.465 pounds per square inch per foot of depth. (B)

Geotechnical Borehole—an exploratory borehole drilled, augured, bored or cored to obtain soil samples to be analyzed for chemical and/or physical properties.

Geothermal—pertaining to the internal heat of the earth.

Gravel-Packed Well—a well in which properly graded gravel or coarse sand is hydraulically placed in the area immediately surrounding the screen or slotted pipe used as a screen to increase the effective diameter of the well, to stabilize the aquifer and to prevent sand from entering the well.

Ground Water—water percolating below the earth's surface.

Health Hazard—any condition that may create a danger to public health and well being.

Heat Pump Hole—a hole drilled to install piping for an earth-coupled water source heat pump system, also known as a vertical closed-loop system.

Heat Pump Supply Well—a water well which supplies ground water to a heat pump heat exchanger.

Industrial Well—a well used to supply water for plants that manufacture, process or fabricate a product. The water may or may not be incorporated into the product being manufactured. The water is usually used to cool machinery, to provide sanitary facilities for employees, to air condition the plant, and water grounds at the plant. Water used for mining or processing ore, such as gravel, is included in the industrial category.

Inactive Well—a well is considered to be inactive if it is not presently operating but is maintained in such a way that it can be put back in operation with a minimum of effort to supply water.

Irrigation/Agricultural Well—a well used for irrigating cultivated plants, for watering stock, for crawfish and catfish farming, and for similar agricultural activities. Most irrigation wells supply water for farm crops, but this category also includes wells that are used for watering parks, golf courses, cemeteries and wells which are used exclusively for watering lawns in urban areas.

Lessee—see *Owner*.

Monitoring Well—a well used to obtain hydrologic and water quality data, usually installed at or near a known or potential source of ground water contamination.

Neat Cement—a mixture of cement and water, consisting of not more than 5 gallons of water per sack (94 pounds) of cement.

Noncommunity Public Supply Well—a public supply water well which serves either fewer than 15 service connections or fewer than 25 year-round residents or no year-round residents. Examples of the former case are small public water supplies for mobile home parks, subdivisions, etc. which fall below the 15 connections/25 persons criteria for community water supplies. The latter case includes public water supplies which serve no year-round residents, such as bars and lounges, motels, camps, office buildings, restaurants, rest stops, service stations, recreational facilities, schools, commercial establishments, etc.

Observation Well—a well used by the owner, by governmental agencies, or by an appropriate engineering or research organization to obtain information on the water resources of an area.

Owner—individual, corporation, association, partnership, institution or governmental agency who is either the legal owner of the property on which the well or hole is located or is holding a long-term lease on the property.

Permeability—a measure of the relative ease with which porous media can transmit a liquid under a potential gradient. Sands have a higher permeability than clays.

Pilot Hole—a hole drilled with the intent to install casing and to produce water. It is usually of a smaller diameter than the proposed well and has to be reamed to a larger diameter for the installation of casing and screen.

Plumbness—the variation with depth of the center line of the well from a vertical line drawn through the center of the well at the top of the casing. (C)

Pollution—a condition created by harmful or objectionable material in water. (D)

Potable Water—water whose bacteriological, physical and chemical properties make it suitable for human consumption.

Power Generation Well—a well used to supply water for generation of any type of power.

Private Well—see *Domestic Well*.

Public Supply Water Well—a well which provides water for drinking, cooking or washing use by the public, or transients, or by persons other than the immediate family of the owner of the supply. A public supply water well may be either a community water well or a noncommunity water well.

Pump-Down Method—a positive displacement method for placing grout or slurry material by pumping or forced injection by air pressure.

Pumping Test—see *Aquifer Test*.

Pumping Water Level—the water level in a well which is being pumped, usually expressed in feet above or below a specific datum, such as land surface.

PVC Well Casing—a polyvinyl chloride plastic pipe conforming to current AWWA Standard A-100 and/or ASTM F-480 Standard for water well casing.

Registered Permit Plat—a land surveyor's plat showing section, township, range, and the distances from the section lines to the location of the well (oil, gas, injection, etc). The permit plat is submitted to the Office of Conservation with the oil or gas well permit application.

Registered Well—an inventoried well that has been assigned an identification number by the department and whose records are available.

Reworking Water Well—rehabilitation or modification of a water well to increase its efficiency, restore its capacity, and/or improve its water quality. Methods of reworking water wells include removing and replacing the screen, regravel packing the screen, placing a new screen within the old screen, placing a liner pipe within the old casing or redeveloping a well by surging, adicizing, jetting, etc.

Rig-Supply Well—a water well drilled at an oil or gas drilling site to supply water for drilling and/or other oil field related activities.

Saline Water—water with a dissolved solids content of 1,000 milligrams per liter (parts per million) or more.

Sanitary Seal—a suitable threaded, flanged, or welded water-tight cap or compression seal installed at the top of the wellcasing so as to prevent the entrance of contaminated water or other objectionable material into the well.

Sanitary Sewer—an underground conduit that conveys domestic, commercial or industrial sewage.

Screen—a structural tubular retainer, usually metal or PVC, used to support the hole in unconsolidated material with openings which are selected on the basis of adopted standards, and which allows sand free water to flow freely into the well in ample quantities and with a minimum loss of head. In agricultural wells, slotted pipe is sometimes used as a screen.

Seepage—the slow movement of water and/or other fluids through the soil into the subsurface.

Septic Tank—an underground water-tight tank which receives sewage.

Specific Capacity—the rate of discharge of water from a well divided by the drawdown of water level within the well for a specified period of continuous pumping of the well. It is usually expressed as "gallons per minute per foot of drawdown after (specified) hours of continuous pumping."

Standby Well—a well is considered to be a standby if it is used in emergencies or occasionally used to supply water.

Static Water Level—static water level is the nonpumping water level in a well that has not been in operation for a period of time and is usually expressed in feet above or below a specified datum, such as land surface.

Stream—a natural channel or water course which conveys surface and subsurface runoff.

Storm Sewer—an underground conduit used for covering surface water.

Subsidence—a local mass movement that involves principally the downward settling or sinking of the earth's surface with little or no horizontal motion. (B)

Subsurface Absorption Fields—an underground area containing a bedding of aggregate with distribution lines to permit disposal of septic tank effluent.

Test Hole—an exploratory borehole drilled to obtain geologic, hydrologic and water quality data.

Test Well—see *Test Hole*.

Underground Injection—the subsurface implacement of fluids by well injection. (F)

Underground Water—see *Ground Water*.

Uniformity Coefficient—the uniformity coefficient is the number expressing the ratio of the 40 percent size of the material to its 90 percent size. Size refers to the percentage by weight retained on a given sieve.

Vent (Breather Pipe)—a screened outlet at the upper end of the well casing to allow equalization of air pressure in the well and the escape of gases.

Water Well Contractor—see *Contractor*.

Well Cap—a removable, usually water-tight device used to cover an opening into the well casing and is threaded, bolted or otherwise attached to the casing to prevent easy entry by other than the owner and to prevent the entrance of any contaminant or other objectionable material into the well.

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HISTORICAL NOTE: Promulgated by the Department of Transportation and Development, Office of Highways, LR 1:969 (May 1975), amended LR 11:971 (October 1985), repromulgated by the Department of Transportation and Development, Office of Public Works, LR 31:942 (April 2005).

§117. Water Well Registration (Long Form)

A. The Water Well Registration Long Form (DNR-GW-1) and detailed instructions for properly completing the form are available by contacting department staff at (225) 342-8244 or by accessing the department's website at www.dnr.louisiana.gov/gwater. The long form consists of a set of three copies. The first copy (marked DNR copy) is to be mailed by the water well contractor within 30 calendar days after the well has been completed to:

Department of Natural Resources
Office of Conservation
P.O. Box 94275
Baton Rouge, La 70804-9275

B. The second copy of the form is to be retained by the water-well contractor for his files, and the third copy is to be given to the well owner immediately upon completion of the work. The commissioner will consider and encourages the electronic submission of registration, data or reports required under this Section.

C. Although most of the information needed to complete the form is available to the water well contractor, the following explanation will provide clarification of intent for selected items and uniformity of reporting.

D. Owner Information. List the name of the legal owner of the property on which the well is located or the person or company holding a long-term lease on the property. If the owner or lessee is an individual, list first and last names and middle initial of individual. List area code and telephone number of owner in the spaces provided.

1. Address. The address should be that of the owner. If the well is owned by an industry, the local address of the firm is preferred in order that additional data on the well may be easily obtained by the state or a regional water district or commission.

2. Owner's Well Number. Many cities, institutions, industrial plants, and large farms have their own system of designating or identifying wells by number and/or name. This information is useful when locating the well and should be entered on the form.

E. Well Location. List the parish where the well is located, including the nearest town, city, etc., and give directions to the well site. The location of the well should be described in detail and as accurately as possible so that the well can be easily located by the department's staff or field inspector. Please include a detailed map or sketch on the back of the original form, showing location of well with reference to roads, railroads, buildings, etc. Use an (X) to indicate location of the well. Show location of nearest existing well(s), if any nearby, by marking (Os), and approximate distance between wells. Determine the well's Global Positioning System (GPS) location and record the GPS longitude and latitude coordinates onto the form.

F. Well Information. Required data are available from water well contractor's and/or engineer's report.

G. Casing and Screen Information. Required data are available from water well contractor's and/or engineer's report. By type of screen indicate whether it is "bar lug" rib type, slotted pipe, etc. State whether casing is plastic or metal. Indicate the depth to which the annular space was cemented and state method of cementing.

H. Water Level and Yield Information. Most of the information entered on the form can usually be obtained from the water well contractor's or engineer's report. Except for "static water level," the terms need no explanation. Static water level is "the nonpumping water level in a well that has not been in operation for a period of time and is usually expressed in feet above or below a specified datum, such as land surface." The owner should be able to provide information on proposed use and pumping rate.

I. Use of Well. The principal purpose for which water from the well is used should be indicated where appropriate on the form. If water is used for more than one purpose, only the principal or primary use should be shown. If the planned use of water is unknown or does not fit one of the specified uses, this should be noted in the space marked "other." Following are explanations of the terms used on the well registration form to indicate the principal use of water from a well.

1. Irrigation/Agricultural. Refers to the use of water to irrigate cultivated plants, to water stock, for crawfish and catfish farming, and for similar agricultural activities. Most irrigation wells supply water for farm crops, but this category also includes wells that are used for watering parks, golf courses, and cemeteries. Occasionally a home owner in an urban area has a well used solely for watering a lawn. This well also should be in the agricultural and irrigation category.

2. Industrial. Includes plants that manufacture, process or fabricate a product. The water may or may not be incorporated into the product being manufactured. Industrial water may be used to cool machinery, to provide sanitary facilities for employees, to air-condition the plant, and water grounds at the plant. Water used for mining or to process ore such as gravel pits is included in the industrial category. Planning and water-use needs can be implemented by dividing this category into the following standard industrial categories that predominate in Louisiana. Indicate the principal category of industrial use on the form where appropriate. The categories are defined as follows:

a. Food and Kindred Products. This group includes establishments manufacturing foods and beverages for human consumption and certain related products, such as manufactured ice, vegetable oils, animal fats and oils, and prepared feeds for animals and fowl.

b. Textile Mill Products. This major group includes establishments engaged in performing any of the following operations:

i. preparation of fiber and subsequent manufacturing of yarn, thread, braids, twine and cordage;

ii. manufacturing broad woven fabric, narrow woven fabric, knit fabric, and carpets and rugs from yarn;

iii. dyeing and finishing fiber, yarn, fabric, and knit apparel;

iv. coating, waterproofing, or otherwise treating fabric;

v. the integrated manufacture of knit apparel or other finished articles from yarn; and

vi. the manufacture of felt goods, lace goods, bonded-fiber fabrics, and miscellaneous textiles.

c. Lumber and Wood Products (except furniture). This major group includes sawmills, lath mills, shingle mills, cooperage stock mills, planning mills, and plywood and veneer mills engaged in producing lumber and wood basic materials; and establishments engaged in manufacturing finished articles made entirely or mainly of wood or wood substitutes.

d. Paper and Allied Products. This major group includes the manufacture of pulp from wood and other cellulose fibers and rags; the manufacture of paper and paperboard; and the manufacture of paper and paperboard into converted products such as paper coated paper bags, paper boxes and envelopes.

e. Chemicals and Allied Products. This major group includes establishments manufacturing products by predominantly chemical processes. Establishments classified in this major group manufacture three general clashes of products:

i. basic chemicals such as acids, alkalies, salt, and organic chemicals;

ii. chemical products to be used in further manufacture such as synthetic fibers, plastic materials, dry colors, and pigments;

iii. finished chemical products to be used for ultimate consumption such as drugs, cosmetics and soaps; or to be used as materials or supplies in other industries such as paints, fertilizers, explosives. The mining of natural rock salt is classified in mining industries. Establishments primarily engaged in manufacturing nonferrous metals and high percentage ferroalloys are classified in the primary metals category and baking powder; other leavening compounds and starches in the food and kindred products category. Establishments primarily engaged in packaging, repackaging, and bottling of purchased chemical products are classified in traded industries of the standard industrial categories. Plastic materials and synthetic rubber are included in this category.

f. Petroleum Refining and Related Industries. This major group includes establishments engaged in petroleum refining, manufacturing paving and roofing materials, and compounding lubricating oils and greases from purchased materials. Establishments manufacturing and distributing gas to consumers are classified in public utilities industries, and those primarily engaged in producing coke and by-products in primary metals category.

g. Primary Metal Industries. This major group includes establishments engaged in the smelting and refining of ferrous and non ferrous metals; in the manufacture of castings, forgings, and other basic products of ferrous and nonferrous metals, and in the manufacture of nails, spikes, and insulated wire and cable. This major group also includes the production of coke.

h. Other. Please name the principal industrial output from the industry if not listed in the industrial categories on the form.

3. Public Supply. Refers to a well which provides water for drinking, cooking, or washing use by the public or transients, or by persons other than immediate family of the owner of the supply. A public supply water well may either be a community water well or a noncommunity water well, as follows.

a. Community Public Supply Water Well. A public supply well which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents. A community public supply well may be owned by a municipality or community, a water district, a corporation, a private individual or by a local, state or federal governmental agency.

b. Noncommunity Public Supply Well. A public supply water well which serves either fewer than 15 service connections or fewer than 25 year-round residents or no year-round residents. Examples of the former case are small public water supplies for mobile home parks, subdivisions, etc., which fall below the 15 connections/25 persons criteria for community water supplies. The latter case includes public water supplies which serve no year-round residents, such as bars and lounges, motels, camps, office buildings, restaurants, rest stops, service stations, recreational facilities, schools, commercial establishments, etc.

c. Because public supply use includes many categories of use, requirements for planning and water-use surveys require a further break-down of this use; thus, public supply use is divided into the following categories: (A list is provided on the registration form (refer to §117) so that the user may select the appropriate category of public supply use.)

d. Municipal. This category includes all wells used to supply the drinking, sanitation, and other needs of an urban area, e.g., Lake Charles, Ruston, etc. The well is generally owned by a utility company, a municipality or private individual.

e. Rural. The wells are used for the drinking, sanitation, and other needs of a rural area. Such systems generally are operated by a local water district or by private individuals.

f. Commercial

i. Wells that are used principally to supply a motel, hotel, restaurant, office complex, swimming pool, ice rink or other recreational facility; drive-in, trailer park or public summer camp.

ii. Where water is used commercially in the making of bottled drinks, the wells are in this category.

g. Therapeutic. Water that is used primarily for bathing and/or drinking and is purported to have therapeutic value is in this category. Water that is bottled and sold falls into this category, mainly because of its claimed therapeutic value.

h. Institutional/Government. Refers to wells used specifically in the maintenance and operation of an institution such as large schools, churches, universities, hospitals, rest homes, penal institutions, and other governmental installations.

i. Other. A well that is used for a purpose that does not fit into the above categories. Give details.

4. Power Generation. Refers to a well used to supply water for generation of any type or power.

5. Dewatering Well. This is a water well installed to de-water an aquifer or lower a water table in order to allow construction or mining activities.

6. Observation. Refers to a well used by the owner, by governmental agencies, or by an appropriate engineering or research organization to obtain information on the water resources of an area.

7. Test Hole. An exploratory borehole drilled to obtain geologic, hydrologic and water quality data.

8. Other. A well that is used for the purpose that does not fit into either the above categories or those listed on the short form (DNR-GW-1S).

J. Available Information. Please indicate where appropriate on the form whether the specified logs or data were collected; if so, attach copies to the registration form for transmittal to the department.

K. Abandonment Information. If the well is new, specify whether or not it replaces an existing well. The water well contractor is responsible for informing the owner of the well of state regulations requiring plugging of abandoned wells. This item is intended to serve as a reminder.

L. Remarks. This space can be used for presenting any other pertinent information, such as name of consulting engineer, screen openings, pump information, name of subcontractor, etc.

M. Driller's Log. Give a description of the materials encountered and depth. If space on front of the form is insufficient, continue driller's log on reverse side of original form or attach a copy of the driller's log to the original form to be transmitted to the department.

1. After completing the form, list the name of the water well contracting company and the license number on the space provided. Sign and date the form and mail the original to the department at the address listed on the form within 30 calendar days after the well has been completed. The owner's copy shall be given to the owner immediately upon completion of the work. The contractor's copy shall be retained by the contractor for his files.

2. If there are any questions, please call or write:

Louisiana Department of Natural Resources
Office of Conservation
P.O. Box 94275
Baton Rouge, LA 70804-9275
Phone: (225) 342-8244

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§119. Water Well Registration (Short Form)

A. The Water Well Registration Short Form (DNR-GW-1S) and detailed instructions for properly completing the form are available by contacting department staff at 225-342-8244 or by accessing the department's website at www.dnr.louisiana.gov/gwater. The short form consists of a set of three copies. The first copy (marked DNR copy) is to be mailed by the water well contractor within 30 calendar days after the well has been completed to: Louisiana Department of Natural Resources, Office of Conservation, P.O. Box 94275, Baton Rouge, LA 70804-9275.

B. The second copy of the form shall be retained by the water well contractor for his files and the third copy shall be given to the well owner immediately upon completion of the work. The commissioner will consider and encourages the electronic submission of registration, data or reports required under this section.

C. Although most of the information needed to complete the form is available to the water well contractor, the following explanation will provide clarification of intent for selected items and uniformity of reporting:

1. Use of Well. The principal purpose for which the well is used should be indicated by checking the appropriate box on the form. If the well is used for more than one purpose, only the principal or primary use should be shown.

a. Domestic Well. A water well used exclusively to supply the household needs of the owner/lessee and his family. Uses may include drinking, cooking, washing, sanitary purposes, lawn and garden, watering and caring for pets.

b. Rig Supply Well. A water well drilled at an oil or gas drilling site to supply water for drilling and/or other field related activities.

c. Monitoring Well. A well used to obtain hydrologic and water quality data, usually installed at or

near a known or potential source of ground water contamination.

d. Heat Pump Supply. A water well which supplies ground water to a heat pump heat exchanger.

e. Heat Pump Hole. A hole drilled to install piping (tubing) material for an earth-coupled water source heat pump system, also known as a vertical closed-loop system.

f. Abandoned Pilot Hole. A hole drilled with the intent to install casing and to produce water but had to be abandoned because of problems related to drilling operations or encountering unsatisfactory formations.

g. Other. A well used for a purpose that does not fit into either the above categories or those requiring a long form (DNR-GW-1).

2. Owner Information. List the name of the legal owner of the property on which the well is located or the person or company holding a long-term lease on the property. If the owner or lessee is an individual, list first and last names and middle initial of individual. List area code and telephone number of owner in the spaces provided.

3. Owner’s Address. List full and correct address of the owner.

4. Owner's Well Number. List name or number the well owner has assigned to the well.

5. Well Information. List in appropriate spaces, completion date of well, depth of hole, depth of well, static water level, casing type, size and length, screen size, type and length, the depth to which the casing was cemented, and cementing method used.

6. Well Location. List the parish where the well is located, including the nearest town, city, etc., and give directions to the well site. The location of the well should be described in detail and as accurately as possible so that the well can be easily located by the department's staff or field inspector. Please include a detailed map or sketch on the back of the original form showing the location of the well with reference to roads, railroads, buildings, etc. Use an (X) to indicate location of the well. Show location of nearest existing well(s), if any nearby, by making (Os) and approximate distance between wells. Determine the well’s Global Positioning System (GPS) location and record the GPS longitude and latitude coordinates onto the form. For rig-supply wells, attach a "registered" permit plat (see §105.I) and for monitoring wells, complete spaces provided for the section, township and range (see §105.J).

7. Remarks. This space can be used for presenting any other information, such as screen openings, pump information, problems encountered during drilling, name and license number of water-well subcontractors, method and materials used to seal heat pump hole, etc.

8. Driller's Log. List in the space provided a description of the materials encountered and depth. If space on front of the form is insufficient, continue driller's log on reverse side of original form or attach a copy of the driller's log to the original form to be transmitted to the department.

9. Heat Pump Holes. List average depth of holes and number of holes drilled at the site. Indicate type of tubing material used by checking appropriate box. Method and materials used to seal holes shall be stated under item marked "remarks."

10. Abandonment Information. If the well is new, specify whether or not it replaces an existing well. The water well contractor is responsible for informing the owner of the well of state regulations requiring plugging of abandoned wells.

D. After completing the form, list the name of the water well contracting company and the license number on the spaces provided. Sign and date the form and mail the original to the department at the address listed on the form within 30 calendar days after the well has been completed. The owner's copy shall be given to the owner immediately upon completion of the work. The contractor's copy shall be retained by the contractor for his files.

E. If there are any questions or you need assistance, please call or write to:

Louisiana Department of Natural Resources
Office of Conservation
P.O. Box 94275
Baton Rouge, LA 70804-9275
Phone: (225) 342-8244

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