

## Chapter 13.12 - WELLS\*

### Sections:

#### Article I. - General Provisions and Definitions

##### 13.12.010 - Purpose of provisions.

This chapter is intended to regulate the drilling, construction, reconstruction, destruction, abandonment, maintenance and related activities, of all wells within the unincorporated portions of Napa County in such a manner that the groundwater or environment of the county will not be contaminated or polluted, for the protection of the public health, safety and welfare.

(Ord. 1194 § 3, 2002: Ord. 1159 § 1 (part), 1999)

##### 13.12.020 - Ad hoc advisory committees.

The director may, as is necessary, convene ad hoc advisory committees for the purpose of gathering information relevant to the subject matter of this division. Said committees may be composed of members of the Napa Chapter of the California Groundwater Association, qualified technical professionals, members of the community and other persons/organizations that may, in the discretion of the director, provide the aforementioned information.

(Ord. 1159 § 1 (part), 1999)

(Ord. No. 1374, § 16, 9-11-2012)

##### 13.12.021 - Additives.

"Additives" means quick-setting cement, retardants, hydrated lime (up to ten percent of the volume of the cement) and bentonite (up to five percent) used in neat cement, sand-cement grout or concrete.

(Ord. 1159 § 1 (part), 1999)

##### 13.12.022 - Applicant.

"Applicant" means a licensed (State Contractor's C-57 license) well-drilling contractor who has been hired to perform the work on behalf of the legal property owner(s). A copy of such license, and when applicable, a current certificate of insurance for workers compensation must be on file with the director.

(Ord. 1159 § 1 (part), 1999)

(Ord. No. 1374, § 17, 9-11-2012)

#### 13.12.030 - Annular space.

"Annular space" means the space between an excavation and the casing of a well or the space between two concentric casings.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.040 - AWWA.

"AWWA" means American Water Works Association.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.050 - Bentonite clay.

"Bentonite clay" means a commercially prepared powder, granular, pelletized or crushed sodium montmorillonite clay. The largest dimension of pellets or chips shall be less than one-fifth the thickness of the annular space into which they will be placed. Bentonite clay mixtures shall be composed of Bentonite clay and clean water, thoroughly mixed before placement so that a uniform slurry is achieved. Bentonite clay materials are subject to approval by the director.

(Ord. 1159 § 1 (part), 1999)

(Ord. No. 1374, § 18, 9-11-2012)

#### 13.12.051 - Cathodic protection well.

"Cathodic protection well" means any artificial excavation constructed by any method for the purpose of installing equipment or facilities to protect metallic objects in contact with the ground.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.060 - Concrete.

"Concrete" means Portland cement and aggregate mixed at a ratio of at least six ninety-four pound sacks of Portland cement per cubic yard of aggregate. In no case shall the size of the gravel in the aggregate be greater than one-fifth the radial thickness of the annular seal.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.070 - Contamination or pollution.

"Contamination" or "pollution" shall have the meanings ascribed to them in California Water Code Section 13050.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.080 - Director.

The term "director" as used in this chapter shall mean the director of planning, building, and environmental services, or the director's designees.

(Ord. 1159 § 1 (part), 1999)

(Ord. No. 1374, § 19, 9-11-2012)

**Editor's note**— Ord. No. 1374, § 19, adopted Sept. 11, 2012, amended § 13.12.080 title to read as herein set out. Former § 13.12.080 title pertained to environmental management director (director).

#### 13.12.081 - Exploratory hole (boring).

"Exploratory hole (boring)" means an uncased temporary excavation whose purpose is the immediate determination of hydrologic or geologic conditions at a site.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.082 - Extraction well.

"Extraction well" means an artificial excavation constructed by any method for the purpose of removing groundwater to be used either for permanent dewatering or for the removal of ground water for cleanup of contamination.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.083 - Geothermal heat exchange well.

"Geothermal heat exchange well" (including ground source heat pump wells) means any artificial excavation by any method, that uses the heat exchange capacity of the earth for heating and cooling (such as for air conditioning units) in which excavation the ambient ground temperature is eighty-six degrees Fahrenheit (thirty degrees Celsius) or less. A closed loop fluid system may be incorporated in the

design.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.090 - Ground water.

"Ground water" means water below the surface of the ground at a depth such that it has been protected from surface pollution or contamination by an impervious soil stratum, or which has received an acceptable degree of natural treatment by filtration through a considerable amount of soil as generally understood in industry standards.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.091 - Hazard.

"Hazard" means a well which threatens to, or which contaminates or pollutes the ground water in such a way that it jeopardizes the health and safety of the public. A hazard also means anything which creates an unsanitary or unsafe condition resulting from a well.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.100 - Horizontal well.

"Horizontal well" means a water well drilled horizontally or at an angle different from vertical.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.101 - Injection well.

"Injection well" means an artificial excavation constructed by any method for the purpose of introducing water, nutrient solutions, treated water, or reclaimed water into the ground as a means of replenishing groundwater basins, or enhancing recovery of chemical constituents, or establishing hydrologic control over local ground water.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.102 - Monitoring well.

"Monitoring well" means any artificial excavation by any method for the purpose of monitoring fluctuations in ground water levels, quality of underground waters, or the concentration of contaminants in underground waters. For the purpose of this division, injection wells, vapor extraction wells and

extraction wells for the purpose of removing ground water for the cleanup of contamination shall be considered monitoring wells.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.110 - Neat cement.

"Neat cement" means a mixture composed of one sack of Portland cement (ninety-four pounds) to not less than five nor more than seven gallons of water.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.120 - Sand-cement grout (or grout).

"Sand-cement grout" means a mixture composed of not more than two parts of sand and one part of Portland cement, and not less than five nor more than seven gallons of water per sack (ninety-four pounds) of cement.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.130 - Sanitary well seal.

"Sanitary well seal" means a device placed into the topmost part of a well casing which, by means of an expanding gasket, excludes foreign material from entering the well and may be provided with a means for introducing disinfecting agents directly into the well, or a device producing an equivalent effect. Such device shall be watertight to prevent the entrance of surface water and other contaminants into the well.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.140 - Sewage disposal system.

"Sewage disposal system" means a septic tank and subsurface disposal field or other type of system or appurtenance thereto, including sewage sump tanks and distribution boxes, whether individual, public or private, as defined in Chapter 13.16 of the Napa County Code, receiving domestic or industrial sewage waste. "Sewage disposal system" does not include a sewer line.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.150 - Sewer line.

"Sewer line" means a line conveying sewage waste matter from any building or premises to a point of disposal, such as to a septic tank or sewage treatment or disposal plant.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.160 - Shallow water well.

"Shallow water well" means any water well thirty feet or less in depth.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.170 - Spring.

"Spring" means a naturally occurring flow of ground water reaching the surface of the ground which may be developed as a water supply system.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.180 - Surface water.

"Surface water" means all those waters found on or immediately below the surface of the ground and that have not been filtered through any considerable amount of soil, as defined by industry standards, and which normally do not meet California drinking water standards and are not protected so as to exclude real or potential sanitary hazards. In the event that a conflict of opinion arises as to whether or not any waters are "surface waters," within the meaning of this division, the burden and expense of proving that such waters are not surface waters shall be upon the person or persons making such claim, and in the absence of findings to the contrary, the opinion and/or findings of the director shall be final.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.190 - Tremie.

"Tremie" means a tubular device or pipe used to place the sealant in the annular space.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.200 - Vapor extraction well.

"Vapor extraction well" means an artificial excavation constructed by any method for the purpose of injection, monitoring or extraction of vapors, into or from the predominantly unsaturated zone above the

water table.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.210 - Water well.

"Water well" means any artificial excavation constructed by any method for the purpose of extracting water from, or injecting water into, the ground. This definition shall not include the following: (1) oil and gas wells; (2) geothermal wells constructed under the jurisdiction of the California Department of Conservation (except those wells converted to use as water wells) or (3) wells used for the purpose of dewatering excavations during construction, or stabilizing hillsides or earth embankments.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.220 - Well.

"Well" shall mean any artificial excavation constructed by any method for the purpose of extracting water from, or injecting water into, the ground. In addition, for the purpose of this division, the following structures are also defined as wells: abandoned wells, geothermal heat exchange wells (pumps), cathodic protection wells, exploratory holes (borings), extraction wells, horizontal wells, injection wells, monitoring wells, vapor extraction wells and water wells.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.230 - Well cover.

"Well cover" means a temporary device to cover the topmost part of a well casing. The device must be so constructed to be structurally sound, impervious, and prevent the entrance of foreign material.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.240 - Well destruction.

"Well destruction" means certain work done to an existing well, the intent of which is to effectively seal the entire well up to the ground surface, in such a manner that each intersected water stratum is sealed and isolated from every other stratum and from surface water. Destruction of wells shall be completed in accordance with the procedures outlined in Article IV of this division, or as otherwise specified by the director.

(Ord. 1159 § 1 (part), 1999)

### 13.12.250 - Well drilling contractor.

"Well drilling contractor" means a person who possesses a valid C-57 contractor's license in accordance with the provisions of the California Business and Professions Code, Section 7000, et. seq. and Water Code Section 13750.5.

(Ord. 1159 § 1 (part), 1999)

### 13.12.251 - Well reconstruction.

"Well reconstruction" means certain work done to an existing water well in order to restore its production, replace defective casing, seal off certain strata or surface water, or similar work. Well reconstruction does not include the cleaning out of sediments, surging or work related to a well's pump.

(Ord. 1159 § 1 (part), 1999)

## Article II. - Permits and Inspection

### 13.12.260 - Permit requirements.

No construction, destruction or reconstruction of any well shall be commenced on any property until a permit to do such work has first been obtained from the director, except in the event of an emergency as set forth in Section 13.12.310.

(Ord. 1159 § 1 (part), 1999)

### 13.12.270 - Water wells—Classes of permits.

There shall be five types of water well permits, namely Class IA, Class IB, Class II, well reconstruction and well destruction.

- A. Class IA permits shall be obtained for the installation of a water well where such well location conforms with the minimum distances set forth in Section 13.12.340, and where the director deems no conditions exist which may result in a pollution or contamination of the ground water.
- B. Class IB permits shall be obtained for the installation of a new or replacement water well when such well is or will be the sole source of water supply and the well location is closer than the minimum distances set forth in Section 13.12.340, or where the director deems conditions exist which may result in contamination or pollution of the ground water unless special construction features are included in the well construction. A Class IB well permit shall not be issued unless



there exists on a parcel an existing constraint which prohibits the construction of a Class IA well.

At a minimum, special construction features shall include the following:

1. An annular seal having a minimum thickness of three inches.
2. An annular seal having a minimum depth of fifty feet or into the first impervious layer, whichever is greater.
3. The sealing material to be placed in the annular space by means of a tremie pipe, so as to fill the annular space from the bottom.
4. The well log must be made available to the director prior to sealing the annular space.
5. Different and/or additional standards from subsections (1) through (4) above may be imposed by the director if the proposed well is to be located in close proximity to a potential source of contamination. Such standards will be conditioned on the construction permit.

In no case shall a Class IB well permit be issued when the distance to any part of a sewage disposal system is less than fifty feet.

- C. Class II permits may be issued for replacement wells serving existing residential structures if it is determined by the director that special circumstances exist whereby the criteria for a Class IB permit cannot be met due to existing constraints on the property. Special construction requirements as determined by the director will be imposed.
- D. Reconstruction permits shall be obtained for any well reconstruction work.
- E. Destruction permits shall be obtained for any well destruction work.

(Ord. 1159 § 1 (part), 1999)

(Ord. No. 1374, § 20, 9-11-2012; Ord. No. 1399, § 12, 3-24-2015)

#### 13.12.280 - Application requirements.

- A. Any person legally entitled, as defined in Section 13.12.300, to apply for and receive a permit shall make such application on forms provided for that purpose. Such person shall give a description of the character of the work proposed to be done, and the location and ownership of the job site. The director may require plans, specifications or drawings and such other information as deemed necessary, including but not limited to, all improvements on the parcel, and the location of sewage disposal systems and sewer lines on all adjoining parcels.

If a proposed well is to be located in a floodway, floodplain, or riparian zone as defined in the Napa County Code (Sections 16.04.250, 16.04.290, and 16.04.410), no permit to construct a well shall be issued until a permit has been obtained from Napa County public works department. The well and related equipment including the pressure tank, electrical box, air vent and other devices shall be constructed in such a manner as to prevent the entrance of flood waters into the well or related

equipment.

- B. If the director determines that the plans, specifications, drawings, descriptions or information furnished by the applicant are in compliance with this chapter and other applicable requirements, said director shall issue the permit applied for upon payment of the required fee, as hereinafter fixed.
- C. All well permits shall be valid for a period of two years from the date of issue. The director, upon notification to the property owner, may enforce the same expiration deadlines as noted above on well permits issued prior to the effective date of this ordinance.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.290 - Fees.

Applications for a permit for well installation, reconstruction or destruction shall be accompanied by that fee established by resolution of the board of supervisors.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.300 - Issuance conditions.

No permit shall be issued to construct, reconstruct or destroy a well except to a licensed well-drilling contractor (or an authorized agent), as defined in Section 13.12.250 of this division.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.310 - Starting work without permit—Emergency work.

Any person who commences any work for which a permit is required by this division without first having obtained a permit therefor shall, if subsequently allowed to obtain a permit, pay double the permit fee for such work; provided, however, that this provision shall not apply to emergency work when proved to the satisfaction of the director that such work was urgent and necessary and that it was not practical to obtain a permit before commencement of the work. In all cases where such work was determined by the director to be an emergency, a permit must be obtained as soon as it is possible to do so, and if there is an unreasonable delay, as determined by the director, in obtaining such permit, a double fee as herein provided shall be charged.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.320 - Inspection of work required.

All wells for which a permit has been obtained may be inspected by the director to insure compliance with all the requirements of this division.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.321 - Proper disposal of drilling fluids and soil cuttings.

The applicant is required to see that safe and appropriate measures are taken in the handling and disposal of drilling fluids, soil cuttings, and other materials used or generated in connection with the permitted work. All drilling wastes must be controlled so as not to create conditions which violate applicable local, state and federal laws and regulations. Discharge of drilling wastes into the sanitary sewer or storm drain is prohibited unless authorized by the director. This provision does not modify the measures for proper handling, storage, and disposal of hazardous waste set forth in the California Health and Safety Code, Division 20, Chapter 6.5 and by the California Code of Regulations, Title 22, Division 4.5. In addition, mud pits created to confine drilling fluids shall be maintained during the well drilling operation so as not to be a nuisance. It shall be the applicant's responsibility to see that the mud pit is properly evacuated, or backfilled, or both, upon completion of the job.

(Ord. 1159 § 1 (part), 1999)

### Article III. - Construction Specifications

#### 13.12.330 - Materials and workmanship—Standards.

All materials and workmanship shall be no less than the quality specified in this division. The requirements of these standards are minimal only, and any material or method determined by the director to give equivalent or better results may be required. Materials or methods not covered by these standards must meet the standards of the California Water Well Standards Bulletin 74-81 and the supplement thereto, bulletin 74-90, and must receive the written approval from the director prior to use. In the event of conflicting or contradictory requirements, the provisions of this division shall prevail. Except as otherwise contradictory, the California Water Well Standards Bulletin 74-81 and 74-90 and any subsequent supplements and revisions thereto are hereby incorporated by reference.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.340 - Location—Distance from other facilities.

A. All water wells, geothermal heat exchange wells, extraction wells for the purpose of permanent

dewatering, and horizontal wells shall be located as follows:

Minimum Distances	
From property line	5 feet
From septic tank and/or any portion of a sewage disposal system or sewage disposal system expansion area <sup>1</sup>	100 feet
From public or private approved sewer line <sub>2</sub>	25 feet
From a public or private road	See Napa County Code <u>Chapter 18.112</u>
From floodway, floodplain, or riparian zone	See <u>Section 13.12.280</u>

1. Minimum distance may be reduced if conditions are met for Class 1B or Class II wells as listed in Section 13.12.270. Every effort shall be made to install the well in a location with the greatest possible setback distance.
2. Shall be fifty feet if sewer not constructed of approved building sewer materials.

As determined by the director, special setback distances may be required when the above wells are located near the following: regulated or unregulated underground fuel or storage tanks, contaminated sites, sanitary landfills and large scale animal or fowl operations.

- B. Monitoring and cathodic protection wells, and exploratory borings shall maintain setbacks from potential sources of contamination as approved by the director. Such setbacks shall be dependent on the source of contamination, the depth of the monitoring or cathodic protection well, the depth and type of the annular seal, the formations which are penetrated, and the proposed usage.

(Ord. 1159 § 1 (part), 1999)

(Ord. No. 1374, § 21, 9-11-2012)

13.12.350 - Reserved.

**Editor's note**— Ord. No. 1374, § 22, adopted Sept. 11, 2012, repealed § 13.12.350, which pertained to locations—exemptions and derived from Ord. No. 1159, § 1 (part), adopted 1999.

13.12.360 - Protection of wells during construction.

At all times during the progress of the work, or whenever there is an interruption in work on a well, the well shall be protected to prevent ground water contamination.

(Ord. 1159 § 1 (part), 1999)

13.12.370 - Casing specifications.

- A. All materials used for well casings shall be approved by the director and shall be structurally capable to perform the functions for which it is designed; i.e., to maintain the hole by preventing its walls from collapsing, to provide a channel for conveyance of the water, and to provide a measure of protection of the quality of the water pumped.
- B. All casings shall be placed with sufficient care to avoid damage to casing sections or joints.
- C. The casing shall extend at least eight inches above the ground surface, and at least two inches above the surface of any surrounding concrete slab, or as determined by the director.

(Ord. 1159 § 1 (part), 1999)

13.12.380 - Sealing of annular space.

- A. The annular space of Class IA wells shall be filled with acceptable sealant having a minimum thickness of two inches.
- B. The sealing material shall consist of neat cement, sand-cement grout, bentonite clay, concrete or a mixture of such approved by the director. Used drillers' mud, cuttings or chips from drilling shall not be used as sealing material.
- C. The sealing material shall extend from two inches above the ground surface to at least twenty feet below the ground surface, or at least two feet into impervious soil, whichever is the greater, except in the case of shallow water wells where no water-bearing stratum is encountered below twenty feet, the seal shall extend to a minimum depth of ten feet, and except for water wells which will serve a public water system, the seal shall extend to a minimum depth of fifty feet or two feet into impervious soil, whichever is greater. If bentonite clay is used, the uppermost three feet of the annular space must be neat cement, sand-cement grout, or concrete and shall be placed only after the bentonite has had sufficient time to settle. The requirements of this subsection do not apply to monitoring wells, cathodic protection wells and exploratory holes.
- D. For monitoring wells, cathodic protection wells and exploratory holes, refer to Bulletin 74-90 for

grouting requirements.

- E. The grout shall be applied in one continuous process either by pressure or by gravity in such a manner as to exclude surface and other undesirable water from the well. Sealing material shall be placed by methods (such as the use of a tremie pipe or equivalent) that prevent bridging or dilution of the sealing material or separation of sand or aggregate from the sealing material. Annular sealing materials shall not be installed by freefall unless the interval to be sealed is dry and no deeper than thirty feet below the ground surface.
- F. Prior to grouting the annular space, a bentonite clay seal consisting of pellets or other approved material may be placed at the bottom of the annular space.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.390 - Access openings into well casings.

Access openings into the well casing for air release, disinfection and any other purpose necessary for maintenance and operation of the well are permitted, but must have a watertight seal.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.400 - Well pits and below-ground discharge pipes.

- A. Well pits or below-ground discharge pipes may be permitted only when determined to be absolutely necessary by the director. Where the well casing terminates in a pit below the ground surface, the pit shall be constructed of monolithic, reinforced concrete, watertight in all respects. The top of such pit shall be covered with a concrete slab or equal material, or with a housing of satisfactory construction. The casing shall extend at least eight inches above the pit floor. The well pit shall be so constructed and protected so that flood, rain or surface waters cannot enter the pit. Additional requirements may be imposed where it is determined necessary by the director.
- B. The pit shall be provided with a drainage sump and an automatic sump pump and audio type alarm (or, if topography permits, a "free" discharge protected against entrance of rodents, insects or flooding). The discharge from the sump pump shall not be connected to any sewer or pipe drain. Pits shall have easy access for proper operation, maintenance and inspection of the equipment, and shall have a locked hatch. Doorways or hatches shall at all times effectively keep water out of the pit.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.410 - Disinfection requirements.

Newly constructed or repaired water wells shall be adequately treated in such a manner as to disinfect all parts of the well before or as the pump is set, with chlorine or an equal disinfecting chemical,

to a strength of at least fifty parts per million of available chlorine, but not more than two-hundred parts per million, and held for at least eight hours, after which time the well shall be pumped to reduce the disinfecting chemical to a safe level.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.420 - Pump installation.

All pumps shall be installed so as to prevent contamination of the ground water supply by surface water or other contaminants. The pump shall be mounted through a sanitary well seal. There shall be an access opening for introduction of chlorine into the well and gravel pack.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.430 - Completion report—Driller responsibilities.

Upon completion of a well, the driller shall be responsible for the placing of a sanitary well seal, or if the pump is not installed immediately, a watertight and tamper-proof well cover shall be installed. The driller shall submit a report of completion within the time frame required by state law, made out in detail on the State Department of Water Resources reporting form to the director.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.440 - Protection of water supply.

- A. No person shall install or maintain a well in any manner that will result in the pollution or contamination of the ground water, or which allows the entrance of surface waters into the ground water.
- B. If evidence is presented to the satisfaction of the director that any existing well is polluting or contaminating the ground water, the director shall require that such well be destroyed in accordance with the provisions of this division, or repairs be made to such well to eliminate the pollution or contamination or the entrance of surface water into the ground water.
- C. At a minimum, all water wells must be provided with a sanitary well seal. In circumstances where chemicals or other deleterious materials are injected into the water system, as a minimum an approved reduced pressure principle device or an approved air gap must also be provided at the well head.
- D. In the case of a flowing artesian well, the well head shall be sealed and vented to prevent the continuous discharge of well water on to the surface of the ground.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.441 - Reconstruction of existing water wells.

- A. In no case shall a reconstruction permit be issued for a water well where a sewage disposal system is located less than fifty feet away. For additional information regarding this matter, refer to Section 13.12.270(C) for Class II wells.
- B. If a water well is located greater than one hundred feet to a sewage disposal system, a reconstruction permit may be issued provided all efforts are made to meet the construction requirements of a Class IA well. If a well is located between fifty and one hundred feet from a sewage disposal system, a reconstruction permit may be issued if all efforts are made to meet the construction requirements for a Class IB well.

(Ord. 1159 § 1 (part), 1999)

#### Article IV. - Destruction of Abandoned Wells

#### 13.12.460 - Abandoned wells.

- A. The owner of any property shall be responsible for destroying any abandoned well located thereon. A well is considered to be abandoned when it has not been connected for service to any structure and/or not used for a period of one year. An abandoned well also includes a well which is in such a state of disrepair that no water can be produced.
- B. The well will not be considered abandoned if all of the following occur: (1) the owner declares his or



her intention to the director, in writing, to use such well again for supplying water or for other approved purposes, (2) the well has no defects in construction which would cause pollution or contamination to the ground water by surface water, (3) the well is covered with a safe well cover, (4) the well is marked so as to be clearly seen, and (5) the ground area surrounding the well is sloped away from the casing and kept clear of brush and debris.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.480 - Destruction of wells.

- A. Prior to destroying a well, a detailed evaluation and report on the well shall be submitted to the director by a licensed well driller (as defined in Section 13.12.250). Such report shall indicate the type of well to be sealed, all known information of the geological conditions of the soil, and the methods and material to be used in the destroying and sealing process. The methods and materials used in destroying wells shall be such that the ground water is protected from pollution or contamination.
- B. When a water well or an abandoned water well is to be destroyed, it shall be destroyed as follows:
  - 1. Any obstructions in said well, including pipes, pump, etc. shall be removed when possible.
  - 2. As much casing shall be removed as possible, but not less than three feet below grade or as determined by the director.
  - 3. The well shall be filled with concrete, or "p" gravel to thirty feet or below the first impervious layer (if known), whichever is deeper. If the well is less than thirty feet deep, proceed to step 4.
  - 4. Fill well with concrete, neat cement or sand-cement grout to surface.
  - 5. The placement of the material shall be done in such a way as to assure a dense seal, free of voids, in order to exclude surface water. Gravity installation of sealant without the aid of a tremie or grout pipe shall not be used unless the interval to be sealed is dry.
- C. For the destruction of monitoring wells, cathodic protection wells or exploratory holes, refer to Bulletin 74-90 for requirements.

(Ord. 1159 § 1 (part), 1999)

#### 13.12.490 - Alternative well or test hole destruction methods.

Other methods of destroying wells, including large diameter wells and wells considered to pose a higher degree of risk to the ground water, may be approved by the director if in his opinion an equivalent effect will result, and no contamination or pollution to the ground water will occur.

(Ord. 1159 § 1 (part), 1999)