

Chapter 13.10
WELL STANDARDS

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Sec. 13.10-10. Purpose

It is the purpose of this chapter to regulate the (1) construction, (2) reconstruction, (3) destruction, and (4) inactivation of water, cathodic protection, and monitoring wells in such a manner that the ground water of the county will not be contaminated or polluted and that water obtained from wells will be suitable for beneficial use and will not jeopardize the health, safety or welfare of the people of this county.

(Ord. No. 1348, §1; Ord. No. 1398, §1)

Sec. 13.10-11. Definitions

The following words and phrases, whenever used in this chapter, shall be construed as hereafter set out. Words not otherwise defined in this chapter shall have the meaning ascribed to them in the California Department of Water Resources Bulletin No. 74-81 ("Water Well Standards"), 74-1 ("Cathodic Protection Well Standards"), and 74-88 ("Monitoring Well Standards"), as each may be amended.

Animal or fowl enclosure means an area of land where animals are corralled, penned, tethered or otherwise caused to remain in confinement in a restricted area and where supplemental feeding is required.

Applicant means (1) the legal owner(s) of the property on which the well is to be constructed, reconstructed, or destroyed; or (2) that owner's agent authorized in writing to make this application; or (3) a licensed well-drilling contractor who shall perform the work on the well.

Cathodic protection well means any artificial excavation in excess of fifty feet constructed by any method for the purpose of installing equipment or facilities for the protection electrically of metallic equipment in contact with the ground, commonly referred to as cathodic protection.

Contamination and pollution shall have the meanings ascribed to them by California Water Code Section 13050.

County means the county of Solano, acting through its board of supervisors.

Destruction of wells shall consist of the complete filling of the well in accordance with the procedures outlined in Bulletin 74-81, "Water Well Standards: State of California" of the California Department of Water Resources.

Emergency means a circumstance which is either (1) an imminent threat of or is actually contaminating or polluting the groundwater of this county; or (2) jeopardizes the health or safety of the people of the county; or (3) will cause a substantial or immediate loss of property, crops, or livestock.

Environmental health division means the environmental health division of the Solano County Environmental Management department.

Inactive well, or inactivation is a well not routinely operating but capable of being made operable with a minimum of effort. It shall be considered abandoned and proper destruction required when it has not been used for a period of one year, unless the owner demonstrates the owner's intention to use the well again. An inactive well shall be maintained pursuant to the requirements of Bulletin 74-81.

Monitoring well means any artificial excavation used for the purpose of monitoring fluctuations in groundwater levels, quality of underground waters, or the concentration of contaminants in the underground waters. "Monitoring wells," as used in this chapter, does not include those monitoring wells regulated pursuant to local regulations dealing with the underground storage of hazardous substances. Also, it shall not include monitoring for the purpose of private sewage disposal systems.

Nuisance means a well which threatens to, or which contaminates or pollutes the ground water of this county in such a way that it jeopardizes the health and safety of the public. A nuisance also means anything which creates an unsanitary or unsafe condition resulting from water well-drilling activity.

Person means any individual, firm, partnership, general corporation, association or governmental entity. "Governmental entity," as used herein, shall not include an irrigation district, nor include any local agency exempt from the application of this chapter pursuant to state law, and shall include the United States to the extent authorized by federal law.

Program manager means the program manager of the environmental health division, or his or her authorized representative.

Reconstruction shall mean only the deepening of a well, reoperation, sealing or replacement of a well casing.

Water well means any artificial excavation constructed by any method for the purpose of extracting water from, or injecting water into, the underground. This definition shall not include: (a) oil and gas wells, or geothermal wells constructed under the jurisdiction of the department of conservation, except those wells converted to use as water wells; or (b) wells used for the purpose of (1) dewatering excavation during construction, or (2) stabilizing hillsides or earth embankments.

Well shall have the meaning ascribed by the California Water Code, Sections 13710-13712.

(Ord. No. 1348, §1; Ord. No. 1398, §1)

Sec. 13.10-12. Acts prohibited

(a) It shall be unlawful for any person to construct, reconstruct, or destroy any well unless such person has (1) obtained a permit issued by the project manager for the specific work to be performed; or (2) in the case of an emergency, fully complied with the provisions of this chapter relating to emergencies.

(b) It shall be unlawful for any person to construct, reconstruct, destroy, or inactivate any well unless such construction, reconstruction, destruction, or inactivation is in accordance with the standards set forth in this chapter.

(Ord. No. 1348, §1; Ord. No. 1398, §1)

Sec. 13.10-13. Permit required; fee

(a) Application for the permit required by this chapter shall be made in writing to the program manager on such forms as he or she may prescribe, signed by the applicant, accompanied by a filing fee set by resolution of the board of supervisors (no part of said fee shall be refundable), and shall include, but not be limited to, the following:

(1) Applicant's name, address, and current phone number.

(2) A statement that the contractor performing the work is licensed under the provisions of Chapter 9 of Division 3 of the Business and Professions Code as a well-drilling contractor possessing a C-57 water contractor's license, and such license is in full force and effect; the number of such license; and a valid workers' compensation certificate of insurance. In those situations where a well-drilling contractor does not have employees, he or she may sign a workers' compensation waiver in lieu of a certificate of insurance.

(3) Estimated or proposed depth of the well, casing material, sealing material, sealing method, intended use of the well, and drilling method to be used.

(4) Location of the property and well site, including street address and/or assessor's parcel number; and the legal owner of the property.

(5) A plot plan indicating the location of the well with respect to the following items.

(A) Property lines;

(B) Sewage disposal systems or works carrying or containing sewage or industrial wastes within a two-hundred foot radius of the proposed well;

(C) All perennial, seasonal, natural, or artificial water bodies or water courses, including location of one-hundred year floodplain, if applicable;

(D) Drainage pattern of the property;

(E) Existing wells within a one-hundred foot radius of the proposed well;

(F) Access roads and easements (water, sewer, utility, roadway);

(G) Existing and/or proposed structures;

(H) Animal or fowl enclosures, pens, paddocks, stockyards within a one-hundred foot radius of proposed well site; and

(I) Underground storage tanks containing hazardous substances.

(6) Permits shall be issued subject to the terms, conditions, and standards of this chapter.

(7) A permit issued for construction of a well covers the construction of one completed well. If the well driller proposes to change the site of the well from that shown on the site plan of a permit, the change in site must be approved by the county prior to drilling. An alternative well site should be approved on initial site plan in areas where water availability is marginal.

(8) Every permit issued pursuant to this chapter shall expire upon completion of the task authorized thereby; however, in any event, such permit shall expire one year from the date of issuance.

(b) Where owners of existing wells request inspection of said wells, the fee schedule adopted by the board of supervisors pursuant to this section shall be applicable.

(Ord. No. 1348, §1; Ord. No. 1398, §1)

Sec. 13.10-14. Standards

The standards for construction, reconstruction, destruction, and inactivation set forth in the California Department of Water Resources Bulletin No. 74-81: "Water Well Standards," in California Department of Water Resources Bulletin No. 74-1, "Cathodic Protection Well Standards," and in California Department of Water Resources Bulletin No. 74-88, "Monitoring Well Standards" (one copy of each of which is on file in the office of the clerk of the board of supervisors), as each may be amended, are hereby adopted as the "Well Ordinance" for the unincorporated area of the county, and by reference incorporated herein as if fully set forth, with the following additional clarifications and requirements:

(a) **Well sites.** No well shall be located any closer to the items or areas indicated than the distances specified, except on written approval of the program manager. Monitoring and cathodic protection wells may be located within easements and may be exempted from property line setbacks. Water wells may only be located in public utility easements if written permission is first obtained from the utility, and a copy of the written permission is included with the application. Water wells may not be located within public or private road easements. Other than property lines, hazards are to be located down slope from the well if possible, with a minimum of the following distances. Where special hazards are involved, these distances shall be increased.

Property line (unsewered area)	25 Feet ¹
Septic tanks	100 Feet
Leachfields	100 Feet
Sewer lines	50 Feet
Stream, ditch or drainage canal	25 Feet
Subsurface leaching system	100 Feet
Animal or fowl enclosure	100 Feet
Underground storage tank containing hazardous substances	100 Feet

(b) **Annular space.** The space between the well casing and the wall of the drilled hole (the annular space) shall be effectively sealed to a depth of at least fifty feet on all public water supply wells and twenty feet for individual wells drilled in Solano County after the effective date of the ordinance codified in this chapter.

(c) **Sounding tube.** Every water well casing shall be equipped with a three-fourth inch or larger taphole with threaded plug, or similar access for the introduction of water measuring devices and disinfection solution. For wells fitted with a "well cap" the cap shall have a removable threaded plug for this purpose.

1 A variance to reduce the property line setback distance to not less than ten feet may be granted by the program manager to prevent unnecessary hardship or injustice, in instances such as where parcel size or water availability would otherwise prevent development.

(d) **Drilling waste.** Drilling waste must be confined to the parcel on which the well is being drilled and may not be discharged so as to create conditions which violate federal and state laws and regulations or local ordinances. Should drilling waste be removed from the site, it shall be disposed of at an approved disposal facility.

(e) **Mud pits.** Mud pits created to confine drilling mud shall be maintained during the well drilling operation so as not to be a safety hazard. It shall be the well driller's responsibility to properly earth fill the mud pit(s) upon completion of the job.

(f) **Set-up time.** The minimum time that must be allowed for annular seals containing Type II and III (six-pack) cement to set shall be twenty-four hours before construction operations on the well may be resumed. When additives to shorten setting time are used with the cement, this set-up time may be reduced to a minimum of six hours before air jetting, bailing, swabbing, test pumping, or further construction on the well may be resumed.

(g) **Log of well.** Any person who has drilled, dug, excavated, or bored a well subject to this chapter shall, within thirty days after completion of the work, furnish the program manager with a signed copy of the report required by Section 13751 of the California Water Code.

(h) **Horizontal wells.** The location and design of horizontal or lateral wells shall be approved by the program manager on a case-by-case basis prior to approval to construct or reconstruct such wells.

(i) **Administrative variance.** The program manager may grant an administrative variance to the provisions of this chapter where written evidence is submitted that a modification of the standards will not endanger the health or safety of the public and strict compliance would be unreasonable in view of all the circumstances. Notice to adjacent property owners shall be required at least ten days prior to granting any variance involving property line setbacks.

(j) **Plastic casing.**

(1) Thermoplastic well casing shall conform to ASTM F480-81 or latest revision as follows:

(A) Minimum standards dimension ratio (SDR) shall be twenty-six.

(B) Carry the seal of the National Sanitation Foundation NSF-WC.

(2) All casing shall have additional thickness and weight if standard thickness is not capable of withstanding forces to which it is subject.

(3) The well casing must be clearly marked by the manufacturer showing: nominal size, type of plastic material, standard dimensional ratio (SDR), ASTM designation, and National Sanitation Foundation (NSF) seal of certified approval.

(k) **Well screens.** PVC well screens shall be factory slotted or perforated to maximize the entry of water from the producing zone and minimize the entrance of sand.

(Ord. No. 1348, §1; Ord. No. 1398, §1)

Sec. 13.10-15. Emergency

In the event of an emergency, a person may begin work to construct, reconstruct, destroy or inactivate a well without the permit required by this chapter; provided that (1) such work is performed in conformance with the standards set forth herein; (2) the program manager is notified of such emergency work by the following work day, and (3) an application for the required permit is made within three working days after initiation of such emergency work.

(Ord. No. 1348, §1; Ord. No. 1398, §1)

Sec. 13.10-16. Enforcement

(a) The program manager may suspend or revoke a well permit issued under this chapter whenever he/she determines that a condition resulting from any work performed under such a permit constitutes a nuisance as defined herein, or when the applicant, his/her agents, employees, or the licensed well drilling contractor performing the work (1) violates any permit or (2) misrepresents any material facts in the application for a permit.

(b) Except in emergency situations, before the program manager suspends or revokes a well permit, the program manager shall make a reasonable effort to notify the applicant and the licensed well driller performing work under the permit if the well driller is not the applicant and to provide an opportunity for each to show cause why the permit should not be suspended or revoked.

(c) Upon notification by the program manager that no valid permit has been issued or that the permit is suspended or revoked, no further work shall be performed until such violation has been abated.

(d) The environmental health division may adopt rules and regulations to implement and administer this chapter.

(Ord. No. 1348, §1; Ord. No. 1398, §1)

Sec. 13.10-17. Nuisance

Upon a finding by the program manager that a well or well drilling activity constitutes a nuisance, as defined herein, the division of environmental health

services may take action necessary to abate such nuisance. The owner of the property on which the well is located and the person causing the nuisance, if not the same, shall be jointly liable for the reasonable costs incurred by or at the request of the division for abatement of the nuisance.

(Ord. No. 1348, §1; Ord. No. 1398, §1)

Sec. 13.10-18. Appeal

Any person whose application for a permit has been suspended, revoked or denied or whose request for an administrative variance has been denied may appeal to the board of supervisors of the county, in writing, within ten days after the notice of such suspension, revocation or denial. Said appeal shall specify the reasons and shall be accompanied by a filing fee, if any, as established by the board of supervisors. The clerk of the board of supervisors shall set the appeal for hearing and shall give notice to the appellant and the program manager of the time and place of the hearing.

(Ord. No. 1348, §1; Ord. No. 1398, §1)

Sec. 13.10-19. Inspection

The division of environmental health shall be requested, at least twenty-four hours in advance to make an inspection of

- (1) the sealing of the annular space on a well,
- (2) the destruction of wells, and
- (3) any other operation, as required by the permit to cope with special or unusual conditions.

The division of environmental health shall have the right to enter upon any property at any reasonable time to make inspections and examinations for the purpose of enforcement of this chapter, subject to the provisions of Code of Civil Procedure Section 1822.50 et seq.

(Ord. No. 1348, §1; Ord. No. 1398, §1)

Sec. 13.10-20. Penalties

Any person who violates any provision of this chapter is guilty of a misdemeanor. Each offense shall be punishable by a fine of not less than twenty-five dollars nor more than one thousand dollars, or by imprisonment in the county jail for a term not exceeding six months, or by both such fine and imprisonment. Each day such offense continues, shall constitute a separate offense.

(Ord. No. 1348, §1; Ord. No. 1398, §1)