Ordinance Code of Contra Costa County, California
Title 4. Division 414
Approved Water Supply Systems

Effective Date: August 1981

CHAPTER 414-4  APPROVED WATER SUPPLY SYSTEMS

ARTICLE 414-4.2  GENERAL

414-4.201 GENERAL. WATER SUPPLY SYSTEM – APPROVAL REQUIRED. Any person proposing to subdivide or develop any property needing water for domestic purposes shall demonstrate an approved water supply and obtain written approval from the health officer for such development.

414-4.202 PURPOSE AND DISCLAIMER. This chapter is enacted to provide for the protection of the County’s groundwater sources from degradation that could result from inadequately constructed, defective, or improperly abandoned wells, to provide for regulation of small water systems in accordance with federal standards as mandated by the State, and to require submission of tentative subdivision maps and building permit applications to the Health officer for him to review the availability of an approved water supply prior to the recordation of final maps and issuance of building permits. Notwithstanding the foregoing, by enacting this chapter, the County of Contra Costa neither assumes or undertakes any obligations or responsibilities of any kind to assure, guarantee, preserve, or otherwise guard the adequacy, potability, or any other qualitative or quantitative feature of the County’s groundwater sources in any manner whatsoever, and no cause of action against the County, its agents, directors, or employees shall be deemed to accrue under any theory whatsoever on the basis of the enactment of this chapter or any subsequent amendment thereto.

414-4.203 DEFINITIONS. As used in this chapter, the following words and phrases shall have the meanings given in this chapter:

414-4.205 APPROVED WATER SUPPLY SYSTEM means any system, approved by the health officer, or the California Department of Health Services, as meeting the requirements of Titles 17 and 22, the California Administrative Code.

414-4.207 CROSS-CONNECTION means any actual or potential unprotected connection as defined in Title 17, California Administrative Code.

414-4.209 CUSTOMER SYSTEM includes those parts of the facilities beyond the termination of the utility system which are used to convey water to points of use.

414-4.211 DISTRIBUTION SYSTEM includes the facilities and conduits used for the delivery of water from the source to the customer's system.
414-4.213 **FURNISH OR SUPPLY** has its usual meaning, except that it does not include furnishing or supplying water to a user for domestic purposes other than for human consumption if the user receives the water, by pipe or otherwise, directly from an open irrigation canal system; nevertheless, it does include furnishing or supplying water to any small water system, connected by an integrated pipe system owned and operated by the supplier.

414-4.215 **HEALTH OFFICER**, unless otherwise modified, means the health officer of this County, his/her medical deputies, his/her Environmental Health Inspectors, and his/her other duly authorized representatives.

414-4.217 **INDIVIDUAL WATER SYSTEM** means an approved water source and system of piping designed to provide water for domestic use and which serves (a) one single family residence; or (b) two single family residences on one parcel; or (c) one structure serving less than 25 persons more than 60 calendar days per year.

414-4.219 **SITE EVALUATION** means the investigation of a lot or subdivision to determine the feasibility of using an individual water system or a small water system.

414-4.221 **SMALL WATER SYSTEM** means a system which furnishes water for domestic purposes to from two through one hundred ninety-nine service connections and shall include “Public Water Systems” as defined in California Health and Safety Code Section 4010.1 and its applicable regulations under Title 22 of the California Administrative Code. Two single family residences on one parcel shall not be considered a small water system.

414-4.223 **SOURCE FACILITIES** include all components of the facilities used in the production, treatment, storage, and delivery of water to the distribution system.

414-4.225 **WATER SOURCE** means a source of water supply for any water system, including, without limitation, wells, springs, ponds, lakes, surface streams, irrigation ditches or canals, and potable water obtained from other sources including large public water systems.

414-4.227 **USER** means any person using water for domestic purposes, except any person processing water or selling, serving, hauling, furnishing, or supplying water to the public in any manner.

414-4.229 **UTILITY SYSTEM** means a water system consisting of source facilities, treatment facilities, and distribution system, and includes all other facilities of the water system under the complete control of the supplier, up to the point where the customer’s system begins.

414-4.231 **WELL** means any well, public or private, including without limitation, wells serving County and State small water systems, individual domestic use wells, industrial wells, agricultural wells, recharge or injection wells, air conditioning wells, horizontal wells, permanent test wells, dewatering wells and cathodic protection wells.

414-4.233 **LICENSED WELL DRILLER** means a person licensed in accordance with the provisions of the Contractors License Law (Chapter 9, Division 3, of the Business and Professional Code) to drill water wells.

414-4.235 **WELL DRILLING** means the act(s) by any person, including without limitation, the property owner and/or licensed well driller, to dig, drill, bore, excavate, or drive a well.
DOMESTIC USE means water that is intended for human consumption. The terms domestic purposes and human consumption mean the same as domestic use when they appear in this chapter.

ABANDONED WELL means a well which has not been used for a period of one year, unless the owner has declared his intention to use the well again. Wells that are to be used again shall be adequately protected, and marked, and the area around the well shall be kept clear.

SUBDIVISION MAPS
(a) Tentative Maps. Pursuant to Title 9, a copy of any submitted tentative subdivision map shall be forwarded to, and filed with the health officer for investigation of domestic water supply. The tentative map shall show proposed provisions for sewage disposal, source of approved water supply, number of lots, the size of each lot, and contour lines at intervals of five (5) feet or less.

(b) Health Officer Approval. The health officer shall review the filed tentative map for compliance with this chapter and in a timely manner report his conclusions thereon, together with any conditions recommended to insure such compliance, to the planning department and advisory agency.

(c) Final and Parcel Maps. Final and parcel maps shall not be recorded unless the conditions recommended by the health officer and established by the advisory agency on approval of the tentative map have been satisfied.

ARTICLE 414-4.4 SMALL WATER SYSTEMS

SMALL WATER SYSTEMS – PERMIT REQUIRED
(a) Every person proposing to install, construct, and/or operate a small water system shall first apply to the health officer for approval of the water source and utility system. The application shall be accompanied by complete plans and specifications with appropriate fees.

(b) The health officer shall approve, conditionally approve, or deny the application on the basis of compliance with this chapter and the health officer's regulations.

(c) Upon approval of the completed installation of the water system by the health officer, he shall issue a water supply permit and a public health license to operate the system.

SMALL WATER SYSTEM – INVESTIGATION, SITE EVALUATION. Upon receipt of an application for the construction or operation of a small water system the health officer shall make the necessary investigation and/or site evaluation of the proposed or existing system and all other circumstances and conditions the health officer deems material. The health officer may order repairs, alterations, or additions to the proposed or existing system to insure that the water furnished or supplied shall at all times meet the requirements of Sections 414-4.413, 414-4.415 and 414-4.417 herein. The health officer may require any permit holder or applicant to make a complete report on the condition and operation of the small water system owned, operated, or contracted for by the permit holder or applicant.

SMALL WATER SYSTEM – BACK-FLOW PREVENTION. Every person furnishing or supplying water to users shall prevent water from unapproved sources, or any substance, from entering the small water system.
414-4.407 **SMALL WATER SYSTEM – DESIGN AND CONSTRUCTION.** All small water systems shall be designed and constructed so as to comply with applicable A.W.W.A. Standards and generally accepted engineering practices.

414-4.409 **SMALL WATER SYSTEM -- APPROVED SOURCES REQUIRED.** All water sources for small water systems shall comply with the requirements of Title 22, the California Administrative Code and may be used only after approval of the health officer.

414-4.411 **SMALL WATER SYSTEM – DISTRIBUTION RESERVOIRS.** Distribution reservoirs shall be adequately protected against contamination. Adequately ventilated housing may be required by the health officer to protect the facilities from the elements and unauthorized entry.

414-4.413 **SMALL WATER SYSTEM – DISTRIBUTION SYSTEM.**

(a) **Pressure-Quantity.** The distribution system shall be of adequate size and designed in conjunction with related facilities to maintain a minimum water pressure of twenty (20) pounds per square inch at every point during periods of maximum normal demand. The quantity of water delivered to the distribution system shall be sufficient to supply adequately, dependably, and safely the total requirements of all users under maximum consumption.

(b) **Flushing.** Dead-end runs shall be provided with means of flushing, and shall be flushed frequently enough to assure that the water will be kept safe, wholesome, and potable for human consumption. The design of the small water systems shall provide for elimination of dead-end runs wherever practicable.

(c) **Materials.** Materials used in the distribution system shall be able to withstand with ample safety factors, all internal and external forces to which they may be subjected.

(d) **Back-flow protection.** Each service connection from an approved water supply system shall be protected against backflow of water from a non-approved system.

(e) **Fire hydrants.** Fire hydrants shall conform to requirements of local authority.

(f) **Location of pipes.** No water pipe shall be laid in the same trench with sanitary sewers.

(g) **Disinfection of pipes.** All pipes or conduits, or parts, newly constructed or repaired before being placed in service, shall be completely disinfected in accordance with American Water Works Association Procedures for Disinfecting Water Mains.

(h) **Marking of pipes.** Where the premises contain dual or multiple water systems and piping, the exposed portions of pipes shall be painted, branded, or marked at sufficient intervals to distinguish the pipes which carry water safe for human consumption.

414-4.415 **SMALL WATER SYSTEM – OPERATION AND MAINTENANCE.**

(a) **Personnel.** All personnel responsible for operation and maintenance shall have sufficient experience and training to qualify them properly their duties. When water is treated the water system shall be operated by personnel having special skills in the appropriate areas and acceptable to the health officer.

(b) **Maps and Records.** Complete and current maps of the utility system shall be maintained. Complete and current records shall be kept showing results of bacteriological and chemical analyses of water and other data required by the health officer.
2. *Other surface sources.* Yields and required storage capacity shall meet the same minimum requirements as for wells. Adequate documentation that the surface sources are perennial shall be provided.

C. **Director of Building Inspection:**
When the building inspection director is advised by the health officer that it has not been demonstrated that a water source exists complying with this chapter and that such lack is a danger to or likely to cause public health problems, he may withhold issuance of the requested building permit or certificate for a structure.

414-4.603 **INDIVIDUAL WATER SYSTEM – LOT AREA, VARIANCES.**
(a) *Lot Area.* The health officer shall require each structure that needs both an individual water system and an individual sewage disposal system to be on a lot whose area, exclusive of natural impediment and surface and underground easements, is at least forty-thousand (40,000) square feet.

(b) *Variances.* The health officer may grant variances from Subsection (a) when he finds the following conditions to be met:
1. The lot otherwise will comply with the requirements of this Division and the health officer's regulations; and
2. The variance will neither create, nor contribute to the creation of a public nuisance.

414-4.605 **INDIVIDUAL WATER SYSTEM – INVESTIGATION, SITE EVALUATION.** The health officer shall make the necessary investigation and/or site evaluation of the proposed development and all other circumstances and approve, or deny the proposed development on the basis of compliance with this chapter and corresponding regulations.

**ARTICLE 414-4.8 WELLS**

414-4.801 **WELLS – PERMIT REQUIRED.**
(a) Every person proposed to dig, drill, bore, or drive any water well, or rebore, deepen, cut new perforations in, or seal the aquifers of any existing well, before commencing work, shall apply to the health officer for approval of the well site and method of installation and construction and for a permit to do the work. If a well driller is hired it is his responsibility to see that a permit is obtained. The application shall be on forms furnished by the health officer and shall contain the information he may require.

(b) The permit shall expire on the one hundred eightieth (180) calendar day after date of issuance if the work has not been started and reasonable progress toward completion is not maintained, but the health officer may extend the expiration date when delay is warranted.

(c) The health officer shall approve, conditionally approve, or deny the application and issue or withhold the permit accordingly, on the basis of compliance with this chapter and his regulations.

(d) Upon completion of the drilling, repairs, alterations, or additions of the well and before a final approval of the well for use, a log of the well shall be submitted to the health officer. Where minor or insignificant repairs, alterations or additions are made, the health officer may waive the requirement for a log.
2. Other surface sources. Yields and required storage capacity shall meet the same minimum requirements as for wells. Adequate documentation that the surface sources are perennial shall be provided.

C. Director of Building Inspection:
When the building inspection director is advised by the health officer that it has not been demonstrated that a water source exists complying with this chapter and that such lack is a danger to or likely to cause public health problems, he may withhold issuance of the requested building permit or certificate for a structure.

414-4.603 Individual Water System – Lot Area, Variances.
(a) Lot Area. The health officer shall require each structure that needs both an individual water system and an individual sewage disposal system to be on a lot whose area, exclusive of natural impediment and surface and underground easements, is at least forty-thousand (40,000) square feet.

(b) Variances. The health officer may grant variances from Subsection (a) when he finds the following conditions to be met:
1. The lot otherwise will comply with the requirements of this Division and the health officer's regulations; and
2. The variance will neither create, nor contribute to the creation of a public nuisance.

414-4.605 Individual Water System – Investigation, Site Evaluation. The health officer shall make the necessary investigation and/or site evaluation of the proposed development and all other circumstances and approve, or deny the proposed development on the basis of compliance with this chapter and corresponding regulations.

ARTICLE 414-4.8 Wells

414-4.801 Wells – Permit Required.
(a) Every person proposed to dig, drill, bore, or drive any water well, or rebore, deepen, cut new perforations in, or seal the aquifers of any existing well, before commencing work, shall apply to the health officer for approval of the well site and method of installation and construction and for a permit to do the work. If a well driller is hired it is his responsibility to see that a permit is obtained. The application shall be on forms furnished by the health officer and shall contain the information he may require.

(b) The permit shall expire on the one hundred eightieth (180) calendar day after date of issuance if the work has not been started and reasonable progress toward completion is not maintained, but the health officer may extend the expiration date when delay is warranted.

(c) The health officer shall approve, conditionally approve, or deny the application and issue or withhold the permit accordingly, on the basis of compliance with this chapter and his regulations.

(d) Upon completion of the drilling, repairs, alterations, or additions of the well and before a final approval of the well for use, a log of the well shall be submitted to the health officer. Where minor or insignificant repairs, alterations or additions are made, the health officer may waive the requirement for a log.
414-4.803 **WELLS – REPAIRS, ALTERATIONS OR ADDITIONS.** The health officer may order repairs, alterations, or additions to the existing source or system to insure that the water furnished or supplied shall at all times be pure, wholesome and potable and without danger to human health.

414-4.805 **WELLS – SITE.** The site of every well shall be adequately drained and located a safe distance from any sources of pollution or contamination; this distance is dependent upon the character of the soil, location of pollution sources, and slope of the ground.

414-4.807 **WELLS – PROTECTION.**

(a) Adequate means shall be provided to protect the well from contamination during construction, reconstruction, or alteration. Newly constructed or repaired wells and necessary distribution systems shall be adequately chlorinated following construction or repair work.

(b) Surface construction which protect the well from contamination shall be provided when determined necessary by the health officer.

(c) The health officer shall be notified at least twenty-four (24) hours in advance of the installation of the seal of the annular space between the casing and excavation. All wells shall be sealed in accordance with the procedures outlined in Part 2, Section Nine of California Department of Resources Bulletin Number 74. All wells shall be sealed to the depth of the first impervious soil formation in addition to all other requirements of Bulletin Number 74.

(d) The well driller shall complete a certification of the protection of the underground aquifers he has penetrated during drilling and competition of the well. The certification shall be made on a form provided by the health officer and shall be signed by the well driller under penalty of perjury and shall indicate the contractor or driller license number. The work performed in the protection of the underground aquifers shall be done in conformance with California Department of Water Resources Bulletin Number 74, found well drilling practice, current published data or other references documented with the certification.

414-4.809 **WELLS – ABANDONED.** To prevent the contamination of ground waters and other dangers, every person wholly or partially responsible for abandoning a well or having entire or partial right of ownership or possession of the land or premises on which an abandoned well is situated shall destroy the well as specified in Part III, Section 23 of the State of California, Department of Water Resources, Bulletin Number 74.

**ARTICLE 414-4.10 ENFORCEMENT**

414-4.1001 **ENFORCEMENT – PROHIBITIONS.**

(a) No person subdividing and/or developing any property needing water for domestic use shall so use the property until he has demonstrated an approved water supply.

(b) No person shall drill a water well whether for domestic use, irrigation, agricultural or other purposes, without first applying for and receiving a valid, unrevoked, unsuspended permit to do so from the health officer.

(c) No person shall drill, reconstruct, repair or destroy a well for hire unless he is licensed well driller.
(d) No person shall operate a small water system without filing a written application with the health officer and receiving and possessing a valid, unrevoked, unsuspended water supply permit and public health license.

(e) No person shall maintain a cross-connection with a small water system operated for domestic use.

(f) No person shall supply water for domestic use until the results of the tests required by the health officer of bacteriological, chemical and physical analyses, performed by a laboratory certified by the State Department of Health Services, are submitted to the health officer and show that the water meets state safe drinking water quality standards and all other criteria established by the health officer through his regulations.

(g) No person shall modify, add to, or change an approved water supply system without the prior written approval of the health officer.

414-4.1003 Enforcement - Publication of Regulations. The health officer may make and publish regulations to make more detailed or specific the provisions of the chapter. These regulations shall become effective two (2) weeks after filing with the clerk of the Board of Supervisors and posting in the County Health Department. The health officer shall be responsible for the execution of this chapter.

414-5.1005 Enforcement - Right of Entry. To enforce this chapter, the health officer may enter and inspect any premises, operations or work regulated hereby, at reasonable times and with such notice to the owner, occupant, operator, applicant, licensee, or permittee, as is reasonable and practicable under the circumstances. In conducting such inspections the health officer is authorized to proceed pursuant to the Code of Civil Procedure Sections 1822.50 and following.

414-4.1007 Enforcement - Nuisance Abatement. Any installation made or condition existing in violation of this chapter or of standards or regulations established under Section 414-4.1003 is declared to be a public nuisance, and its maintenance, operation, and existence may be abated in a civil action.

(a) Notice; Hearing. Except in instances of necessity or emergency, when the health officer declares a public nuisance, he shall promptly so notify the owner of the property by certified mail to the owner’s address on the assessment roll. The notice shall state the condition and reason for the declaration, and shall also state that the owner of the property has thirty (30) days after the mailing of the notice within which to abate the nuisance, failing which the health officer may have the nuisance abated and the owner shall be liable for the cost thereof. The notice shall also state that if owner objects to the health officer’s declaration, the owner may request a hearing before the health officer to determine whether a public nuisance exists. The notice shall further indicate that the request for the hearing must be received by the health officer prior to the expiration of the time set for abatement, and the hearing shall be held within thirty (30) days after the request is received by the health officer. County abatement is suspended by the filing of a request for hearing, pending the final decision of the health officer.

(b) Costs. If the health officer has a nuisance abated, the health officer shall promptly so notify the property owner, including a statement of costs and of the owner’s rights to a hearing thereon. The notice mailing and the time period for hearing requests and hearing shall be those in subsection (a). Upon fixing the costs (after hearing or in absence of request thereon), the health officer shall proceed according to law to impose the costs on and collect them from the property
owner and/or the property. These procedures do not affect the county's right to collect these costs from any other person responsible therefore under law.

414-4.1009  **ENFORCEMENT – EMERGENCY ACTION.** Where the health officer, makes a written finding that the public health is endangered by some act, omission, or condition regulated by this chapter, in connection with any premises or operation licensed under this chapter, the health officer may order the immediate cessation of the act, abatement of the condition, or action to correct the condition. The health officer may order the temporary emergency suspension of the applicable permit and its removal from the person or premises, and the health officer may post notice of this action in a conspicuous place. Emergency suspension, as distinct from any other action authorized by law, is effective for a period of five days, including the first day on which the permit is suspended. During that period, any activity regulated by this chapter is unlawful. At the end of that period, or sooner if a finding is made that the public health is no longer endangered, the permit becomes valid again unless a hearing is ordered.

414-4.1011  **ENFORCEMENT – PERMIT SUSPENSION.** Where a written complaint is filed with the health officer that some applicable law or regulation is being violated by any person, premises or operation required to be licensed under this chapter, the health officer may order a hearing, and after hearing may suspend the permit for not more than ninety (90) days, or until the health officer is assured of compliance with applicable laws or regulations, whichever is less, and the health officer may post notice of this action in a conspicuous place. At the end of the period, or when the health officer is satisfied of compliance, the permit becomes valid again. During that period any activity regulated by this chapter is unlawful.

414-4.1013  **ENFORCEMENT – PERMIT REVOCATION.** A permit maybe revoked and confiscated if it has been suspended once and if violations of this chapter or other applicable laws or regulations or acts or omissions endangering the public health continue, or if the health officer or one of the health officer’s medical deputies makes a written finding that correction of the situation is impracticable and that public health is endangered thereby. The health officer may post notice of this action in a conspicuous place.

414-4.1015  **ENFORCEMENT – HEARINGS.** In cases of hearings under Section 414-4.1011, notice must be written and delivered to the person involved or in charge of the premises or operation at least forty-eight (48) hours before the hearing. Other hearings ordered by the health officer must be preceded by written notice, personally delivered or mailed to the person to whom the permit was issued at the latest address on file with the health officer not less than five (5) nor more than fifteen (15) days before the hearing date. These hearing shall be in the main office of the County Health Department, unless some other location is specified in the notice. These hearings shall be conducted by the health officer or one of the health officer’s medical deputies, and may not be continued or postponed for longer than ten (10) days from the original date without consent of the permittee.

414-4.1017  **ENFORCEMENT – APPEALS.**

(a) A person objecting to or disagreeing with any decision made pursuant to Sections 414-4.403 and 414-4.605, and/or the pertinent regulations thereto, may appeal the decision to the health officer. All requests for this appeal hearing shall be in writing and must received by the health officer within ten (10) days after notice of the decision was mailed. All requests for the appeal hearing must be accompanied by the appropriate fee. A hearing on the appeal shall be held within fifteen (15) days after the request for appeal is received by the health officer.
(b) Appeals may be taken from the results of any hearing held pursuant to Sections 414-4.109, 414-4.1011, 414-4.1013, 414-4.1015 and Subsection (a) to the Board of Supervisors by a written notice of appeal stating fully the matters or action appealed from and the grounds for the appeal. The notice shall be filed with the clerk of the Board within fifteen (15) days of the action appealed from. The Board shall then schedule the appeal for a hearing within thirty (30) days of the filing of the notice of appeal.

414-4.1019 ENFORCEMENT – PENALTIES. Any person violating this chapter or regulations issued hereunder, by failing to submit plans, obtain necessary inspections and approvals, or pay fees, or by commencing or continuing construction or remodeling in violation hereof, shall pay triple the appropriate fee as a penalty and remain subject to other applicable penalties and enforcement procedures authorized by the state law and/or this code.

414-4.1021 ENFORCEMENT – OTHER REQUIREMENTS. A permit or license issued under this chapter does not relieve the permittee or licensee from compliance with applicable federal, state, or local laws and regulations or other required permits or licenses.

414-4.1023 GUARANTEE OF PERFORMANCE.

(a) Performance Bond. Prior to the issuance of a permit, the applicant shall post with the health officer a cash deposit or bond guaranteeing compliance with the terms of this Chapter and the applicable permit, such bond to be in an amount deemed necessary by the health officer to remedy improper work but not in excess of five thousand dollars ($5,000.00).

(b) Continuous Performance Bond. In lieu of furnishing a separate bond for each permit as provided above, a licensed contractor may deposit with the health officer a surety bond or cash deposit in the amount of five thousand dollars ($5,000.00), which bond or cash deposit shall be available to the county to remedy any improper work done by the contractor pursuant to any permit issued under this chapter.

ARTICLE 414-4.12 FEES

414-4.1201 GENERAL. The following non-refundable fees shall be paid to health officer at the time of filing for or requesting an investigation, test, inspection or permit required by this Chapter. No fees are required when the health officer receives from the applicant a written statement by a district or city governing body indicating that an approved domestic water supply is available and adequate to handle the additional volume of water required for the proposed improvement.