

ARTICLE II. WELLS, PUMPING FACILITIES AND IRRIGATION SYSTEMS*

***Editor's note:** Sections I--XVIII of Ord. No. 95-4, adopted April 20, 1995, amended art. II as herein set out. Formerly, art. II pertained to wells, pumping facilities and irrigation systems and derived from §§ I--XVII of Ord. No. 85-8, adopted June 20, 1985 and §§ I--XIV of Ord. No. 89-58, adopted Dec. 21, 1989. Subsequently, Ord. No. 2002-23, § I, adopted Dec. 12, 2002, amended Art. II, in its entirety, to read as herein set out. See the Code Comparative Table.

Cross references: Buildings and building regulations, ch. 22; environmental protection standards for potable water wellfields, § 50-271 et seq.; health and sanitation, ch. 58; cross connection control, § 122-111 et seq.

State law references: Water wells, F.S. § 373.302 et seq.

Sec. 74-31. Authority and applicability.

This article is enacted under the authority of the Charter of the County of Volusia, Florida, and F. S. Chapter 125, to provide for the following:

- (1) That all properties located adjacent to a potable central water supply must connect to said water supply in the absence of a moratorium prohibiting said connection under the following circumstances:
 - a. To provide potable water to new construction; and/or
 - b. In the event that an existing potable well becomes unusable requiring the installation of a new well;
- (2) Regulations for the location, construction, repair and abandonment of wells;
- (3) The installation of pumps, pumping equipment and irrigation systems;
- (4) And the certification of pump and irrigation contractors, in the interest of the public health, safety and welfare of the citizens and inhabitants of Volusia County.

This article vests the responsibility and authority for the regulation of wells and irrigation systems, and the certification of pump and irrigation contractors, to the Volusia County Health Department. This article shall apply and be enforced in both the unincorporated and incorporated areas of the county. Certification of pump and irrigation contractors operating within a municipality; and permits issued for irrigation systems permitted within an incorporated municipality, shall be in compliance with that municipality's regulations, unless the municipality authorizes the Volusia County Health Department to administer and enforce the provisions of this article within the municipality.

(Ord. No. 2002-23, § I, 12-12-02)

Sec. 74-32. Definitions.

The definitions set forth in the most current version of Chapter 40C-3, 64E-8, 62-531, and 62-532, Florida Administrative Code are adopted by reference and incorporated herein and shall apply to the provisions of this article. For the purpose of this article, the following words or phrases shall mean:

Agricultural use means the use of water for the commercial production of crops including ornamentals or the growing of farm products, including, but not limited to, vegetables, citrus, and other fruits, pasture, sod or animals.

Backflow device means a safety device used to prevent the backflow of water or a mixture of water and chemicals into the water supply.

Board means Volusia County Building Trades Board.

Certified contractor means a person who holds a currently valid certificate of competency for pump and irrigation installations from the department.

Closed loop system means a series of pipes not open to any aquifer installed vertically in a borehole for the purpose of transmitting thermal energy.

Council means the County Council of the County of Volusia, Florida.

County means County of Volusia, a political subdivision of the State of Florida.

Department means the Volusia County Health Department, its agents or employees.

District means the St. Johns River Water Management District.

Domestic use means any use of water for individual personal needs or for household purposes such as drinking, bathing, heating, cooking or sanitation.

Drawdown means the lowering of the water level in a well and the water table or piezometric surface in or adjacent to the well, which results from the discharge of water from the well by pumping.

Established ground surface means the permanent elevation of the ground surface at the site of a well.

Gang well means a system where two or more water wells are coupled together with a common header or manifold.

Irrigation system means a device or combination of devices having a hose, pipe, or other conduit which connects directly to any source of ground or surface water, through which device or combination of devices, water, or a mixture of water and chemicals, is drawn and applied for residential, commercial or agricultural purposes.

Irrigation system completion means the termination of all irrigation installation activities. Continuous absence of the irrigation installer from the installation site for five or more days indicates that the system is deemed completed by the installer, unless proper notification, such as a telephone call, is made to the department.

Person means any natural person, individual, owner, operator, firm, association, organization, partnership, joint venture, business, trust, public or private corporation, company, political subdivision, public officer, or any other entity whatsoever, or combination thereof, of whatever kind.

Potable water means water suitable for human consumption and approved by the Volusia County Health Department (Florida Department of Health).

Pump(s) means water well pump.

Pumps and pumping equipment means any equipment or materials utilized or intended for use in withdrawing or obtaining groundwater from wells for any use, including, but not limited to, pumps, seals, tanks, fittings and controls.

Repair means any action which involves the physical alteration or replacement of any part of a well below the established ground surface, including the physical alteration and replacement of any portion of an irrigation system. Routine maintenance of sprinkler heads, fittings, or line breaks do not require permitting.

Well(s) means water well.

(Ord. No. 2002-23, § I, 12-12-02)

Sec. 74-33. Intent.

The intent of this article is to:

- (1) Require that all properties located adjacent to a potable central water supply must connect to said water supply in the absence of a moratorium prohibiting said connection under the following circumstances:
 - a. To provide potable water to new construction and/or
 - b. In the event that an existing potable well becomes unusable requiring the installation of a new well.
- (2) Protect, control and conserve the quality and availability of groundwater supplies in the county.
- (3) Prescribe minimum requirements governing the location, construction, repair or abandonment of water wells, pump installations and irrigation systems.
- (4) Provide certification of all pump and irrigation contractors.
- (5) Prohibit, where the best interest of the public would be served, the location, construction, repair or abandonment of water wells.
- (6) Protect the health, safety and welfare of the citizens of the County of Volusia.

(Ord. No. 2002-23, § I, 12-12-02)

Sec. 74-34. Exemptions.

The following are exempt from the provisions of this article:

- (1) Any well, pump or other equipment used temporarily for dewatering purposes, provided the well does not penetrate a confining unit.
- (2) The construction, repair or abandonment of a well with a casing diameter of six inches or greater; or a gang well in which the sum of the diameter of the individual casings is six inches or greater.
- (3) A well constructed solely for the purpose of a test hole.
- (4) Any well, pump or other equipment constructed or installed by any federal or state governmental agency, its agent, or authorized representatives.
- (5) Any jetted well used temporarily to obtain water for compaction on a construction site, provided the well does not penetrate a confining unit.
- (6) Any pump installed on or in a well, with a casing diameter of six inches or greater.
- (7) Any well located within a delineated area pursuant to 62-524, Florida Administrative Code, as amended.
- (8) Exemptions from this article, may be issued by the department or designee, as long as state rules are not compromised.

(Ord. No. 2002-23, § I, 12-12-02)

Sec. 74-35. Variances.

When an undue hardship results from compliance with the requirements of this article, the property owner may request a variance from the department. Said application must be submitted on department approval forms, accompanied by a non-refundable fee.

(Ord. No. 2002-23, § I, 12-12-02)

Sec. 74-36. Certification of pump and irrigation contractors.

(a) *Certification required.* No person shall install or repair a pump and/or irrigation system; or shall offer to perform the installation or repair of said system, unless the person holds a valid certificate of competency from the department as a pump and irrigation contractor. Such certificate of competency shall only be issued to a natural person or a person representing a business corporation, association, partnership, company or trust.

(b) *Exemptions:*

(1) Licensed Florida Water Well contractors and Florida State Certified Plumbing Contractors, are exempt from the requirement of obtaining a certificate of competency from the department for the installation or repair of pumps or pumping equipment, and the installation or repair of irrigation systems.

(2) Florida State Registered Plumbing Contractors are exempt from the requirement of obtaining a certificate of competency from the department for the installation or repair of pumps or pumping equipment, and the installation or repair of irrigation systems, if said contractor holds a valid, certificate of competency in Volusia County, for plumbing contracting.

(3) A property owner who personally performs construction, maintenance, or repairs on a pump or irrigation system which serves his or her owner-occupied, single-family residence, is exempt from the certification requirements, but is still subject to the permit requirements as set forth in this article.

(c) *Certificate of competency:*

(1) *Application forms:* A complete application for certificate of competency shall be submitted to the Volusia County Health Department on the department's approved form.

(2) *Application Fees:* The application must be accompanied by the required fee(s) as established by resolution of the county council. Application fees are non-refundable and non transferable.

(3) *General liability and property damage insurance and worker's compensation:* Proof of valid general liability and property damage insurance, and worker's compensation or exemption, must be submitted to the department prior to issuance of the certificate of competency, and prior to each renewal. A minimum of \$100,000.00 property damage coverage and \$25,000.00 general liability insurance coverage, must be demonstrated.

(4) The applicant must demonstrate a minimum of two years of experience in the installation and repair of pumps and irrigation systems gained through working with a licensed pump and irrigation contractor, well driller, or plumbing contractor.

(5) The applicant shall submit to a written examination which shall be prepared, graded and proctored by Experior, Gainesville, Florida, or any other testing agency recognized by the department, to test the qualifications of the applicant to perform the installation and repair of pumps, pumping equipment and irrigation systems in the county.

(6) In order to be eligible for certification, the applicant shall obtain a passing grade of 75 percent or higher on the required examination and passing grade of 75 percent or

- higher on the two hour business and law examination.
- (d) *Duration of certificates.* All certificates of competency issued as provided herein, are biennial certificates and will expire on September 30 of odd-numbered years. Certificates may be renewed for the ensuing year without written examination through the month of September of an odd numbered year, upon proper and timely application to the department.
- (e) *Inactive status.* Upon payment of an inactive status fee, a contractor may work while in an inactive status, under the supervision of an active status contractor, in accordance with the requirements of F. S. Ch. 489, as amended. The return to active status from inactive status without testing, requires proof of maintained continuing education units in accordance with section 74-36(8) of this article.
- (f) *Reciprocity.* An initial certificate of competency as a pump and irrigation contractor shall be issued without further written examination to any person,
- (1) Who successfully completed a written examination for pump and irrigation contractors prepared, proctored and graded by a testing agency approved by the department and;
 - (2) Who holds a current certificate of competency from a city or county which has an irrigation ordinance with jurisdiction and control over installation, extending, and maintaining irrigation systems, and all appurtenances thereto, similar to that of Volusia County certificates of competency. To secure such a certificate, the applicant shall submit to the department, a photostatic copy of a current competency certificate, a copy of the specific application used to secure testing, and a certificate from the chief administrator's office of the city or county issuing said certificate.
- (g) *Certificate of competency number.* The certificate of competency number of each pump and irrigation contractor shall remain the same, from year to year.
- (h) *Continuing education units.* Twelve continuing education credits must be completed biennially to maintain the validity of a certificate of competency. Continuing education courses must be approved by the department to be eligible for credit.
- (i) *Grounds for refusal, suspension or revocation of certificate of competency.* The department may refuse to issue or renew, or may suspend or revoke, a certificate of competency for any one or more of the following:
- (1) Material misstatement in the application for certificate of competency.
 - (2) Failure to have or maintain the qualifications required by this article.
 - (3) Willful disregard or violation of this article, or any rule or regulation promulgated by the council pursuant to this article.
 - (4) Willful aiding or abetting another person in the violation of this article, or any rule or regulation promulgated by the council pursuant to this article.
 - (5) Gross incompetency in the performance of work required of a pump and irrigation contractor.
 - (6) Allowing the use of a certificate of competency for the purpose of violating this article.
 - (7) Failure to pay the required certification and/or permit fees.
 - (8) Failure to complete the required continuing education units on a biennial basis.
 - (9) Failure to submit proof of general liability and property damage insurance, or workman's compensation coverage or exemption.
 - (10) Failure to abide by permit conditions.

(j) *Refusal, suspension or revocation of certificate of competency for irrigation contractors:*

(1) In case of refusal, suspension or revocation of a certificate of competency, the person concerned shall be notified of said action by the department by:

- a. Personal notice, or by certified mail, return receipt requested;
- b. Notice by the sheriff's office, or;
- c. Publishing notice on two days in a newspaper of general circulation in the county.

(2) In case of the above-described action, the person concerned may file written notice of appeal to the board, through the department, within 30 days from receipt of notification. The department shall, upon receipt of said notice, schedule a hearing during the next regularly scheduled meeting of the board. The board may sustain, reject or modify the refusal, suspension or revocation.

(k) *Fines.* Any person who installs or repairs a pump and/or irrigation system; or offers to perform said work without a valid certificate of competency from the department shall be fined \$250.00 for the first offense, and \$500.00 for each subsequent offense. Fines will be deposited in the Volusia County Health Department Trust Fund.

(Ord. No. 2002-23, § I, 12-12-02)

Sec. 74-37. Well contractors license.

(a) No person shall construct, repair or abandon, or offer to construct, repair or abandon, a well in the county unless such person holds a valid State of Florida Water Well Contractor's License as set forth in F. S. § 373.323, as amended.

(b) Any person installing a water well without said license shall be fined \$250.00 for the first offense; \$500.00 for each subsequent offense. Fines will be deposited in the Volusia County Health Department Trust Fund.

(c) All wells must be constructed or repaired in accordance with the standards set forth in section 74-40 of this article. Well completion report shall be submitted in accordance with section 74-40(4) of this article.

(d) Revocation, suspension, and enforcement actions on water well contractor's licenses will be in accordance with F.S. § 373.323(7), as amended, and Chapters 40C-3.037, 40C-3.038, and 62-531, Florida Administrative Code, as amended.

(Ord. No. 2002-23, § I, 12-12-02)

Sec. 74-38. Identifying vehicles, equipment, and advertising.

(a) *Vehicles and equipment.* All vehicles and equipment used by well or certified pump and irrigation contractors during well, pump and/or irrigation system installations, shall be marked with the department's certificate of competency number or the State of Florida Water Well Contractor's license number for the contractor responsible for installation. The identification number shall be displayed on both sides of each vehicle, in numerals of not less than two inches in height and one inch in width; and in colors contrasting with the vehicle.

(b) *Advertising.* The department's certificate of competency number or the Florida Water Well contractor's license number of the contractor responsible for the installation operation shall appear on all advertising.

(c) *Fine.* Failure to display the aforementioned numbers as specified above, shall result in a fine of \$250.00 for each occurrence.

(Ord. No. 2002-23, § I, 12-12-02)

Sec. 74-39. Well, pump and irrigation system permits.

(a) [*Generally.*] All properties located adjacent to a potable central water supply must connect to said water supply in the absence of a moratorium prohibiting said connection under the following circumstances:

(1) To provide potable water to new construction and /or

(2) In the event that an existing potable well becomes unusable requiring the installation of a new well.

(b) *Permit required.* Except as exempted by section 74-34 of this article, a valid Volusia County Health Department permit shall be obtained prior to commencement of construction, repair, modification or abandonment of any well or conversion of a test hole to a water well, or the installation of a pump or the installation of an irrigation system.

(c) *Permit application requirements:*

(1) The written application for well construction, repair, modification or abandonment permit or installation of a pump and/or irrigation permit shall include, but is not limited to:

a. Name, address, and telephone number of the property owner.

b. Written authorization from the owner designating the authorized agent, if any.

c. Name, telephone number, license number, and signature of a currently licensed water well contractor, plumbing contractor, certified contractor, or owner-contractor, as applicable.

d. A site plan, including the description of well, pump, or irrigation system location, including tax parcel number, address, and specific directions to job site.

e. In the case of a well, description of the proposed well construction, including diameter, purpose, type of casing material and method of construction.

f. In the case of pump and/or an irrigation system, the description of the pump and/or irrigation system installation, including pump size, type, and intake settings.

(d) *Issuance of permit.* Upon receipt of the application and appropriate permit fee, the department shall review the application and, if in compliance with this article, it shall approve for issuance of a permit. Said permit may contain terms and conditions which may be prescribed by the department. In the case of a well permit, the department's conditions shall be based upon known hydrologic and geologic conditions. Such well construction conditions may include, but are not limited to, total depth of well, depth of well casing, well diameter, depth of pump intake setting, pump size and type, and actual location of the well on the property.

(e) *Notice of permit application rejection.* The department shall notify an applicant if the application for permit is not in compliance with this article. Such notice shall state the grounds for rejection. An application for a refund or partial refund may be made upon showing good cause.

(f) *Late permit fees.* Except for emergency authorization as provided in section 74-39(6), an additional fee equal to double the permit fee, not to exceed \$150.00, shall accompany any late permit application. In the event that a late permit fee is not paid within 30 days after notification,

future permits will not be issued until all fees are paid.

(g) *Instant authorization.* Permission to commence construction or modification of a well or the installation of a pump may be applied for by telephone, fax, or e-mail when emergency conditions exist which would justify such a request. The permitting authority may grant an emergency permit to prevent an imminent and substantial danger to the public health, safety, or welfare. Proper application for permit shall be submitted no later than five working days following instant authorization. The permitting authority will not issue routine permits absent prior review of a completed application.

(h) *Authority granted by permit.* A valid permit shall constitute approval to commence authorized work.

(1) A valid permit must be properly displayed at the job site prior to commencement of work.

(2) A permit is valid for a period of 180 days from date of issuance. The duration of a permit may be extended at the department's discretion for a reasonable period, not to exceed an additional 180 days.

(3) Any change to permit conditions require the issuance of a new permit.

(i) *Suspension or revocation of permit.* A permit may be suspended or revoked by the department if any well construction, repair, modification or abandonment or pump or irrigation system installation is found in violation of the permit, Florida law, Florida Administrative Code, this article, or any applicable municipal ordinance. The department may issue a stop work order under such conditions. Suspension or revocation may be based upon any of the following:

(1) Material misstatement or misrepresentation in the application for a permit;

(2) Failure to comply with the conditions set forth in the permit;

(3) Willful disregard or violation of this article or any rule or regulation promulgated by the council;

(4) Willfully aiding and abetting another person in the violation of this article or any rule or regulation promulgated by the council;

(5) Failure to pay the required permit fee;

(6) Construction or installation of a well, pump or irrigation system which would have a deleterious effect on the quality of ground water supplies in the county.

(Ord. No. 2002-23, § I, 12-12-02)

Sec. 74-40. Well construction methods and standards.

The following minimum standards shall apply to all construction, repair or abandonment of wells in the county, except in those areas exempted by the district:

(1) *Casing and liner pipe requirements:* All casing and liner pipes must comply with the requirements of Rules 40C-3 and 62-532, Florida Administrative Code, as amended, which are adopted herein by reference, and made a part hereof.

(2) *Well construction and operation requirements:*

a. The well construction method, grouting, sealing and location requirements of Rule 40C-3 Florida Administrative Code, as amended, are adopted herein by reference, and made a part hereof.

b. Well owners shall insure that each well is accessible for cleaning, treatment, repair, testing, inspection or other attention, as may be necessary.

- c. Each well shall be located in accordance with applicable state, county, or municipal law, ordinance, and rules and regulations.
- d. Well owners shall insure that wells are properly abandoned. Wells shall be plugged by a certified water well contractor in accordance with the methods set forth in Rule 40C-3 Florida Administrative Code, as amended.
- e. Each newly constructed or repaired well shall be thoroughly cleaned of foreign substances, developed, sanitized and disinfected prior to being placed into permanent service.
- f. Each newly constructed or repaired well shall be tested for yield prior to being placed into permanent service.
- g. Each well casing shall extend a minimum of 12 inches above any known flood level, but not less than 12 inches above established ground surface.
- h. Except for zero lot line lots, no well shall be constructed within five feet of the outside of a building foundation, nor within five feet of a property line. No drinking water well shall be constructed within 25 feet of a building foundation if the soil has been chemically treated for pests.
- i. Water sampling requirements of Chapter 64E-8, Florida Administrative Code, shall be observed. In addition, private water systems serving only one or two nonrental residences shall be analyzed for nitrates and chloride concentration. Final clearance of a well requires a microbiological analysis showing an absence of coliform bacteria. Samples must be collected and analyzed by a laboratory certified by the Florida Department of Health.
- j. Public drinking water supply wells shall be constructed to comply with Rule 62-555.300 Florida Administrative Code, as amended.
- k. Private water systems shall be constructed in compliance with Rule 64E-8, Florida Administrative Code, as amended.
- l. Limited use public drinking water systems, including limited use commercial public drinking water systems and limited use community public water systems shall be constructed in compliance with Rule 64E-8, Florida Administrative Code, as amended.
- m. A metallic tag shall be placed on the well head, concrete marker, terminal box, or a permanently attached fixture. The tag shall include, but not be limited to, the water well contractor license number, date of completion, and permit number issued by the department.

(3) *Grouting and sealing of wells:*

- a. The methods for grouting and sealing wells in Rule 40C-3, Florida Administrative Code, as amended, are adopted and incorporated into this article by reference.
- b. The provision for temporary and permanent well seals established in Rule 40C-3, Florida Administrative Code, as amended, are adopted and incorporated into this article by reference.

(4) *Well completion reports:* A completion report for each newly constructed, repaired or abandoned well, shall be submitted by the applicant, on department approved forms. The original signed report shall be submitted to the department within 30 days of completed well construction, repair, or abandonment. The fee for a late completion report shall be \$25.00.

(Ord. No. 2002-23, § I, 12-12-02)

Sec. 74-41. Pipe and pump installation requirements.

- (a) Pressure storage tanks shall be equipped with adequate means for regulating air volume and excess pressure relief.
- (b) Pump storage tanks shall be installed on a solid foundation and be readily accessible for repairs or priming. Cinder blocks resting on sand is not considered a solid foundation. Tank sizing will be in accordance with Florida Building Code, Plumbing 612.2, as amended. Pump sizing will be in accordance with Florida Building Code, Plumbing 612.1, as amended.
- (c) Single pipe ejector assemblies shall not be installed with plastic pipe.
- (d) All pumping equipment shall be installed in accordance with manufacturer's specifications.
- (e) A spring loaded check valve shall be mounted on the discharge side of the pump upstream from any outlet in order to prevent backflow into the well. Such valve shall not be used for the purpose of maintaining prime for the well. If a well is used for irrigation only, any backflow prevention device listed in section 74-42 may be used in lieu of such check valve, provided the device is located upstream from any outlet.
- (f) All piping shall conform to the requirements of Schedule 40 of the American Society of Testing and Materials (ASTM) or the American Petroleum Institute (API).
- (g) Two inch domestic wells requiring a deep well jet pump are prohibited unless proper flow rates as specified in Florida Building Code Plumbing, Section 612 are demonstrated.
- (h) Because of the proliferation of numerous large high capacity wells with resultant rapid drawdown of the Floridian aquifer during certain periods of time, the following additional requirement shall apply to all pumps installed for use in the Floridian aquifer in that part of the county, bounded on the east by State Road 11, and its intersection with U.S. 17 and U.S. 92, continuing south on U.S. 17-92 to its intersection with Beresford Avenue, DeLand, Florida, bounded on the south by Beresford Avenue and an imaginary line extending west from Beresford Avenue, DeLand, Florida, to the St. Johns River, bounded on the west by the St. Johns River and bounded on the north by the Volusia County line:
 - (1) No pump except a single pipe jet, double pipe jet, submersible or turbine shall be installed.
 - (2) The minimum depth of pump intake setting shall be 84 feet.
 - (3) A multi-stage pump is required for deep well jet systems.

(Ord. No. 2002-23, § I, 12-12-02)

Sec. 74-42. Irrigation system installation.

- (a) Except as otherwise provided in section 74-42(2), backflow into any water source shall be prevented as provided in Rule 62-555, Florida Administrative Code, as amended, which is adopted and incorporated into this article by reference.
- (b) Any irrigation system which is used for the application of chemicals shall be equipped with an antisiphon device constructed in accordance with the most current version of F. S. §§ 487.021 and 487.064, and Rule 5E-2.028, Florida Administrative Code, as amended.
- (c) All irrigation system underground piping shall have minimum soil cover of six inches.
- (d) Irrigation system piping and fittings shall be approved by National Sanitation Foundation for

potable water use when upstream of the backflow device.

(e) All low voltage wiring used for system controls shall be installed in accordance with the most recent edition of the National Electric Code.

(f) Irrigation system components shall be installed in accordance with manufacturer's specifications. Reuse irrigation and application facilities located on private properties, including residential properties, shall be color coded using Pantone Purple 522C and in accordance with Rule 62-610.469 Florida Administrative Code, as amended. Routine repairs covering less than twelve inches on residential systems may use any color pipe.

(g) Except for the backflow prevention requirements in section 74-42(a) and (b), irrigation systems installed for agricultural use are exempt from the provisions of this article.

(h) A rain sensor device, which will override the irrigation cycle of the sprinkler system when adequate rainfall has occurred, shall be installed on automatic sprinkler systems in compliance with F. S. § 373.62, as amended.

(i) Any backflow prevention device that is testable, shall be tested by a certified backflow technician upon installation, whenever the device is repaired and annually, when connected to municipal or investor-owned drinking water systems. Backflow prevention devices are required on irrigation systems connected to private wells when also used as a private drinking water source.

(Ord. No. 2002-23, § I, 12-12-02)

Sec. 74-43. Standards for injection wells used to introduce water into an aquifer and closed loop system.

(a) Wells constructed for the purpose of climate or thermal control shall also include the construction of an injection well. Provided, however, that discharge water may be used for irrigation purposes and water pump flow from the supply well shall be limited to three gallons per minute, per ton, of the climate or thermal control unit. Wells which have artesian flows, shall also be equipped with demand valves.

(b) All injection wells and closed loop systems shall be constructed by a licensed water well contractor and permitted, as provided by law.

(c) The injection well shall be located not less than 50 feet from any other well or septic tank system.

(d) Injection well capacity shall equal or exceed the design capacity of the supply well. The well owner or contractor is required to demonstrate that the injection well is of proper design capacity.

(e) Closed loop boreholes shall be sealed with grout or alternate materials approved by the district or the department.

(f) No toxic substances shall be introduced into closed loop installations.

(g) Climate or thermal control systems permitted after October 1, 1985, shall conform to conservation water restrictions imposed by the district, county, or municipality. When such restrictions are in effect, all discharge water shall be injected by way of an injection well.

(Ord. No. 2002-23, § I, 12-12-02)

Sec. 74-44. Additional well regulations on lands lying east of the intracoastal waterway and establishing buffer zones to protect certain portions of the county from saltwater

intrusion.

(a) Notwithstanding any other provision of this article to the contrary, well construction on all lands lying east of the intracoastal waterway shall be limited to the surficial aquifer only; and said construction for the purpose of irrigation or climate control (heating or air conditioning) only.

(b) The following additional well construction standards and water conservation practices shall also apply in the above-described area:

(1) Well casing shall be limited to two inches in diameter.

(2) Well pump horsepower shall be limited to one and one-half brake horsepower.

(c) That certain area of the county, as set forth in Table A and as shown on Map "A" attached herein, is designated as a buffer zone for the protection of the water resource area to the west of such buffer zone from saltwater intrusion. Notwithstanding anything to the contrary in this article, or actions of the St. Johns River Water Management District, no water well greater than four inches in diameter shall be constructed within the boundaries of such buffer zone.

(Ord. No. 2002-23, § I, 12-12-02)

Sec. 74-45. Inspections.

(a) Prior to, during, or after the construction, repair or abandonment of any well, or the installation of any pump or irrigation system, the department may cause to be made such periodic inspections as is deemed necessary to ensure conformity with applicable standards. Department officials may, at reasonable times, enter upon and shall be given access to, any premises for the purpose of such inspections.

(b) If prior, during, or after the construction, repair or abandonment of any well, or the installation of any pump or irrigation system, the department believes that work is in violation of any provisions of this article or any rule adopted hereunder, the department shall give the contractor or owner written notice of the alleged violation. Said notice shall contain the provisions of this article or rules, alleged to have been violated, and may order that necessary corrective action be taken within a specified period of time. If the reinspection fee is not paid within 30 days after notification, nonissuance of future permits will result until all fees are paid. In addition to the provisions of section 74-46, failure to perform corrective action after receipt of written notice, shall be grounds for revocation or suspension of the permit.

(c) All abandoned water wells identified by the department after inspection shall be plugged in accordance with section 74-40(2)(d) of this article.

(Ord. No. 2002-23, § I, 12-12-02)

Sec. 74-46. Violations and penalties.

(a) If the department finds that any of the provisions of this article are being violated, the person responsible for such violations shall be notified, in writing, indicating the nature of the violation and ordering any action necessary to correct it.

(b) Any person found in violation of any of the provisions of this article, shall be punishable as provided in Chapter 1, Section 1-7, Code of Ordinances, County of Volusia. Each day the violation continues shall be deemed a separate offense.

(Ord. No. 2002-23, § I, 12-12-02)

Sec. 74-47. Fees or charges.

Except for fees or charges otherwise established by this article, the county council shall set by resolution any other fees or charges which may be established in accordance with the provisions of the article.

(Ord. No. 2002-23, § I, 12-12-02)

Sec. 74-48. Appeals.

Any person aggrieved by the decision of the department may, within 30 days, appeal in writing to the health department director. Subsequent appeals may be made to the county council.

(Ord. No. 2002-23, § I, 12-12-02)