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SOUTH FLORIDA
WATER MANAGEMENT DISTRICT

DELEGATION AGREEMENT BETWEEN SOUTH FLORIDA WATER MANAGEMENT DISTRICT AND HIGHLANDS COUNTY HEALTH DEPARTMENT

SFWMD ORDER NO.: 2010-091-DAO-WC

The South Florida Water Management District ("DISTRICT") and the Highlands County Health Department ("HEALTH DEPARTMENT") enter into this Delegation Agreement on May 13, 2010 to accomplish the goals and purposes stated below.

Witnesseth:

I. PARTIES

1. The DISTRICT is a public corporation of the State of Florida existing by virtue of Laws of Florida, 1949, and operating pursuant to Chapter 373, Florida Statutes, and Title 40E, Florida Administrative Code (F.A.C.), as a multipurpose water management district with its principal office at P.O. Box 24680, 3301 Gun Club Road, West Palm Beach, Florida 33416-4680.

2. The HEALTH DEPARTMENT is a unit of the State of Florida Department of Health located at 7205 South George Boulevard, Sebring, Florida 33875-5847. The HEALTH DEPARTMENT is a person within the meaning of Section 373.019(12), Florida Statutes.

3. The lands within the boundaries of Highlands County are located within the boundaries of the DISTRICT and are subject to the rules, regulations, authority and orders of the DISTRICT, pursuant to Chapter 373, Florida Statutes.

II. AUTHORITY AND PURPOSE OF AGREEMENT

1. The DISTRICT, pursuant Chapter 373, Florida Statutes and the Rules duly adopted thereunder, has authority within its jurisdiction for the administration and enforcement of rules governing water wells.

2. The DISTRICT desires implementation of the water well regulation program contemplated in Part III of Chapter 373, Florida Statutes, and the Rules and Regulations duly adopted thereunder.

3. The DISTRICT has authority pursuant to Sections 373.308 and 373.309, Florida Statutes, to delegate to any political subdivision any of its authority under Part III of Chapter 373, Florida Statutes, by interagency agreement adopted pursuant to Section 373.046, Florida Statutes.

4. The DISTRICT recognizes that the HEALTH DEPARTMENT has the desire and the regulatory experience necessary to implement such water well regulatory program.

5. The purpose of this Agreement is to establish the permitting, compliance, and enforcement responsibility of the HEALTH DEPARTMENT associated with the delegation of the water well construction program for all water wells in Highlands County; to establish the responsibilities of the HEALTH DEPARTMENT regarding maintaining adequate levels of administrative, technical, and financial capabilities to implement and enforce the program; and, to establish responsibilities of the HEALTH DEPARTMENT for reporting to and maintaining communication with the DISTRICT.

In consideration of the benefits to each of the parties, the DISTRICT and the HEALTH DEPARTMENT agree as follows:

III. SCOPE OF DELEGATION

1. The DISTRICT hereby delegates to the HEALTH DEPARTMENT its authority to implement and administer the program for regulation of water well construction standards for all water wells in Highlands County.

2. The HEALTH DEPARTMENT shall review, evaluate and make final inspections and disposition of permit applications for the construction, repair and abandonment of all water wells in Highlands County, pursuant to:

a. Chapter 40E-3, F.A.C., which is attached as EXHIBIT 1;

b. The rules incorporated in Section 40E-3.3036, F.A.C., which are attached as EXHIBITS 2-6; and,

c. The August 27, 2004, Interagency Agreement between The Department of Environmental Regulation and the South Florida Water Management District, and the Department of Health regarding delegation of water wells in delineated areas which is attached as EXHIBIT 7. Official maps of areas delineated pursuant to Section 62-524.430, F.A.C., are available from the Department of Environmental Regulation.

3. The HEALTH DEPARTMENT shall use application and permit forms including completion report forms approved for use by the DISTRICT. An application form and a completion report form approved for use by the DISTRICT are attached as EXHIBIT 8.

4. The DISTRICT will continue to review, evaluate, and make final disposition as to the rules, regulations, authority, and orders of DISTRICT pertaining to the consumptive use of water pursuant to Part II of Chapter 373, Florida Statutes.

5. The HEALTH DEPARTMENT will withhold issuance of any Well Construction Permit, if the withdrawal from the proposed well will require a Consumptive Use Permit until the Consumptive Use permit application has been approved by the DISTRICT, unless the project is exempt from permitting requirements pursuant to 40E-2.051, F.A.C., or the DISTRICT has otherwise concurred in the issuance of the Well Construction Permit.

6. The HEALTH DEPARTMENT will perform the appropriate monitoring and enforcement activities to ensure compliance with the provisions of its well construction permits. This provision does not preclude the DISTRICT from conducting enforcement activities concerning well construction in Highlands County. However, to the extent practical, the DISTRICT will not initiate enforcement action within Highlands County without prior communication or coordination with the local program.

7. The DISTRICT will forego implementation of the water well construction permitting program for wells within the Highlands County.

8. Upon the effective date of this Agreement, the HEALTH DEPARTMENT shall ensure that Highlands County adopts or amends any ordinance, as necessary to implement the provisions of this Agreement. The DISTRICT may adopt a rule amendment implementing the provisions of this Agreement.

IV. REPORTING RESPONSIBILITIES

1. The HEALTH DEPARTMENT will provide to the DISTRICT, on a quarterly basis, a list (hard copy and computer disk) summarizing each well construction permit issued and all well completion reports received during the three previous months. The summary shall include, at a minimum, well construction permit number, date issued, permit type (construct/repair/abandon), permittee name and address section/township/range, contractor name and license number, Water Use Permit number, type of use, total depth, and casing diameter and depth. The DISTRICT will work with the HEALTH DEPARTMENT to develop a mutually acceptable reporting format.

2. The Project Manager for the DISTRICT is Ann Marie Superchi and all correspondence and communications from the HEALTH DEPARTMENT shall be directed to her. The Project Manager shall be responsible for overall coordination and oversight relating to the performance of this Agreement.

3. All reports and correspondence required under this agreement shall be sent to:

South Florida Water Management District
Water Use Division
Attn: Ann Marie Superchi, Science Technician 3
P.O. Box 24680
West Palm Beach, Florida 33416-4680

V. PROGRAM MANAGEMENT

1. The HEALTH DEPARTMENT shall hire and maintain a staff capable of performing the duties specified in this Agreement. The HEALTH DEPARTMENT shall maintain adequate program funding, staffing, and equipment to comply with all statutes, rules and policies pertaining to the delegated water well construction program. Permits shall be required for all wells unless expressly exempt by statute or rule.

2. The HEALTH DEPARTMENT shall assess and retain permit fees for the delegated water well program. Nothing in this Agreement shall preclude the HEALTH DEPARTMENT from assessing administrative fees if it deems it necessary to support review and compliance functions under this Agreement.

3. In the event administrative or judicial legal proceedings become necessary for proper implementation of the program or are initiated by an applicant or permittee, the District shall assume the responsibility for such proceedings or, in the alternative, may at the request of the HEALTH DEPARTMENT, provide the expertise and financial resources necessary to resolve such proceedings. In the event the District assumes the responsibility for such proceedings, the HEALTH DEPARTMENT shall cooperate with the District and provide any and all requested assistance, including but not limited to testimony.

VI. PROGRAM OVERSIGHT

1. In order to promote consistency, the DISTRICT may review, upon reasonable notice to the HEALTH DEPARTMENT, any pending water well application or issued permits which the HEALTH DEPARTMENT is reviewing or has processed pursuant to this Agreement. The DISTRICT may also randomly inspect project sites for which an application is being processed by the HEALTH DEPARTMENT or which the HEALTH DEPARTMENT has issued a permit, in cooperation with the HEALTH DEPARTMENT and the applicant.

2. The primary purpose of this program review is to determine if permit applications, monitoring programs, compliance efforts, and enforcement actions are being managed in accordance with applicable rules and statutes, and that appropriate files are being maintained for all delegated responsibilities assumed by the HEALTH DEPARTMENT.

VII. GENERAL PROVISIONS

1. The HEALTH DEPARTMENT is an independent contractor and is not an employee or agent of the DISTRICT. Nothing in this Agreement shall be interpreted to establish any relationship other than that of an independent contractor, between the DISTRICT and the HEALTH DEPARTMENT, its employees, agents, subcontractors, or assigns, during or after the performance of this Agreement.

2. The DISTRICT assumes any and all risks of personal injury, bodily injury and property damage attributable to the negligent acts or omissions of the DISTRICT and the officers, employees, servants and agents thereof. The DISTRICT warrants and represents that it is self-funded for liability insurance, with such protection being applicable to the officers, employees, servants, and agents while acting within the scope of their employment with the DISTRICT. The HEALTH DEPARTMENT and the DISTRICT further agree that nothing contained herein shall be construed or interpreted as (1) denying to either party any remedy or defense available to such party under the laws of the State of Florida; (2) the consent of the State of Florida or its agents or agencies to be sued; and, (3) a waiver of sovereign immunity of the State of Florida beyond the waiver provided in Section 768.28, Florida Statutes.

3. If either party initiates legal action including appeals, to enforce this Agreement, the prevailing party shall be entitled to recover reasonable attorney's fees, based upon the fair market value of the services provided.

4. The HEALTH DEPARTMENT shall allow public access to all project documents and materials in accordance with the provisions of Chapter 119, Florida Statutes.

5. Either party may terminate this Agreement at any time upon 120 days prior written notice to the other party. Within thirty days of a notice of intent to terminate this Agreement, both parties shall make good faith efforts to resolve any basis for the termination. If after sixty days, one or both of the parties to this Agreement still wish to terminate the Agreement, the HEALTH DEPARTMENT shall not accept any further applications under this Agreement. Except as otherwise agreed to by the parties, the HEALTH DEPARTMENT shall complete processing any pending application submitted to the HEALTH DEPARTMENT in accordance with this Agreement.

6. The terms of this Agreement may be extended, renewed, amended, or modified only by mutual consent of both parties and until reduced to writing.

7. If any part of this Agreement is judicially, administratively or otherwise determined to be invalid or unenforceable, the other provisions of this Agreement shall remain in full force and effect, provided that both parties agree that the material purposes of this Agreement can be determined and effectuated.

8. Failures or waivers to enforce any condition or provision of this Agreement by the parties, their successors and assigns shall not operate as a discharge of, or invalidate, such condition or provision, or impair the enforcement rights of the parties, their successors and assigns.

9. This agreement states the entire understanding between the parties and supersedes any written or oral representations, statements, negotiations, agreements, rules, memorandums, letters, or ordinances to the contrary. The HEALTH DEPARTMENT recognizes that any representations, statements or negotiations made by the DISTRICT do not suffice to legally bind the DISTRICT in a contractual relationship unless they have been reduced to writing, authorized and signed by an authorized DISTRICT representative. This Agreement shall bind the parties, their assigns and successors in interest.

10. On August 2, 2010, the HEALTH DEPARTMENT shall begin implementation of this Delegation Agreement.

11. This Agreement shall become effective when it is fully executed by both parties. The parties or their duly authorized representatives hereby execute this Agreement.

The parties or their duly authorized representatives hereby execute this Delegation Agreement.

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
By its Governing Board

By: _____
Chairman

Attested:

By: Cathy Widnes
District Clerk/Asst. Secretary
Dated: 5/13/10, 2010

Legal Form Approved:

By: _____
Jennifer Bokankowitz, Esq.

HIGHLANDS COUNTY HEALTH DEPARTMENT

By: _____
Administrator

Exhibit 1- Chapter 40E-3, F.A.C.
Exhibit 2- Chapter 62-531, F.A.C., Well Contractor Licensing Requirements
Exhibit 3- The Department's Water Well Contractor Disciplinary Guidelines and Procedures Manual (October 2002) and the Department's Florida Unified Citation Dictionary for Well Construction (October 2002)
Exhibit 4- Chapter 62-532, F.A.C., Water Well Permitting and Construction Requirements
Exhibit 5- Chapter 62-555, F.A.C., Construction of Public Supply Water Wells
Exhibit 6- Chapter 62-524, F.A.C., Construction of Water Wells in Delineated Areas
Exhibit 7- Interagency Agreement between The Department of Environmental Regulation and the South Florida Water Management District, and the Department of Health
Exhibit 8- Application form and Completion Report form

Rules of the
South Florida Water Management District

WATER WELLS

Chapter 40E-3, F.A.C.

Amended March 16, 2005

EXHIBIT 1

WATER WELLS

40E-3.010 Review of Water Well Permit Applications.
40E-3.011 Policy and Purpose.
40E-3.021 Definitions.
40E-3.031 Implementation. (Repealed)
40E-3.032 Delegation.
40E-3.035 Agreements.
40E-3.036 Rules and Publications Incorporated by Reference.
40E-3.037 Water Well Contractor Licensing. (Repealed)
40E-3.038 Violations of Contractor Licensing and Well Construction Requirements.
40E-3.039 Penalties. (Repealed)
40E-3.0391 Enforcement. (Repealed)

PART I REGULATION OF WELLS
40E-3.040 Scope of Part I.
40E-3.041 Permits Required.
40E-3.051 Exemptions.
40E-3.0511 Exceptions and Variances for Well Construction Permits.
40E-3.101 Content of Application.
40E-3.201 Permit Application Fees. (Repealed)
40E-3.301 Conditions for Issuance of Permits.
40E-3.321 Duration of Permits.
40E-3.341 Suspension and Revocation.
40E-3.411 Well Completion Reports.
40E-3.451 Emergency Authorization.
40E-3.461 Inspection.

PART II CONSTRUCTION, REPAIR AND ABANDONMENT STANDARDS
40E-3.500 Scope of Part II.
40E-3.502 Construction Methods.
40E-3.504 Location.
40E-3.507 Casing and Liner Pipe Standards.
40E-3.512 Well Construction Requirements.
40E-3.517 Grouting and Sealing.
40E-3.521 Well Seals.
40E-3.525 Explosives.
40E-3.529 Flowing Wells.
40E-3.531 Abandoned Well Plugging.

PART III DRILLER REGISTRATION STANDARDS
40E-3.700 Scope of Part III. (Repealed)
40E-3.721 Driller Registration. (Repealed)

40E-3.725 Responsibility of Contractor. (Repealed)
40E-3.727 Type of Registration. (Repealed)
40E-3.733 Exemptions. (Repealed)
40E-3.752 Refusal, Suspension, or Revocation of Registration. (Repealed)
40E-3.763 Examinations. (Repealed)

PART IV SPECIFIC GEOGRAPHIC THRESHOLDS
40E-3.800 General Permit for Wells. (Repealed)
40E-3.810 General Permit for Construction, Repair or Abandonment of Wells. (Repealed)
40E-3.815 Notice of Intent. (Repealed)
40E-3.820 Request for Additional Information. (Repealed)
40E-3.825 Thresholds for South Dade County. (Repealed)

40E-3.010 Review of Water Well Permit Applications. Water Well permit applications are processed pursuant to the provisions of Section 120.60, F.S., Part VI of Chapter 40E-1, F.A.C., and Chapter 28-107, F.A.C.
Specific Authority 120.54(5), 120.60 FS. Law Implemented 120.54(5), 120.60 FS. History — New 7-2-98.

40E-3.011 Policy and Purpose.

(1) The purpose of Chapter 40E-3, F.A.C., is to implement the duties and responsibilities of the South Florida Water Management District (District) under Part III, Chapter 373, F.S., and those responsibilities and duties delegated to the District by the Department of Environmental Protection (Department) to regulate the location, construction, repair, or abandonment of water wells and the licensing of water well contractors. It is the policy of the Governing Board that these rules are reasonably necessary to insure the protection and management of water resources and the health, safety, and general welfare of the people of this District.

(2) Additional District rules relating to water wells are found in Chapters 40E-5, F.A.C. (Artificial Recharge), 40E-2, F.A.C. (Consumptive Use), and 40E-30, F.A.C. (General Permits for Wells).
Specific Authority 373.044, 373.113, 373.171, F.S. Law Implemented 373.103(1), 373.306, 373.308, 373.309, 373.313, 373.314, 373.316, 373.319, 373.323(2), 373.326, 373.329, 373.333, 373.342, F.S. History – New 1-1-85, Amended 12-19-89, 3-16-05.

40E-3.021 Definitions. When used in this chapter:

(1) "Abandoned Well" means a well, the use of which has been permanently discontinued. Any well which is in such a state of disrepair that its continued use for the purpose of obtaining groundwater, or disposing of water or liquid wastes, or for observation, is impractical, shall be deemed to be abandoned.

(2) "Annulus or Annular Space" means any artificially created void existing between a well casing or liner pipe and a borehole wall, or between two casings, or between tubing and the casing for liner pipes.

(3) "Aquifer" means a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield useful quantities of groundwater to wells, springs, or surface water.

(4) Bentonite Grout" means a pumpable grouting material, consisting of high solid sodium montmorillonite, used for plugging or sealing water wells.

(5) "Casing Diameter" or "Diameter of Casing" means the largest nominal permanent water bearing casing. For the purpose of this chapter, the diameter of the casing at the upper terminus will be presumed to be the diameter for the entire length, unless the well owner or contractor can demonstrate that the well has a smaller diameter permanent water bearing casing below the upper terminus.

(6) "Consolidated" means a geologic stratum, which is cemented with a binding substance commonly derived from within the deposit containing that stratum.

(7) "Consumptive Use Permit" means a Water Use Permit issued under Chapter 40E-2 or 40E-20, F.A.C.

(8) "Department" means the Florida Department of Environmental Protection (FDEP).

(9) "Dewatering" means the use of wells or other such equipment to temporarily lower a water level as may be necessary during construction activities.

(10) "Driller" means a person licensed by the water management district or a person working under the direct supervision of a licensed water well contractor who actually constructs the well.

(11) "Driven Casing" means well casing installed by the percussion drilling method, in which the well casing is advanced into a borehole that is less than the nominal outside diameter of the casing.

(12) "Drive Shoe" means any device specifically designed, fabricated, and installed to protect the bottom end of a water well casing or liner pipe from collapse or other damage while the casing or liner pipe is being driven into place in a water well.

(13) "Field Log" means a log with accurate, written documentation of all construction activities needed to fill out well completion reports.

(14) "Filter Pack" means sand or gravel that is uniform, clean, and siliceous. It is placed in the annulus of the well between the borehole wall and the well screen.

(15) "Grout" or "Neat Cement Grout" means a mixture consisting of water and Portland cement (American Concrete Institute Types I, II, or III, or other types of cement and acceptable amounts of those additives approved for use in cement grouts by the District), also Bentonite grout as defined by subsection 62-532.200(4), F.A.C.

(16) "Inspection Port" means any opening not less than three-quarters (3/4) inch in diameter through which unobstructed access to the inside of the casing can be obtained for measuring water levels. Inspection ports shall be threaded openings temporarily sealed with a removable watertight plug.

(17) "Jetted Well" or "Sand Point Well" means a pipe with an attached well point or open-ended screen. The well is installed in unconsolidated formations by the washing action of a water jet.

(18) "Liner" means a metallic or nonmetallic pipe, which is installed within the permanent water bearing casing to improve, repair, or protect the casing or is installed below and separate from the casing to seal off caving material which may be encountered in the open hole of the well.

(19) "Monitoring Well" or "Observation Well" means a well used primarily to monitor hydrologic parameters such as water levels or water quality.

(20) "Nominal" means the standard size of the well casing and may be less than or greater than the number indicated. Nominal, when referring to the grouting annulus, means either the available void thickness between the telescoped casings or the average available void thickness between the borehole and the outside wall of the casing at any point.

(21) "Packer" means a device placed within a well casing that seals the annulus between two pieces of casing, between the casing and the screen, between one formation or water bearing strata and another, or between the formation and the casing.

(22) "Public Water Supply Well" means a well constructed for the purpose of supplying water to a public water system, as permitted under Chapters 62-550, 62-555, 62-560, 62-524, and 64E-8, F.A.C.

(23) "Public Water System" means a system for the provision to the public of piped water for human consumption through pipes or other constructed conveyances, if such a system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

(24) "Telescoped casing" means an interior well casing extending below an exterior casing.

(25) "Test Hole" means any temporarily cased or uncased hole drilled, bored, cored, washed, or jetted, for the intended use of obtaining data for engineering, geophysical or geological exploration, and/or prospecting for minerals or products of mining or quarrying, and not for the purposes of either producing, disposing of, or searching for water.

(26) "Upper Terminus" means that portion of a well casing ending at land surface or within an approved depth below land surface. Land surface is considered to be the ground elevation of the finished grade at the well.

(27) "Water Test Well" means a temporary water well for the purpose of obtaining data to determine aquifer properties or water quality. Water test wells are typically drilled prior to applying for a water use permit. Water test wells must either be abandoned or converted to a water well or monitoring well within 30 days of completion of testing.

(28) "Water Use Permit" means a permit issued under Chapter 40E-2 or 40E-20, F.A.C.

(29) "Water Well" means a well as defined in subsection 373.303(7), F.S., which includes any excavation that is drilled, cored, bored, washed, driven, dug, jetted, or otherwise constructed when the intended use of such excavation is for the location, acquisition, development or artificial recharge of ground water. This term does not include any well constructed for the purpose of obtaining or prospecting for oil, natural gas, or products of mining or quarrying, for disposing of oil brine or re-pressuring oil bearing or natural gas-bearing formations, for storing petroleum, natural gas or other products, or for temporary dewatering of subsurface formations for mining, quarrying or construction purposes.

(30) "Water Well Contractor" means an individual who is responsible for the location, construction, repair, or abandonment of a water well and who is licensed under Chapter 62-531, F.A.C., to engage in the business of construction, repair, or abandonment of water wells.

(31) "Well Casing" means a metallic or nonmetallic pipe installed in a borehole or driven to prevent caving, provide structural strength, seal off zones of poor water quality, or prevent the interchange of waters between aquifers.

(32) "Well Completion Report" means the form, supplied or approved by the District, that is completed and signed by the licensed water well contractor.
Specific Authority 373.044, 373.113, 373.171, F.S. Law Implemented 373.019, 373.106, 373.303, 373.306, F.S. History – New 1-1-85, Amended 12-19-89, 3-16-05.

40E-3.031 Implementation.
Specific Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.103(1), 373.306, 373.308, 373.309, 373.313, 373.314, 373.316, 373.319, 373.323(2), 373.326, 373.329, 373.333, 373.342 FS. History — New 10-1-84, Repealed 3-16-05.

40E-3.032 Delegation. The authority for general administration of Chapter 40E-3, F.A.C., is delegated to the Executive Director of the District. It is the policy of the Governing Board that in making this delegation the Executive Director is authorized to designate specific staff members to carry out various tasks but that overall supervision and responsibility shall rest with the Executive Director. The Executive Director is expressly authorized to issue permits under this chapter as provided in subsection 373.342(1), F.S.
Specific Authority 373.044, 373.113, 373.171, F.S. Law Implemented 373.308, 373.309(2), 373.339, 373.342, F.S. History – New 1-1-85, Amended 3-16-05.

40E-3.035 Agreements. The Governing Board hereby incorporates by reference the following documents:

(1) "Agreement between Lee County and South Florida Water Management District," dated January 9, 1985.

(2) "Agreement between Dade County and South Florida Water Management District," dated January 31, 1985.

(3) "Agreement between Collier County and South Florida Water Management District," dated February 5, 1985.

(4) "Agreement between the City of Cape Coral and South Florida Water Management District," dated October 10, 1986.

(5) "Agreement between the Martin County Health Department and South Florida Water Management District," dated June 12, 1998.

(6) "Agreement between the Osceola County Health Department and South Florida Water Management District," dated February 11, 1999.

(7) "Agreement between the St. Lucie County Health Department and South Florida Water Management District," dated April 13, 2000.

(8) "Agreement between the Hendry County Health Department and South Florida Water Management District," dated September 14, 2000.

(9) "Agreement between the Okeechobee County Health Department and South Florida Water Management District," dated April 11, 2002.
Specific Authority 373.044, 373.113, 373.171, F.S. Law Implemented 373.103, 373.308, 373.309, 373.323, 373.324, 373.326, 373.329, 373.333, F.S. History – New 3-16-05.

40E-3.036 Rules and Publications Incorporated by Reference. The following Department rules and publications are incorporated by reference into this rule and shall apply to the well contractor licensing program administered by the District and to all wells constructed, repaired, or abandoned in the District.

(1) Chapter 62-531, F.A.C., Well Contractor Licensing Requirements (12-25-02).

(2) The Department's Water Well Contractor Disciplinary Guidelines and Procedures Manual (October 2002) and the Department's Florida Unified Citation Dictionary for Well Construction (October 2002).

(3) Chapter 62-532, F.A.C., Water Well Permitting and Construction Requirements (3-28-03).

(4) Chapter 62-555, F.A.C., Construction of Public Supply Water Wells (4-10-03).

(5) Chapter 62-524, F.A.C., Construction of Water Wells in Delineated Areas (6-27-00).

Specific Authority 373.044, 373.113, 373.171, F.S. Law Implemented 373.103, 373.308, 373.309, 373.323, 373.324, 373.326, 373.329, 373.333, F.S. History – New 3-16-05.

40E-3.037 Water Well Contractor Licensing.

Specific Authority 373.044, 373.113, 373.171, 373.333 FS. Law Implemented 373.103, 373.308, 373.309, 373.323, 373.324, 373.326, 373.329, 373.333 FS. History — New 10-1-84, Amended 12-19-89, Repealed 3-16-05.

40E-3.038 Violations of Contractor Licensing and Well Construction Requirements.

(1) Violations of the contractor licensing requirements and well construction requirements are provided by Chapter 373, Fla. Stat., and Chapter 62-531, F.A.C.

(2) The licensed contractor must submit any change of address to the District within 30 days.

Specific Authority 373.044, 373.113, 373.171, 373.333, F.S. Law Implemented 373.323, 373.326, 373.333, 373.336, F.S. History – New 12-19-89, Amended 3-16-05.

40E-3.039 Penalties.

Specific Authority 373.044, 373.113, 373.171, 373.333, FS. Law Implemented 373.129, 373.308, 373.309, 373.333, 373.336 FS. History — New 1-1-85, Repealed 3-16-05.

40E-3.0391 Enforcement.

Specific Authority 373.044, 373.333, 373.119, 373.136, 373.171 FS. Law Implemented 373.119, 373.129, 373.306, 373.333, 373.336 FS. History — New 12-19-89, Repealed 3-16-05.

PART I REGULATION OF WELLS

40E-3.040 Scope of Part I. The rules in this part relate to the permitting requirements applicable to the construction, repair or abandonment of wells. Unless expressly exempt by statute or this rule, all wells must be permitted prior to construction, repair or abandonment and must be constructed, repaired or abandoned by a licensed water well contractor. This exemption does not relieve the applicant from obtaining permits which may be required under Chapter 40E-2 (Consumptive Use), Chapter 40E-4 (Surface Water Management), Chapter 40E-20 (General Water Use Permits) or Chapter 40E-40 (General Surface Water Management Permits).

Specific Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.303, 373.308, 373.309, 373.316, 373.326, 373.342 FS. History — New 1-1-85.

40E-3.041 Permits Required.

(1) Unless expressly exempted by statute or District rule, a permit must be obtained from the District or delegated agency prior to the construction, repair or abandonment of any water well within the District's jurisdiction.

(2) No test hole or water test well shall be converted to a water well until a well construction permit or modification is obtained. No monitoring well shall be converted to a production well until a well construction permit or modification thereof is obtained for each production well.

(3) If a potable well is proposed to be constructed in an area of known groundwater contamination, the well shall be permitted pursuant to Chapter 62-524, F.A.C.

(4) Permits for construction, repair, modification or abandonment of wells for which a water use permit is required under Chapters 40E-2 and 40E-20, F.A.C., shall not be issued prior to issuance of the water use permit authorizing water use withdrawals.

Specific Authority 373.044, 373.113, 373.171, F.S. Law Implemented 373.103, 373.309, 373.313, 373.316, F.S. History – New 1-1-85, Amended 3-16-05.

40E-3.051 Exemptions.

(1) The following wells are exempt from Rule 40E-3.041, F.A.C.:

(a) Existing wells exempted under section 373.316, Fla. Stat.

(b) A well exempted under subsection 373.303(7), Fla. Stat.

(c) A test hole, as defined in subsection 40E-3.021(27), F.A.C.

(d) A well intended for use as an injection well, which has received a permit under Chapter 62-528, F.A.C. Such wells are exempt from the construction standards in this chapter, provided the applicable standards of Chapter 62-528, F.A.C., are met.

(e) In addition, a well which satisfies the requirements of Chapter 40E-30, F.A.C., is exempt from the provisions of Rules 40E-3.301, 40E-3.321, 40E-3.411, 40E-3.501, 40E-3.512, and 40E-3.351, F.A.C.

(2) These exemptions do not relieve the applicant from obtaining permits which may be required under Chapter 40E-2 (Consumptive Use), Chapter 40E-4 (Environmental Resource Permits), Chapter 40E-20 (General Water Use Permits) or Chapter 40E-40 (Environmental Resource Standard General Permits).

Specific Authority 373.044, 373.113, 373.171, F.S. Law Implemented 373.303, 373.308, 373.309, 373.313, 373.316, 373.326, F.S. History – New 1-1-85, Amended 3-16-05.

40E-3.0511 Exceptions and Variances.

(1) The board finds that compliance with all the requirements of Part I of this Rule Chapter may result in an undue hardship for the construction, repair or abandonment of certain wells.

(2) Any affected person may request an exemption from any or all of these rules or an individual well by making written request which must include those specific requirements for which an exemption is requested, any alternate or substitute methods or conditions considered appropriate, and reasons why the exemption is considered necessary.

(3) The District shall grant the exemption by way of a variance if the proposal is in accordance with accepted public health and sanitary engineering principles and practices and will not adversely affect the water resource. The variance shall be the minimum necessary to ameliorate the hardship.

(4) If the request is for a variance from the requirement of obtaining a water use permit, the applicant must demonstrate that an application has been filed and a

compelling necessity exists to commence the construction, repair or modification of a well while an application for a water use permit is pending. Issuance of the variance will not be evidence of any entitlement to the water use permit.

(5) Upon issuance of a variance the District may impose such special conditions as may be necessary to protect the intent and purpose of Part III, Chapter 373, Florida Statutes and this chapter.

(6) The variance under this rule is provided in addition to the variance and waiver procedures set forth in Rule 28-104, F.A.C., which implements Section 120.542, F.S.

Specific Authority 120.54(5), 373.044, 373.113, 373.171 FS. Law Implemented 120.54(5), 373.303, 373.308, 373.309, 373.313, 373.316, 373.326 FS. History — New 1-1-85, Amended 12-19-89, 7-2-98, 9-2-98, 6/12/00.

40E-3.101 Content of Application.

(1) All applications shall be submitted to the permitting authority by the owner or by the water well contractor on behalf of the owner. All applications shall be submitted on the form entitled "State of Florida Permit Application to Construct, Repair, Modify, or Abandon a Well".

(2) All applications shall be submitted with the required non-refundable fee pursuant to Rule 40E-1.607, F.A.C. or the fee schedule established by the agency to which permitting authority has been delegated shall be submitted with the permit application.

(3) Applications for permits required by this chapter shall be filed with the District or the entity to which the authority to issue a permit has been delegated. The application for the construction, repair or abandonment of water wells shall contain:

(a) The name, address, telephone number, license number and signature of the licensed contractor who will be constructing the well, except in the case of a state agency or political subdivision that needs an indication of approval from the District in order to obtain financing to construct a well. In this case, the District will take action on the application for a permit not signed by a licensed water well contractor with the following condition: "Prior to well construction, a copy of the original application, signed by the licensed water well contractor chosen to construct the well, will be submitted to the District,"

(b) The name, address, telephone number and signature of the property owner or his agent, if applicable, on whose property the well is being drilled,

(c) Written authorization from the owner designating the authorized agent, if any,

(d) The location of the well (to the nearest one-quarter-quarter section, or latitude and longitude to the nearest second, or Florida State Planar Coordinates to the nearest one hundred feet), and property site map of the well location, depicting land marks and providing a scale,

(e) The expected cased depth and total depth of the well,

(f) The proposed use of the well,

(g) The proposed grouting interval,

(h) The specification for well construction including the size(s) of the casing to be used, the proposed construction, repair or abandonment methods, specifications including casing types, casing diameters; open hole or screened intervals, sizes and screen openings; and proposed grouting materials,

(i) The proposed method of construction and completion of the well, or the method of plugging and abandoning of the well,

(j) The anticipated starting date to begin drilling,

(k) The District water use permit number, the water use application number, and the well number from the water use permit Table A, if applicable,

(l) A well completion report and/or lithologic or cuttings log for any test hole or water test well and testing results, which is being requested to be converted to a water well,

(m) Applications for public supply wells shall include: the name and address of the water system; the number of persons the well is intended to serve; and three copies of a scaled map showing the well location, property boundaries, existing buildings or physical features, the location of all known and proposed sources of contamination within a 500 feet radius of the proposed well location,

(n) Applications for water test wells must be accompanied by a description of the proposed test. The description at a minimum shall include:

1. Purpose of the test, a brief description of the testing method, and a summary of the results to be provided to the District within 30 days of completion of the testing.

2. Name, address, and telephone number of the person or consulting firm performing the test.

3. A site map showing the location of the water test well and any observation wells.

(4) In addition to the information required to be submitted on the District form, the District staff may specifically request such reasonable additional information as may be necessary to evaluate the hydrologic impacts of the withdrawal to ensure that the impacts will not be harmful to the water resource of the District as set forth in Chapter 40E-2, F.A.C., and that the withdrawals are in compliance with statutory and rule requirements. Pursuant to section 373.314, Fla. Stat., the District will cite a specific rule when requesting such additional information. Such requests for additional information will be made in compliance with section 120.60, Fla. Stat. and Chapter 40E-1, F.A.C.

Specific Authority 373.044, 373.113, 373.171, F.S. Law Implemented 373.308, 373.309, 373.313, 373.326, 373.342, F.S. History – New 1-1-85, Amended 12-19-89, 11-8-99, 3-16-05.

40E-3.201 Permit Application Fees.

Specific Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.109, 373.308, 373.309, 373.313 FS. History — New 1-1-85, Repealed 11-8-99.

40E-3.301 Conditions for Issuance of Permits.

(1) The applicant shall comply with the applicable provisions of Chapter 373, Fla. Stat. and this chapter.

(2) A water use permit, if applicable, under Chapters 40E-2 or 40E-20, F.A.C., must have already been obtained. If a water use permit has not been obtained, an application for a consumptive use permit must be submitted concurrently with the well construction application and must also be approved by the District prior to issuance of the well construction permit.

(3) The proposed well must not harm the water resources of the District or interfere with existing legal users.

(4) The application must be complete and must meet the requirements of Chapter 373, Fla. Stat., and this chapter.

(5) The District or delegated agency shall impose on any permit issued under this chapter such reasonable conditions as are necessary to protect the water resource and to assure that the permitted activity will be consistent with the overall objectives of the

District. The District or delegated agency shall attach such conditions to the well construction, repair, or abandonment permit and the conditions shall be performed accordingly.
Specific Authority 373.044, 373.113, 373.171, F.S. Law Implemented 373.103, 373.306, 373.308, 373.309, 373.313, 373.342, F.S. History – New 1-1-85, Amended 3-16-05.

40E-3.321 Duration of Permits.

(1) Each permit shall be valid for a period of six (6) months, unless the time limit is extended by the District or delegated agency.

(2) Construction, repair or abandonment of a well shall not commence or continue after the expiration of a permit.

(3) Extensions of an existing permit shall be granted by the District or delegated agency upon written request if:

(a) Submitted by the permittee prior to the expiration date of the permit, and

(b) The permittee shows circumstances and conditions have not changed substantially since the permit issuance so that the proposed well will not harm the water resource.

(4) A well construction permit may be transferred from one licensed water well contractor to another if the owner or his agent agree to the transfer prior to permit expiration.
Specific Authority 373.044, 373.113, 373.171, F.S. Law Implemented 373.308, 373.309, 373.313, 373.326, 373.342, F.S. History – New 1-1-85, Amended 3-16-05.

40E-3.341 Suspension and Revocation. The District or delegated agency may suspend or revoke a permit to construct, repair or abandon a well by written notice to the permittee under any of the following circumstances:

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

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

(3) Disregard or violation of any provisions of this chapter or Part III of Chapter 373, F.S.;

(4) Unforeseen circumstances which may create a danger to the water resources or the public health, safety or welfare if the well is constructed as permitted; or

(5) Material change of circumstances or conditions from those existing at the time such permit was issued.
Specific Authority 373.044, 373.113, 373.171, F.S. Law Implemented 373.103, 373.306, 373.308, 373.309, 373.313, 373.342, F.S. History – New 1-1-85, Amended 3-16-05.

40E-3.411 Well Completion Reports.

(1) The water well contractor shall submit a fully completed well completion report (Form 0124) to the District and delegated agency for the construction, repair or abandonment of all wells, regardless of whether a permit is required under Rule 40E-3.101, F.A.C. Well completion reports shall be filed with the District and delegated agency within 30 days of the completion of the work.

(a) Well completion reports for sites controlled by Chapter 62-761, F.A.C., Underground Storage Tank Systems, may include all monitoring wells for the same site on a single form.

(b) Computer generated completion reports developed by the contractor may be used in place of District supplied forms.

(2) The water well contractor shall keep or cause to be kept by a person in his employ an accurate field log of all well construction, repair or abandonment activities performed under each permit. Such logs shall be available for inspection at the site during all times when work is in progress.

(3) If no work is performed or if the well is not completed, a report shall be filed within thirty days of the expiration of the permit stating that no well construction was performed under the permit or outlining the status of the incomplete well.

(4) For water test wells, a report on the test results shall be submitted to the District within 30 days of completion of the testing. The report shall also include a request and a proposed schedule to either abandon the water test well or convert the water test well to a production well or monitoring well.

Specific Authority 373.044, 373.113, 373.171, F.S. Law Implemented 373.308, 373.309, 373.313, 373.326, 373.342, F.S. History – New 1-1-85, Amended 3-16-05.

40E-3.451 Emergency Authorization.

(1) Emergency water well construction permits may be issued by the Executive Director or their designee when one of the following conditions exist which justifies the issuance:

(a) An existing well supplying a particular use has failed and must be immediately replaced;

(b) The health, safety, or general welfare of the people affected by said emergency would be jeopardized without such authorization;

(c) Emergency authorization is needed to immediately mitigate or resolve potentially hazardous degradation of water resources; or

(d) A serious set of unforeseen circumstances occurs which creates the emergency.

(2) Emergency permits may be applied for and issued orally. Mere carelessness or lack of planning on the part of the applicant, contractor or driller will not constitute sufficient cause for the issuance of an emergency permit. If Chapters 40E-2 or 40E-20, F.A.C., also applies to the well, an emergency permit may be issued only if, in addition to qualifying under (1) above, an application for a consumptive use permit has been filed with the District. Issuance of an emergency permit will not be evidence of any entitlement to the consumptive use permit.

(3) The applicant for an emergency permit shall submit the application and fee in accordance with Rule 40E-3.101 F.A.C., along with any other requested information within twenty-four hours after making oral application.

Specific Authority 373.044, 373.119, 373.171, F.S. Law Implemented 373.308, 373.309, 373.313, 373.326, 373.342, F.S. History – New 1-1-85, Amended 7-2-98, 3-16-05.

40E-3.461 Inspection.

(1) The District or delegated agency is authorized to inspect any well or abandoned well within its jurisdiction, including those wells permitted under Rule 40E-3.041, F.A.C. Inspections shall be done as necessary to insure conformity with applicable standards. Duly authorized representatives of the District or delegated agency, upon presenting proper identification and at reasonable times, may enter upon any premises for the purpose of such inspection. Such inspection may include but need not be limited to geophysical logging, water level measurements, or other methods.

(2) If, based on such inspection, the District or delegated agency finds the standards of this chapter have not been met, the District or delegated agency shall proceed with enforcement actions as prescribed by Chapter 62-531, F.A.C.

(3) A site inspection may be conducted by an authorized representative of the District or delegated agency prior to issuing a permit for construction of a public water supply well.

(4) The District or delegated agency shall be notified at least 24 hours in advance of placement of grout in the annular space of any public water supply well. A District or delegated agency representative may be on site to observe the grouting. If the District or delegated agency is properly notified and a representative is not at the site at the appointed time, the grouting may begin in the absence of a representative.

(5) If, based on an inspection, the District or delegated agency finds any well is an abandoned or incomplete well, the well shall be plugged in accordance with Rule 40E-3.531, F.A.C.

(6) If, based on an inspection, the District or delegated agency determines that applicable laws or rules have not been complied with, it shall disapprove the well. A disapproved well shall not be used until brought into compliance. If compliance cannot be achieved in a reasonable time, the well shall be properly abandoned.

(7) If, based on an inspection, the District determines that any well is a potential hazard to the water resource, the well shall be abandoned in accordance with Rules 62-532.500(4) and 40E-3.531, F.A.C.

(8) In all circumstances, a copy of all applicable well construction permits will be available at the construction site during well construction.

Specific Authority 373.044, 373.171, F.S. Law Implemented 373.103, 373.308, 373.309, 373.319, F.S. History – New 1-1-85, Amended 3-16-05.

PART II CONSTRUCTION, REPAIR AND ABANDONMENT STANDARDS

40E-3.500 Scope of Part II. The rules in this part relate to the standards and criteria for the construction, repair and abandonment of wells. All wells within the District unless specifically exempted under rule 40E-3.051 must comply with these standards regardless of whether a permit is required under Part I.

Specific Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.308, 373.309, 373.313 FS. History — New 1-1-85.

40E-3.502 Construction Methods.

(1) Water wells must be located, constructed, cased, grouted, plugged, capped, or sealed to prevent uncontrolled surface flow, uncontrolled movement of water from one aquifer or water bearing zone of differing water quality to another, contamination of groundwater or surface water resources, or other adverse impacts. The construction methods and standards in this chapter shall apply to all construction, repair, or abandonment of wells in the District except:

(a) In those areas exempted by the District with the concurrence of the Department; or

(b) For public water supply wells or limited use public supply wells, which shall be constructed, repaired or abandoned in accordance with Chapter 62-555 or Chapter 64E-8, F.A.C. respectively, or

(c) For monitor wells, which shall be constructed, repaired, or abandoned in accordance with Chapter 62-761, F.A.C., covering underground storage tank systems, or

(d) For water wells permitted under Chapter 62-524, F.A.C., delineated areas, which shall be constructed, repaired or abandoned in accordance with Chapter 62-534, F.A.C., or special criteria developed for specific designated areas, or

(e) When special well construction conditions have been specified on a water use permit, these conditions shall be attached to applicable well construction permits.

(2) The District may designate special well construction standards areas by Emergency Rule to prevent transport of surface contaminants to groundwater or movement of introduced or natural contaminants from one aquifer or zone to another. Such standards will be the minimum necessary to prevent the movement of contaminants and will be in cooperation with other state agencies, local jurisdictions, and the regulated public, in accordance with Chapter 120, Fla. Stat., provisions for emergency rule making.

Specific Authority 373.044, 373.309, 373.171, F.S. Law Implemented 373.113, 373.306, 373.308, 373.309, F.S. History New 1-1-85, Amended 12-19-89, 03-16-05.

40E-3.504 Location.

(1) Water wells shall be located so as to not pose a threat of contamination to the water resource and to provide for the protection of the health, safety and welfare of the user.

(2) Water wells shall be located to comply with the setback distances in subsection 62-532.400(7), F.A.C. This subsection does not relieve the applicant from the responsibility of complying with the requirements of any other regulatory agency with jurisdiction over the applicant's activities.

(3) The District shall increase these distances if necessary to protect the health, safety and welfare of individuals who may be exposed to ground water contamination.

Specific Authority 373.044, 373.171, 373.309, F.S. Law Implemented 373.113, 373.306, 373.308, 373.309, F.S. History – New 1-1-85, Amended 3-16-05.

40E-3.507 Casing and Liner Pipe Standards.

(1)(a) Well casing, liner pipe, and well screen shall be new or in like new condition. Such well casing, liner pipe, and well screen shall not be used unless free of breaks, corrosion, and dents, straight and true, and not out of round. Welded or seamless black or galvanized steel pipe or casing, or stainless steel pipe or casing, or approved types of nonmetallic pipe shall be used for well casing or liner pipe.

(b) All well casing shall conform to the standards identified in subsection 62-532.500(1), F.A.C.

(2) Wells constructed using telescoping casings shall be considered as a continuous casing provided the following conditions are met:

(a) Any annular space including the overlapped section shall be grouted in accordance with subparagraph 62-532.500(2)(f)4., F.A.C. The grout shall extend from the bottom of the casing to the top of the innermost casing. The use of lead packers is prohibited.

(b) The bottom end of the casing shall extend to or below the water level of the aquifer intended to supply water to the well.

(c) All caving zones below the uppermost consolidated unit shall be cased.

(d) A minimum of 10 feet overlap is required for non-public supply wells. One casing centralizer shall be used within the overlapped section.

(e) A minimum of 20 feet overlap is required for public supply wells. Two casing centralizers shall be used within the overlapped section.

(3) Steel well casing and liner pipe shall be joined in a watertight manner by threaded couplings, electrical welding methods, or other methods approved by the District which provide equivalent protection. PVC pipe shall be joined by solvent bonded couplings, threaded couplings, heat welding, or other methods approved by the District which provide equivalent protection.

(4) Nonmetallic and stainless steel well casing or liner pipe shall not be installed by driving unless prior approval is obtained from the District based on a demonstration that the integrity of the well casing or liner pipe will be maintained.

(a) For well casing or liner pipe installed by driving, the casing or pipe shall not butt together inside threaded couplings unless the joint is electrically welded so as to be completely watertight.

(b) A drive shoe is required for use on casing or pipe installed by driving unless prior approval is obtained from the District based on a demonstration that a drive shoe is not necessary to maintain the integrity of the casing or pipe.

Specific Authority 373.044, 373.171, 373.309, F.S. Law Implemented 373.113, 373.306, 373.308, 373.309, F.S. History – New 1-1-85, Amended 3-16-05.

40E-3.512 Well Construction Requirements.

(1) In the construction of a well, reasonable caution shall be taken to maintain the work site so as to minimize the entrance of contaminants into the water resource.

(a) Materials used in construction shall be reasonably free of contamination.

(b) Water used during construction shall be supplied from a potable well or potable water supply. If the well or water supply is a known source of contamination or is within a known area of contamination, it shall not be used to provide water for well construction.

(2) All water wells which penetrate multiple aquifers or water bearing zones shall be properly designed and constructed to prevent an interchange of water between water bearing zones which may result in deterioration of the quality of water in one or more water bearing zones, or will result in a loss of artesian pressure.

(a) If a well cannot be properly completed to prevent an unauthorized interchange of water between water bearing zones or to prevent a loss of artesian pressure, the well shall be abandoned and plugged in accordance with subsection 40E-3.531(3), F.A.C., or other instructions from the District, which are appropriate for the geological conditions encountered.

(3) For wells obtaining water from unconsolidated earth materials, casing shall extend from the upper terminus of the well to the well screen.

(a) The well screen shall be attached to the casing with a watertight seal;

(b) The well shall be constructed to prevent caving or pumping of sand. A filter pack shall be installed around the screened portion of the well;

(c) The well shall be adequately developed until clear of any drilling fluids, particulate material and turbidity.

(4) For wells obtaining water from consolidated earth materials, a continuous casing shall extend from the upper terminus of the well to the top of the uppermost consolidated unit.

(5) For artesian wells, the casing shall penetrate the entire thickness of the overlying formation above the aquifer. The District may grant waivers for seating of casing within the confining zone above an artesian aquifer provided that:

(a) The casing extends a sufficient distance into the confining zone so as to prevent movement of water from the artesian aquifer to overlying aquifers;

(b) The District determines that such construction will not harm the water resources.

Specific Authority 373.044, 373.171, 373.309, F.S. Law Implemented 373.113, 373.306, 373.308, 373.309, F.S. History – New 1-1-85, Amended 3-16-05.

40E-3.517 Grouting and Sealing. Wells shall be grouted and sealed in accordance with paragraph 62-532.500(2)(f), F.A.C., and this section, to protect the water resource from degradation caused by movement of waters along the well annulus either from the surface to the aquifer or between aquifers, and to prevent loss of pressure in artesian aquifers.

(1) All wells that are constructed in a manner which creates an annular space between the casing and the naturally occurring geologic formations shall be grouted and sealed in accordance with the methodologies listed in paragraph 62-532.500(2)(f), F.A.C. and this section.

(2) For any part of a well casing with an outside diameter of four inches or larger intended to be installed in a bore hole which is larger in diameter than the outside diameter of the casing, the annular space shall be filled from bottom to top with not less than a nominal two inch thickness of neat cement grout.

(3) For any part of a well casing with an outside diameter of less than four inches intended to be installed in a bore hole which is larger in diameter than the outside diameter of the casing, the annular space shall be filled from bottom to top with not less than a nominal one inch thickness of neat cement grout minimum.

(4) Wells obtaining water from unconsolidated formations, using a method other than jetting or driving a casing, and creating an annular space, shall be grouted from no more than ten (10) feet above the top of the screen to the upper terminus. Borehole cuttings shall not be reintroduced into the annular space.

(5) For jetted wells or sand point wells obtaining water from an unconsolidated formation of a naturally caving nature in which the annular space is completely filled with formation material, only the upper three (3) feet shall be grouted to provide protection from possible contaminated surface water.

(6) For jetted wells or sand point wells circulating drilling fluids to the surface, and obtaining water from a consolidated formation, shall be grouted bottom to top prior to being seated into water bearing formation.

(7) For wells constructed by driven casing, dry bentonite, with an average mesh size of between 4 and 20 U.S. standard sieve size or grain size between 5mm and

.85mm, must be added to the continuous casing string at land surface at the beginning and during construction of the well.

(8) All other wells shall be grouted from the bottom of the casing to land surface.

(9) Unless a variance has been granted by the District, grouting and sealing of water wells shall be accomplished in the following manner:

(a) The grout mixture shall consist of either Portland Cement or a natural bentonite slurry for wells and boreholes meeting the requirements in subsection 40E-3.512(7), F.A.C. The mixture shall consist of 5.2 to 5.5 gallons of water per sack of Portland Cement or a mixture of 6.0 gallons of water per sack of Portland Cement with 3 to 7.5 pounds of Bentonite, not to exceed 8% by weight.

(b) The minimum set time for grouting of casing using either Portland Cement or Bentonite before drilling operations may continue is 12 hours.

(c) The casing shall be centered in the borehole prior to grouting and sealing.

(d) Grouting of the annular space shall be completed using the tremie pipe, forced pressure, or other equivalent method approved by the District. In all cases, grout will be introduced into the annular space from bottom to top.

(e) In those cases where, during grouting operation, circulation of the grout is lost so that the annular space being grouted cannot be filled in one continuous operation, a tremie pipe shall be installed in the annular space to a point immediately above the zone of lost circulation. The annulus shall be bridged at that point by sand or other approved material introduced through the pipe. Grouting or sealing of the annular space shall be completed using the tremie pipe or other approved methods.

(10) Water wells constructed using Bentonite grouts shall meet all the following requirements:

(a) The slurry grout mixture shall be introduced into the annular space from bottom to top. The casing seat must be clean, allowing the casing to set at the total depth bored in a hole reasonably free of drill cuttings;

(b) A formation packer or a 5-foot neat cement plug must be installed at the casing seat;

(c) Neat cement must be placed in the upper ten (10) feet of the annular space to prevent deterioration of, or damage to, the bentonite seal; and

(d) Bentonite grout may be used only on monitor, domestic, irrigation, water source, or ground source heat pump installations with a nominal casing diameter of five (5) inches or less. Use of bentonite grout is not allowed on public supply wells, wells in delineated areas, wells where artesian flow occurs, in any identified contamination sites where the contaminants will prevent an adequate seal, or in wells with the water quality concentrations exceeding 10,000 milligrams per liter total dissolved solids.

(e) Bentonite grout may be used for abandonment purposes for any well. However, it cannot be used to abandon a dry well, or a well which flows to surface and cannot be placed any higher in the well than the height of the static water level. Any unsealed remainder above the height of the static water level must be filled with neat cement.

(f) Bentonite chips or pellets used for abandonment purposes may not be placed in any well casing or hole less than three inches in diameter or for sealing the annular space of any well.

(g) In all circumstances, the manufacturer's mixing instructions shall be followed.

Specific Authority 373.044, 373.171, 373.309, F.S. Law Implemented 373.113, 373.306, 373.308, 373.309, F.S. History – New 1-1-85, Amended 3-16-05.

40E-3.521 Well Seals.

(1) Temporary Well Seals.

(a) Whenever there is a temporary interruption in work on the well during construction, repair or abandonment, the well opening shall be sealed with a tamper resistant cover.

(b) Except in areas designated by the Department with the concurrence of the District, any well in which pumping equipment is installed seasonally or periodically shall, whenever pumping equipment is not installed, be capped with steel or reinforced concrete cover, or valve.

(2) Permanent Well Seals.

(a) Wells shall be properly sealed to prevent the movement of contaminants and surface water into the well.

(b) The top of the well casing shall at a minimum extend 12 inches above land surface and if practical, 12 inches above the 100-year flood elevation.

(c) Any cased well equipped with permanently installed pumping equipment shall have that pumping equipment and any necessary piping installed through a well seal.

(d) Any unused well shall be capped in a watertight manner with a threaded, welded, or bolted cover or valve. The top of the well casing shall at a minimum extend 12 inches above land surface.

Specific Authority 373.044, 373.171, 373.309, F.S. Law Implemented 373.113, 373.306, 373.308, 373.309, F.S. History – New 3-16-05.

40E-3.525 Explosives. The use of explosives in well construction or development is prohibited unless specifically approved by the Department.

Specific Authority 373.044, 373.171, 373.309, F.S. Law Implemented 373.113, 373.306, 373.308, 373.309, F.S. History – New 1-1-85, Amended 12-19-89, 3-16-05.

40E-3.529 Flowing Wells. If the well flows at land surface, a valve shall be provided and maintained to control the discharge from the well.

Specific Authority 373.044, 373.171, 373.309, F.S. Law Implemented 373.113, 373.306, 373.308, 373.309, F.S. History – New 1-1-85, Amended 3-16-05.

40E-3.531 Abandoned Well Plugging.

(1) Any well which was not constructed in accordance with the standards of this chapter and fails to be corrected upon written notice in accordance with subsection 40E-3.461(2), F.A.C., shall be deemed an abandoned well.

(a) Any well, which has been permanently disconnected from pumping equipment and has not been converted to a monitoring well, shall be deemed to be abandoned.

(b) The owner of the property, on which an abandoned well is located, shall be responsible for ensuring that all abandoned wells on the property are properly plugged by a licensed water well contractor.

(2) Any well, which is an abandoned artesian well under subsection 373.203(1), F.S., shall be plugged in accordance with this section.

(3) All abandoned wells shall be plugged by filling them from bottom to top with grout within a time specified by the District. The work shall be performed by a licensed water well contractor.

(a) Use of clean aggregate to bridge cavernous or lost circulation zones shall be allowed if measurements indicate loss of grout and the borehole or screened portion does not connect two (2) or more aquifers of significantly differing water quality. Prior approval to use aggregate or other material must be obtained from the District.

(b) Obstructions shall be cleared from all wells prior to plugging.

(4) Requests to abandon a well shall be submitted on the application form provided by the District.

Specific Authority 373.044, 373.171, 373.309, F.S. Law Implemented 373.113, 373.306, 373.308, 373.309, F.S. History – New 1-1-85, Amended 3-16-05.

PART III DRILLER REGISTRATION STANDARDS

40E-3.700 Scope of Part III.

Specific Authority 373.044, 373.113 FS. Law Implemented 373.308, 373.323, 373.326 FS. History — New 1-1-85, Repealed 12-19-89.

40E-3.721 Driller Registration.

Specific Authority 373.044, 373.113 FS. Law Implemented 373.308, 373.323, 373.326 FS. History — New 1-1-85, Repealed 12-19-89.

40E-3.725 Responsibility of Contractor.

Specific Authority 373.044, 373.113 FS. Law Implemented 373.308, 373.323, 373.326 FS. History — New 1-1-85, Repealed 12-19-89.

40E-3.727 Type of Registration.

Specific Authority 373.044, 373.113 FS. Law Implemented 373.308, 373.323, 373.326 FS. History — New 1-1-85, Repealed 12-19-89.

40E-3.733 Exemptions.

Specific Authority 373.044, 373.113 FS. Law Implemented 373.308, 373.323, 373.326 FS. History — New 1-1-85, Repealed 12-19-89.

40E-3.752 Refusal, Suspension, or Revocation of Registration.

Specific Authority 373.044, 373.113 FS. Law Implemented 373.308, 373.323, 373.326 FS. History — New 1-1-85, Repealed 12-19-89.

40E-3.763 Examinations.

Specific Authority 373.044, 373.113 FS. Law Implemented 373.308, 373.323, 373.326 FS. History — New 1-1-85, Repealed 12-19-89.

PART IV SPECIFIC GEOGRAPHIC THRESHOLDS

Editorial Note: For current law, see Chapter 40E-30.

40E-3.800 General Permit for Wells.
Specific Authority 373.044, 373.113 FS. Law Implemented 373.309, 373.313, 373.326, 373.342 FS.
History — New 1-1-85, Repealed 1-10-85.

40E-3.810 General Permit for Construction, Repair or Abandonment of Wells.
Specific Authority 373.044, 373.113 FS. Law Implemented 373.309, 373.313, 373.326, 373.342 FS.
History — New 1-1-85, Repealed 1-10-85.

40E-3.815 Notice of Intent.
Specific Authority 373.044, 373.113 FS. Law Implemented 373.309, 373.313, 373.326, 373.342 FS.
History — New 1-1-85, Repealed 1-10-85.

40E-3.820 Request for Additional Information.
Specific Authority 373.044, 373.113 FS. Law Implemented 373.309, 373.313, 373.326, 373.342 FS.
History — New 1-1-85, Repealed 1-10-85.

40E-3.825 Thresholds for South Dade County.
Specific Authority 373.044, 373.113 FS. Law Implemented 373.309, 373.313, 373.326, 373.342 FS.
History — New 1-1-85, Repealed 1-10-85.

CHAPTER 62-531
WATER WELL CONTRACTOR LICENSING REQUIREMENTS

62-531.101 Scope of Water Well Contractor Rule. (Repealed)
Specific Authority 373.043, 373.309, FS. Law Implemented 373.306, 373.308, 373.323, 373.326, 373.329, FS. History -- New 8-18-73; Amended 10-9-84; Formerly 17-20.01; 17-20.001, Amended: 5-25-89, Formerly 17-531.101, Repealed 12-9-96.

62-531.200 Definitions Used in Water Well Contractor Rules.
The following words, when used in this Chapter, shall have the following meanings, except where the context clearly indicates a different meaning:

(1) "Abandonment of Water Wells" means the act of plugging a water well in accordance with Department and District rules.

(2) "Administrator" means an entity awarded a contract to implement a program of approved coursework for water well contractor licensure and license renewal.

(3) "Approved Coursework" means Administrator or Department-approved training required for licensure and continuing education units required for license renewal. Approved coursework requirements may not be used for both licensure or license renewal and for license point reduction at educational workshops, as described in the "Water Well Contractors Disciplinary Guidelines and Procedures Manual, referenced in Rule 62-531.450, F.A.C."

(4) "Continuing Education Unit" means one credit hour (at least fifty minutes) of approved coursework instruction. It may be abbreviated to "CEU" in these rules.

(5) "Coursework Hour" means one credit hour of approved coursework (at least fifty minutes) instruction.

(6) "Department" means the State of Florida Department of Environmental Protection.

(7) "District" means a Water Management District created pursuant to Chapter 373, F.S.

(8) "Drilling Equipment" means a drilling rig consisting of the machinery necessary to construct a well.

(9) "Construction of Water Wells" means all parts and acts necessary to obtain ground water by wells, including the location and excavation of the wells, but excluding the installation of pumps and pumping equipment.

(10) "Repair" means any action that involves the physical alteration, rehabilitation, or replacement of any parts of a well, but does not include the alteration or replacement of any portion of a well which is above ground surface.

(11) "Water Well Contractor" means an individual who is responsible for the construction, repair, or abandonment of a water well and who is licensed under this Chapter to engage in the business of construction, repair, or abandonment of wells.

Specific Authority 373.043, 373.309, FS. Law Implemented 373.308, 373.323, 373.324, 373.326, 373.329, FS. History -- New 5-25-89, Formerly 17-531.200, Amended 7-17-03.

EXHIBIT 2

62-531.300 Application Requirements for Water Well Contractors.

(1) The Water Management Districts shall accept applications for licensing as a water well contractor from any person who is at least 18 years of age, has knowledge of those rules adopted by the Department and the District which deal with the regulation of water wells, has had not less than two years experience in constructing, repairing, or abandoning wells, and beginning July 31, 2004, has taken and completed a minimum of 12 approved coursework hours. In addition, each application shall:

(a) Be submitted on forms provided by the District, and shall be accompanied by a nonrefundable application fee.

(b) Contain proof of experience as provided in subsection (6) below.

(c) Include copies of certificates of completion of approved coursework. Confirmation of approved coursework completion will be accepted from the Department or the Administrator, if available, in lieu of certificates of completion.

(d) Include a request for the water well contractor examination described by Rule 62-531.350, F.A.C.

(2) Approved coursework shall be governed by the requirements in the Manual for Coursework and Continuing Education for Water Well Contractors, Department of Environmental Protection, November 2006, hereby adopted and incorporated as a reference. Copies may be obtained by writing or calling the Department, 2600 Blair Stone Road, MS 3680, Tallahassee, FL 32399-2400; telephone (850)245-8648.

(3) A minimum of six approved coursework hours must be related to water well construction practices and applicable water well construction rules. No more than six approved coursework hours may be related to safety and business practices.

(4) The District shall not schedule an applicant to take the required examination until his application has been reviewed and the applicant has met all other conditions for licensure. The applicant must pass the examination within three consecutive testing periods scheduled by the District or a new application shall be required.

(5) A license shall not be issued until the applicant successfully passes the required examination.

(6) A license issued by any Water Management District shall be valid in every Water Management District in the state.

(7) Satisfactory proof of two years experience in the water well construction business shall be demonstrated by providing one or more letters from the applicant's supervising water well contractors that the applicant has worked with the contractors for at least two years in constructing, repairing, or abandoning water wells.

(8) In order to receive mailings from the Department or the Districts, including notice about license application, it is advised that the applicant informs the District within 30 days of any change of the applicant's address.

Specific Authority 373.043, 373.309 FS. Law Implemented 373.323, 373.326, 373.329 FS. History – New 8-18-73, Amended 10-9-84, Formerly 17-20.02, Amended 6-16-86, Formerly 17-20.020, Amended 5-25-89, Formerly 17-531.300, Amended 7-17-03, 11-25-07.

62-531.330 Water Well Contractor License Renewal.

(1) Licenses issued pursuant to this chapter shall not be transferable and shall expire on July 31 of each odd numbered year. A license may be renewed without

examination for an ensuing two years by making application to the licensing District not later than the expiration date of the license and paying the biennial renewal fee. Such application shall extend the validity of the current license until a new license is received or the applicant is notified by the District that formal administrative action has been taken to suspend, revoke, or deny renewal of the license.

(2) Twelve CEUs shall be required for renewal of a license beginning July 31, 2005. Water well contractor licenses shall be renewed only after the license holder has completed twelve CEUs of approved coursework earned in the two-year period directly preceding the request for license renewal for each renewal cycle. However, if a water well contractor has received his or her first license within 180 days before the end of the biennium renewal of licenses, the continuing education requirements shall be waived for the licensee's first renewal cycle.

(3) A minimum of six CEUs must be related to water well construction practices and applicable water well construction rules. No more than six CEUs may be related to safety and business practices.

(4) Each application for license renewal shall include copies of certificates of completion of CEUs. Confirmation of approved coursework completion will be accepted from the Department or the Administrator, if available, in lieu of certificates of completion.

(5) A Florida licensed water well contractor who teaches approved coursework shall receive one CEU for each coursework hour of instruction.

(6) If a license is not renewed pursuant to subsection (1) before July 31 of each odd numbered year, the current license shall automatically revert to inactive status and may be renewed only in accordance with the requirements in Rule 62-531.360, F.A.C.

(7) Notwithstanding the renewal requirements of this chapter and Section 373.324(3), F.S., and those in Section 250.4815, F.S., for members of the Florida National Guard and the United States Armed Forces Reserves, any active water well contractor license issued under this chapter to a service member as defined in Section 250.01, F.S., or his or her spouse, both of whom reside in Florida, shall not become inactive while the service member is serving on military orders that take him or her over 35 miles from his or her residence and shall be considered an active license for up to 180 days after the service member returns to his or her Florida residence. If the license renewal requirements are met within the 180-day extension period, the service member or his or her spouse shall not be charged any additional costs, such as, late fees above the normal license fees. This subsection does not waive renewal requirement such as registering, continuing education, and all associated fees. The service member must present to the water management district issuing the license a copy of his or her official military orders or a written verification from the member's commanding officer before the end of the 180-day period in order to qualify for the extension.

(8) Pursuant to Rule 62-531.450, F.A.C., no application for a renewal shall be granted if the applicant's license is suspended or revoked until the period for such suspension or revocation has expired.

(9) In order to receive mailings from the Department or the Districts, including notice for license renewal, it is advised that the contractor informs the District within 30 days of any change of the contractor's address.

Specific Authority 373.043, 373.309 FS. Law Implemented 373.323, 373.324, 373.326, 373.329 FS. History – New 5-25-89, Formerly 17-531.330, Amended 7-17-03, 11-25-07.

62-531.340 Water Well Contractor Fees.

(1) The following fees are required for water well contractor license applications, biennial renewals, and late renewals:

(a) New License: A fee of $150 shall accompany each new application for a license.

(b) Biennial License Renewal: A fee of $50 shall accompany each application for a renewal of license.

(c) Late License Renewal: After July 31 of each odd numbered year, in addition to the normal license renewal fee, a late fee of $75 shall accompany each application for renewal of a license which has been inactive for one year or less.

(d) Administrative Fee for CEUs for License Renewal: A fee of $14 per CEU shall be submitted to the Administrator with the documentation of course completion.

(2) Regular employees of a political subdivision or governmental entity engaged in water well drilling shall be licensed in accordance with this chapter, but shall be exempt from paying the fees required in this chapter.

Specific Authority 373.043, 373.309 FS. Law Implemented 373.323, 373.324, 373.329 FS. History–New 5-25-89, Formerly 17-531.340, Amended 11-25-07.

62-531.350 Water Well Contractor Examinations.

(1) Water well contractor examinations shall be written, comprehensive examinations that are standardized statewide and may be administered orally. The standardized examinations shall be prepared by the Department, in consultation with the Districts and representatives of the water well contracting industry. The examinations shall be designed to determine the applicant's knowledge of applicable rules; ability to construct, repair, and abandon a well; and ability to supervise, direct, manage, and control the contracting activities of the water well contracting business.

(2) A grade on the examination of seventy percent or more shall be passing. Results of the examination shall be reported as either passing or failing. Each applicant is entitled to review the graded examination in the District office under staff supervision. Graded examinations are confidential and shall not be revealed to persons other than the applicant who completed the examination. Examinations or copies of examinations shall not be released to applicants or to the public and shall be retained by the Districts in a secured location.

(3) Examinations shall be given by the District monthly as scheduled by the District.

(4) Examinations shall be conducted at the Water Management District in which the applicant resides or in which his principal place of business is located. Examinations for out of state applicants shall be conducted in the District in which most of the business of the applicant will take place.

Specific Authority 373.043, 373.309 FS. Law Implemented 373.323, 373.329 FS. History – New 8-18-73, Amended 10-9-84, Formerly 17-20.03, 17-20.030, Amended 5-25-89, Formerly 17-531.350, Amended 11-25-07.

62-531.360 Inactive Status of Water Well Contractor License.

(1) A license not renewed before July 3l of each odd numbered year shall authomatically revert to inactive status. Such license may be reactivated only if the licensee meets the requirements for reactivation in subsection (3) below.

(2) At least sixty days before the automatic reversion of a license to inactive status, the District which issued the license shall mail a notice of reversion to the last known address of the licensee as it appears on the District records. If the notice is mailed less than sixty days before the automatic reversion, the licensee shall still have sixty days in which to reactivate the license.

(3) A license which has become inactive pursuant to subsection (1) above, may be renewed or reactivated upon applications to the District as follows:

(a) A license which has been inactive for one year or less after July 3l of each odd numbered year may be renewed pursuant to Rule 62-531.330, F.A.C., upon application to the District and upon payment of the renewal and late fees established in Rule 62-531.340, F.A.C. Such renewed license shall expire on July 3l of the next odd numbered year.

(b) A license which as been inactive for more than one year after July 31 of each odd numbered year may be reactivated upon application to the District for licensure pursuant to Rule 62-531.300, F.A.C.

Specific Authority 373.043, 373.309, FS. Law Implemented 373.325, FS. History -- New 5-25-89, Formerly 17-531.360.

62-531.380 Display of Water Well Contractor License Number.

(1) Each water well contractor shall be assigned a permanent license number and shall be issued a certificate with that license number. License numbers are not transferable and shall not be used by another water well contractor.

(2) The license number shall be continuously displayed in a conspicuous place on both sides of each piece of drilling equipment owned, leased, or operated by the contractor. The number shall be easily readable by a person with normal vision and shall be in a color which will contrast with its background. The number shall be presented in numerals not less than two inches high.

Specific Authority 373.043, 373.309, FS. Law Implemented 373.323, 373.326, 373.329, FS. History -- New 8-18-73, Amended 10-9-84, Formerly 17-20.06, 17-20.060, Amended 5-25-89, Formerly 17-531.380.

62-531.390 Exemptions from Water Well Contractor Licensing Requirement.

(1) A water well contractor license is not required for a person to construct a well that meets all of the following criteria:

(a) The well must be two inches or less in diameter.

(b) The well must be constructed on his own land or leased property.

(c) The well is intended for use only in a single family house which is his residence or is intended for use only for farming purposes on his farm, and the waters to be produced are not intended for use by the public or any residence other than his own.

(2) In addition to meeting these criteria, the person shall comply with all local and state rules relating to the construction standards of water wells.
Specific Authority 373.043, 373.309, FS. Law Implemented 373.326, FS. History -- New 5-25-89, Formerly 17-531.390.

62-531.400 Procedures for Disciplinary Actions.

(1) Whenever a Water Management District has reason to believe that there has been a violation of this Chapter, or Chapter 373, Part III, F.S., the District shall provide a written notice of violation to the person alleged to be in violation. The notice of violation shall identify each provision of the appropriate Florida Administrative Code chapter or Florida Statutes alleged to have been violated, and the facts alleged which constitute such a violation.

(2) The notice described in subsection (1) above shall be served by personal service, registered mail, or certified mail, return receipt requested. When personal service cannot be made and the registered or certified mail notice is returned undelivered, the District shall publish a notice to the licensee once each week, for four consecutive weeks, in a newspaper of general circulation published in the county of the licensee's last known address as it appears on the District records. The District shall mail copies of the notice only to persons who have specifically requested such notice or to entities with which the District has formally agreed to provide such notice.

(3) Notice alleging a violation of a rule setting minimum standards for the location, construction, repair, or abandonment of wells shall be accompanied by an order of the District requiring remedial action which, if taken within the time specified in such order, will affect compliance with the requirements of the Chapter. The order shall become final unless a request for hearing as provided in Chapter 120, F.S., is made within 30 days from the date of service of such order.

(4) Upon compliance, a notice shall be served by the District in a timely manner upon each person or entity who received notice of a violation, stating that compliance with the order has been achieved.

(5) When disciplinary action is taken against a contractor which results in suspension or revocation of the contractor's license, the District shall notify each Water Management District of such action.

(6) The District shall reissue the license of a contractor whose license has been suspended or revoked upon a determination by the District that the disciplined person has complied with all of the terms and condtions set forth in the final order.

(7) Disciplinary action may be taken by any District regardless of where the contractor's license was issued.
Specific Authority 373.043, 373.309, FS. Law Implemented 120.60, 373.306, 373.309, 373.323, 373.333, FS. History -- New 8-18-73, Amended 10-9-84, Formerly 17-20.05, 17-20.050, Amended 5-25-89, Formerly 17-531.400.

62-531.450 Unlawful Acts, Grounds for Disciplinary Actions, and Penalties.

(1) When a District has reason to believe that any person not licensed as a water well contractor is in violation of any provisions of this chapter, any rule, or statute that relates to the construction, repair, or abandonment of water wells, the District may issue and deliver to such person a notice to cease and desist from such violation. In

addition, the District may issue and deliver a notice to cease and desist to any person who aids and abets the unlicensed construction, repair, or abandonment of a water well by employing an unlicensed person.

(2) It is unlawful for any person to:

(a) Practice water well contracting without an active license issued pursuant to this chapter.

(b) Construct, repair, or abandon a water well, or operate drilling equipment for such purpose, unless employed by or under the supervision of a licensed water well contractor, unless the activity is exempt in accordance with Rule 62-531.390, F.A.C.

(c) Give false or forged evidence or reports to obtain a license.

(d) Present as his own the license of another.

(e) Use or attempt to use a license to practice water well contracting which has been suspended, revoked, or placed on inactive status.

(f) Engage in willful or repeated violation of this chapter or any other Department, Water Management District, or state agency rule relating to water wells, which endangers the public health, safety, or welfare.

(3) It is unlawful for a business entity to engage in water well contracting or to perform any activity for which a license as a water well contractor is required unless a licensed water well contractor is responsible for supervising such activity of the business entity.

(4) The following acts constitute grounds for which disciplinary actions specified in subsection (5) below may be taken by a District:

(a) Attempting to obtain, obtaining, or renewing a license under this chapter by bribery or fraudulent misrepresentation.

(b) Being convicted or found guilty, regardless of the judicial decision or sentence, of fraud or deceit or of gross negligence, incompetency, or misconduct in the performance of work, or of a crime in any jurisdiction which directly relates to the practice of water well contracting or the ability to practice water well contracting. A plea of nolo contendere (not contesting charges) shall create a presumption of guilt to the underlying criminal charges, and the District shall allow the person disciplined to present any evidence relevant to the underlying charges and the circumstances surrounding the plea.

(c) Allowing any other person to use the licensee's license.

(d) Violating or refusing to comply with any provision of this chapter or any order of the District previously entered in a disciplinary hearing.

(e) Constructing, repairing, or abandoning a water well without first obtaining all applicable permits.

(f) Practicing with a revoked, suspended, or inactive license.

(g) Practicing water well contracting without a water well contractor's license.

(5) When the District finds a person guilty of any of the grounds for disciplinary action in subsection (4) above, it may enter an order imposing one or more of the following disciplinary actions in accordance with the guidelines established in the Department's Water Well Contractor Disciplinary Guidelines and Procedures Manual, October 2002:

(a) Denial of an application for licensure or renewal of a license.

(b) Revocation or suspension of a license.

(c) Imposition of an administrative penalty not to exceed $5,000 for each count or separate offense.

(d) Assessment of points against a water well contractor's license.

(e) Placement of the water well contractor on probation for a minimum of 6 months subject to the conditions specified in an order of the District.

(f) Restriction of the licensee's authorized scope of practice.

(6) The Water Well Contractor Disciplinary Guidelines and Procedures Manual may be obtained from the Department of Environmental Protection's Division of Water Resource Management, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, and from each Water Management District.

Specific Authority 373.043, 373.309 FS. Law Implemented 373.306, 373.309, 373.316, 373.319, 373.333, 373.335, 373.336 FS. History -- New 8-18-73, Amended 10-9-84, Formerly 17-20.09, 17-20.090, Amended 5-25-89, 12-2-92, Formerly 17-531.450, Amended 12-25-02, 11-25-07.

62-531.500 Official Water Well Contractor License List. (Repealed)

Specific Authority 373.043, 373.309, FS. Law Implemented 373.043, 373.323, 373.326, 373.329, FS. History -- New 8-18-73; Amended 10-9-84; Formerly 17-20.07; 17-20.070, Amended 5-25-89, Formerly 17-531.500, Repealed 12-9-96.

62-531.511 Notification of Changes in Water Well Contractor Rules. (Repealed)

Specific Authority 373.043, 373.309, FS. Law Implemented 373.323, 373.326, 373.329, FS. History - New 8-18-73; Amended 10-9-84; Formerly 17-20.08; 17-20.080, Amended 5-25-89, Formerly 17-531.511, Repealed 12-9-96.

OCTOBER 2002

FLORIDA

DEPARTMENT OF

ENVIRONMENTAL PROTECTION

WATER WELL CONTRACTOR DISCIPLINARY GUIDELINES AND PROCEDURES MANUAL

EXHIBIT 3

INTRODUCTION

The purpose of this document is to establish disciplinary guidelines that are applicable to each specific ground for disciplinary action that may be taken by a Permitting Authority. As directed by Section 373.333, Florida Statutes, guidelines will be developed and consistently applied by the Permitting Authority that address the following criteria:

- Specify a meaningful range of designated disciplinary actions based upon severity and repetition of specific offenses.

- Distinguish minor violations from those violations that endanger public health, safety, and welfare or may contaminate the water resource.

- Inform the public of likely disciplinary actions that may be imposed for proscribed conduct.

Each Permitting Authority when taking disciplinary action against any water well contractor will use this document, adopted by reference in Chapter 62 - 531, F.A.C. Copies of these guidelines will be provided to all water well contractors at the time they receive a water well contractor license to operate in the State of Florida.

DISCIPLINARY ACTIONS

The Permitting Authorities are authorized to enter an order imposing any of the following disciplinary actions when a water well contractor has committed any violation identified in Chapter 62-531, F.A.C. This document establishes guidelines for the Permitting Authorities to follow when imposing these actions so that enforcement may be conducted in a consistent manner among the Permitting Authorities. Such disciplinary actions may include:

1) Denial of an application for licensure or for renewal of a license.

2) Revocation of a license for a period of not less than 1 year, during which time the water well contractor cannot construct, repair, or abandon a water well as a licensed water well contractor.

3) Suspension of a license for a period of 30 to 365 days, during which time the water well contractor cannot construct, repair, or abandon a water well as a licensed water well contractor.

4) Placement of a water well contractor's license on probation for a minimum of 6 months, during which time the water well contractor would be required to give the Permitting Authority 24-hour notice prior to construction, repair, or abandonment of any water well. Any violation committed during the period of probation will be the subject of an enforcement action.

5) Restriction of the water well contractor's authorized scope of practice. Such restrictions may apply to the construction, repair, or abandonment of a specific type of well, a type of drilling method, a type of geographic area, or a type of activity (construction, repair, or abandonment). The restriction will continue until the water well contractor demonstrates to the Permitting Authority competency in the area of restriction in accordance with the terms set out in the final order.

6) Imposition of an administrative penalty of up to $1000 for each violation.

7) Assessment of points against a water well contractor's license.

The disciplinary actions identified above may be taken by any Permitting Authority against a water well contractor, regardless of where the contractor's license was issued.

ADMINISTRATIVE PENALTY ASSESSMENT CRITERIA

Generally, administrative penalties will be imposed for violations of water well construction standards or requirements, or for permit violations. Administrative penalty amounts may range from $100 to $1000 for each separate violation.

Administrative penalty amounts will be assessed on a sliding scale related to water resource or human health impact. Table 1 establishes recommended administrative penalties based on the category of the violation versus the severity of the violation. Table 2 establishes guidelines for general categories for violations ranging from minor to major based upon the nature of the requirement being violated. Table 3 lists adjustment factors that may be used to add further flexibility.

A dictionary of citations will be used by each Permitting Authority to increase the efficiency and understanding of the cited violations. Standardization of administrative penalty policies, using the category of violations and severity determinations, will produce a more effective program.

TABLE 1

SLIDING SCALE OF RECOMMENDED ADMINISTRATIVE PENALTIES

	CATEGORY OF VIOLATION		
SEVERITY	MAJOR	MODERATE	MINOR
High	$1000	$600	$400
Medium	$500	$350	$250
Low	$250	$150	$100

CATEGORIES OF VIOLATIONS

The first factor in determining the recommended administrative penalty is the category of the violation. Guidelines for designating the category of violations of water well construction requirements or standards have been established in Table 2 based upon the nature of the violations and the potential for harm to the water resource or human health. Minor violations are generally those that pose no risk of impacting the water

resource. Moderate violations are those that have the potential of causing an impact to the water resource. Major violations are those that pose a threat to human health or the water resource.

Table 2 is a guideline to categorize violation types as minor, moderate, or major. There may be similar violations that occur in different Permitting Authorities, which have differing potentials for harm to the water resource. Since this is the key to the category of violation, a moderate violation in one Permitting Authority could be a major violation in another Permitting Authority.

SEVERITY OF THE VIOLATION

The severity of the violation is the second factor in determining the recommended penalty. The severity identified in Table 1 ranges from low to high and indicates the degree to which the violation deviates from the rule. Violations of a low severity involve minimal deviation. Violations of a medium severity involve significant deviation. Violations of a high severity involve extreme or repeated deviation or harm to human health. Each Permitting Authority will make a determination of the severity of each specific violation of its rules based upon both a technical evaluation and historical knowledge of the potential impacts of such violations.

TABLE 2

VIOLATIONS

1) Water Well Contractor License

   a) Practicing water well contracting without an active license is a Major violation.

   b) Allowance by a licensed water well contractor of the use of his or her license by another person, unless that person is employed by or under the supervision of the contractor, is a Major violation.

   c) Failure to display the water well contractor's number on each piece of drilling equipment owned, leased, or operated by the water well contractor is a Minor violation.

2) Permitting Requirements

   a) Failure to obtain a required permit for construction, repair, or abandonment is a Major violation.

   b) Knowingly providing false information when applying for a permit is a Major violation.

   c) Conducting activities in a manner that would harm the water resource is a Major violation.

   d) Failure to comply with a permit condition that poses a threat to human health or the water resource is a Major violation.

3) Well Completion Report

   a) Failure to comply with a well completion report requirement is a Minor violation.

4) Inspection

   a) Failure to allow an inspection is a Moderate violation.

5) Variance Condition

a) Failure to abide by the conditions of a variance is a Major violation.

6) Water Well Construction Standards

a) Failure to comply with a well construction standard is a Major violation.

CITATION DICTIONARY

Each Permitting Authority will use a citation dictionary that lists each possible violation with a specific number assigned to it and a recommended administrative penalty and points. The dictionary will be developed in accordance with the guidelines established in Tables 1 and 2, and will generally be consistent for similar violations in all Permitting Authorities. A citation will mean an individually numbered violation.

ADMINISTRATIVE PENALTY AND POINTS ADJUSTMENT

Administrative penalty and points adjustments may occur as each Permitting Authority pursues disciplinary action for non-compliance. A licensed water well contractor who has violated a rule citation is cited for an administrative penalty amount based on the sliding scale of recommended administrative penalties (Table 1).

The administrative penalty amount may be adjusted based upon the factors identified in Table 3. Points assessed against a well contractor's license may also be adjusted based upon the factors identified in Table 3. Each factor may be applied separately. The adjusted administrative penalty and points will be included in the consent order or final order.

TABLE 3

ADMINISTRATIVE PENALTY AND POINTS ADJUSTMENTS

DIRECTION	ADJUSTMENT FACTORS
(-) 0 - 100%	Good faith efforts to comply. Examples of good faith efforts are the contractor reporting the violation to the Permitting Authority before discovery of the violation by the Permitting Authority, correction of the violation by the contractor, and restitution to the affected property owner or customer.
(+) 0 - 100%	History of noncompliance 0 – 30% 1-2 previous violations or 5-10 license points 31 – 60% 3-4 previous violations or 11-30 license points 61 – 100% 5 or more previous violations or more than 30 license points

GUIDELINES FOR DISCIPLINARY ACTION

Permitting Authorities will use the following disciplinary action guidelines in order to provide for consistent enforcement actions among the Permitting Authorities. The guidelines are intended to resolve violations in an equitable and timely manner. Each guideline gives clear instructions that describe how and when an enforcement action will be pursued.

GUIDELINE 1 - PROGRESSIVE STEPS FOR DISCIPLINARY ACTION

The following is a summary of the progressive disciplinary actions that may be used by the Permitting Authority (see Figure 1).

Warning Letter -The Permitting Authority may send a warning letter to a water well contractor who has violated certain well construction rules. The warning letter will identify the violation(s) and advise the water well contractor to either take the necessary corrective action(s) (if applicable) or to contest the violation(s) in writing within 15 days after receipt of the warning letter. If the contractor contests the alleged violation, the Permitting Authority will respond in writing to the contractor within 15 days. If the contractor performs corrective action within the specified time, no further disciplinary action based upon the warning letter will be taken. If the contractor does not comply with the warning letter within the time specified, the Permitting Authority may take further enforcement action.

Notice of Violation - The Permitting Authority may send a notice of violation (NOV) to the water well contractor that will cite the alleged violation(s), identify what corrective actions are required, and identify the possible disciplinary actions, including

FIGURE 1

SAMPLE VIOLATION PROCESS

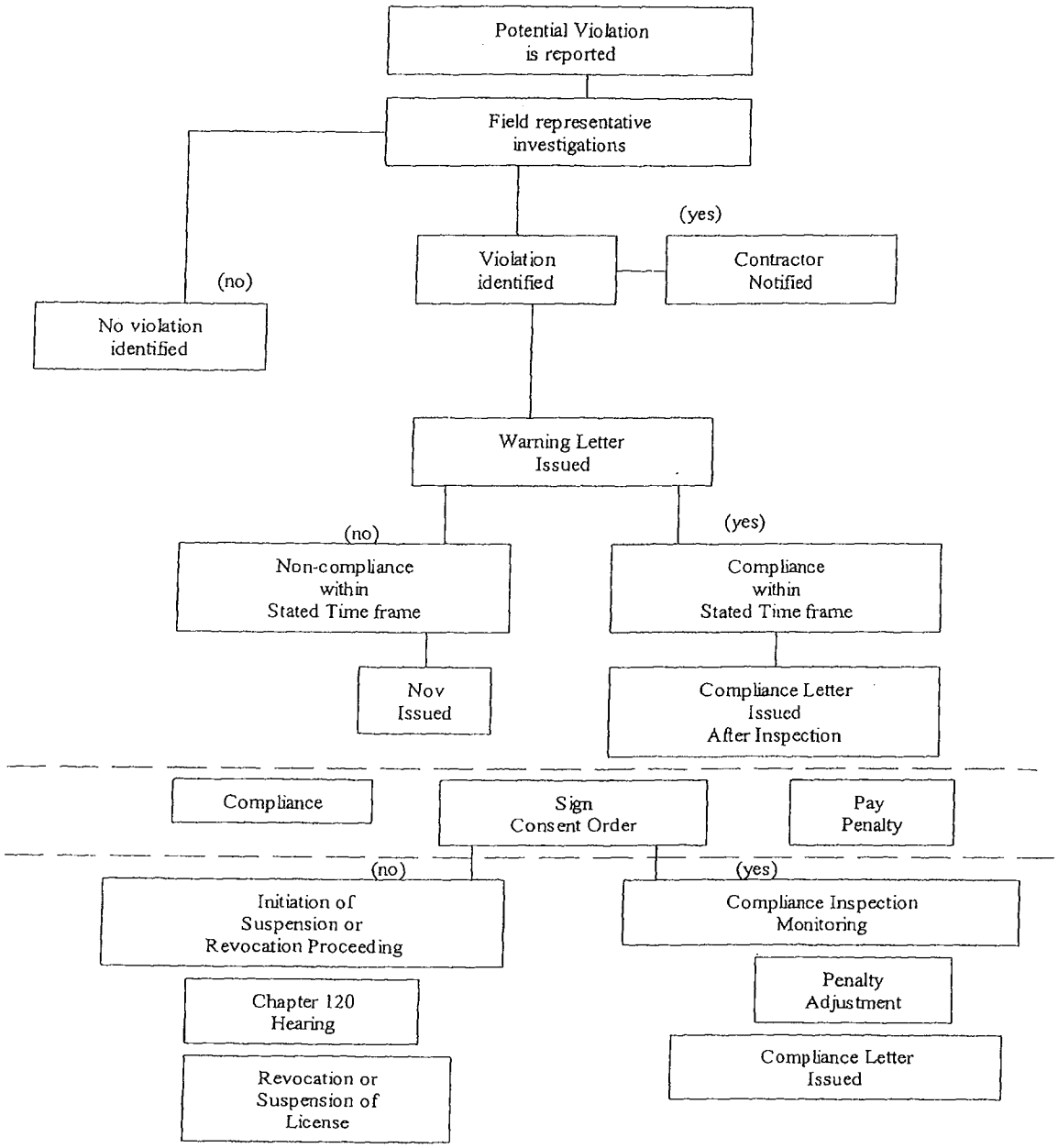

Figure 1. The suggested progression of events from Warning Letter to Revocation procedures.

the standard administrative penalty and points for each violation. The contractor will be requested to contact the Permitting Authority within a specified time to resolve the violation through a consent order. When the contractor meets with the Permitting Authority, the violation and the disciplinary actions will be discussed and a consent order may be negotiated. If the contractor does not contact the Permitting Authority to resolve the violation, the Permitting Authority will proceed with an enforcement action that may include suspension or revocation of the contractor's license. Depending on the severity and/or repetitiveness of the violation, the Permitting Authority may proceed directly with issuing an NOV without sending a warning letter.

After issuance of an NOV to a water well contractor, the Permitting Authority will refer the enforcement matter to the appropriate authority for resolution through a negotiated consent order or litigation.

Consent Order - The Permitting Authority will prepare a proposed consent order for the water well contractor's signature. The consent order will include an administrative penalty and points, which may be adjusted by the Permitting Authority from the administrative penalty and points identified in the NOV based on the adjustment factors contained in Table 3 herein. The consent order also will include any corrective action that is necessary, and any other appropriate disciplinary actions.

Administrative Complaint and Order (ACO) - If the water well contractor refuses to sign a proposed consent order, the Permitting Authority will file an ACO. The ACO will list the corrective action(s) required and propose administrative penalties and points, and any other appropriate disciplinary actions. The rights of the water well contractor to file a petition for a hearing as provided in Chapter 120, F.S., will also be included in the ACO. The ACO may also provide for the suspension or revocation of the water well

contractor's license until such time as the water well contractor complies with the terms of the ACO. If the water well contractor does not timely file a petition for an administrative hearing, the ACO will become a Final Order enforceable in a court of competent jurisdiction. The Permitting Authority may proceed directly to an ACO depending upon the severity and/or repetitiveness of the violation(s).

GUIDELINE 2 - FIRST NOTICE OF DISCIPLINARY ACTION RECOMMENDATIONS

There are certain violations that do not allow for corrective action to be taken by a water well contractor to avoid disciplinary action. Examples of these types of violations include: failure to maintain a current water well contractor's license, failure to provide drilling samples when required by the Permitting Authority, and failure to obtain an applicable permit prior to construction, repair, or abandonment of a well. Appropriate administrative penalties and points assessed against the water well contractor's license and any other appropriate disciplinary actions will be pursued when these violations occur.

GUIDELINE 3 - VIOLATION POINTS SYSTEM AND WORKSHOP PROGRAM

The cumulative total of violations will be monitored using a points system based on the Table 1 recommended administrative penalties. Points are only assessed on those violations for which a Permitting Authority has taken final action. Each point is equivalent to .01 of the administrative penalty assessed by the Permitting Authority. Table 4 illustrates the number of points assessed.

TABLE 4

ADMINISTRATIVE PENALTIES AND POINTS

ADMINISTRATIVE PENALTIES	POINTS ASSESSED
$1000	10
$600	6
$500	5
$400	4
$350	3.5
$250	2.5
$150	1.5
$100	1

Points are accumulated regardless of compliance and can only be reduced by attendance at educational workshops dealing with the regulation of wells and proper well construction techniques. The Department (FDEP) or the Water Management Districts will approve educational workshops for point reduction purposes. No more than 18 hours of workshops can be used to reduce points in any biennial licensing period and a maximum of 27 hours in any two consecutive licensing periods. Each workshop will be rated at 1 point per classroom hour. Points remain on the contractor's license for 3 consecutive years from the effective date of the permitting authority's final action, regardless of renewal, unless reduced by attendance at educational workshops for point reduction purposes. The effective date of point reduction is the date of the workshop attended.

The educational workshops will continue with the same rotation each year to provide regional and statewide participation. The workshop agenda may include rule interpretation with emphasis on minimum standards, compliance, drilling techniques, and other related topics. Additional workshops and related topics may also qualify as educational workshops for point reduction purposes. The number of points associated with the additional workshops and seminars will be determined by the Department and the Water Management Districts.

GUIDELINE 4 – LICENSE ACTIONS

If a contractor accumulates 12 or more points during any 36 consecutive month period, the Permitting Authority may place the water well contractor's license on probation and may restrict the scope of the contractor's practice for 6 to 12 months (see Table 5). If a contractor accumulates 24 or more points during any 36 consecutive month period, the Permitting Authority may suspend the contractor's license for 30 to 180 days. If a contractor accumulates 36 or more points during any 36 consecutive month period, the Permitting Authority may suspend the contractor's license for 181 to 365 days.

The Permitting Authority may revoke a water well contractor's license for 1 year if the contractor accumulates 48 points or more during any 36 consecutive month period. If a water well contractor's license is revoked, in order to be issued a new license, the contractor must take and pass the water well contractor licensing examination. If a water well contractor accumulates 60 points or more during any 36 consecutive month period, the Permitting Authority may permanently revoke the contractor's license. Points will be assessed on the effective date of the consent order or final order.

TABLE 5

POINTS AND RESTRCTION MATRIX

Restriction	Points	Duration
Probation and/or license restrictions	12 or more in any 36 consecutive month period	6 months to 1 year
Suspension – 1st category	24 or more in any 36 consecutive month period	30 days to 6 months
Suspension – 2nd category	36 or more in any 36 consecutive month period	181 days to 1 year
Revocation	48 or more in any 36 consecutive month period	Minimum of 1 year
Permanent Revocation	60 or more in any 36 consecutive month period	Permanent
Note: No more than 18 hours of workshops can be used to reduce points in any biennial licensing period and no more than 27 hours in any two consecutive licensing periods.		

GUIDELINE 5 - REPETITIVE VIOLATIONS

Repetitive violations of the same rule citation are an indication of a licensed contractor's refusal to abide by well construction or permitting requirements.

The well construction rules have been promulgated to protect the water resource and human health. Compliance with these minimum standards is the means by which the resource and human health are protected. Therefore, it is imperative that repetitive violations are minimized.

revocation of a license, assessment of a Major violation penalty and points, probation, or restrictions on the authorized scope of practice.

3) Allowing any other person to use the license.

If found guilty of allowing any other person to use his/her license, the Permitting Authority will revoke the water well contractor's license, in addition to assessing a Major violation penalty and points.

4) Violating or refusing to comply with any provision of Chapter 373, F.S., or a rule adopted by the Department or any Water Management District under the authority of Chapter 373, F.S., or any order of a Permitting Authority previously entered in a disciplinary hearing.

The disciplinary actions that may be taken by the Permitting Authority for the water well contractor's violation of or refusal to comply with Chapter 373, F.S., or rules adopted pursuant to that Chapter will include any one or more of the following - denial of renewal of the license, suspension or revocation of the license, assessment of ~~a~~ penalties and points, probation, or restrictions on the authorized scope of practice. For refusing to comply with the conditions of a final order, the Permitting Authority may suspend or revoke the license.

5) Constructing, repairing, or abandoning a water well without first obtaining all applicable permits.

For not first obtaining all applicable permits, the Permitting Authority may assess the water well contractor penalties and points in the Major category.

6) Having had administrative or disciplinary action relating to water well construction, repair, or abandonment taken by any municipality or county or by any state agency. The Permitting Authority will review these actions before the Permitting Authority takes any disciplinary action of its own.

The disciplinary actions that may be taken by the Permitting Authority for this ground include any one or more of the following -- denial of license renewal, suspension or revocation of the license, assessment of a Major violation penalties and points, probation, or restrictions on the authorized scope of practice.

7) Practicing with a revoked, suspended, or inactive license.

For practicing with a revoked, suspended, or inactive license, the Permitting Authority may issue a cease and desist order, assess an administrative penalty of $1000 per offense, or file a complaint in a court of competent jurisdiction seeking monetary penalties and injunctive relief.

CONCLUSION

Violations and appropriate agency action must be balanced between a strong but reasonable enforcement directive and a good educational workshop program. The disciplinary action guidelines address water well contractors who fail to abide by the minimum water well construction standards or permitting requirements. The workshop program presents an option and second chance for the licensed water well contractor.

CHAPTER 62-532
WATER WELL PERMITTING AND CONSTRUCTION REQUIREMENTS

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62-532.100 Intent of Water Well Permitting And Construction. (Repealed)
Specific Authority 373.309, FS. Law Implemented 373.016, 373.026, 373.043, 373.103, 373.113, 373.306, 373.308, 373.309, FS. History -- New 8-17-74, Formerly 17-21.01, 17-21.001, Amended 7-30-89, 3-11-92, Formerly 17-532.100, Repealed 12-9-96.

62-532.200 Definitions for Water Well Permitting and Construction.
The following words and phrases, when used in this chapter, shall have the following meaning, except where the context clearly indicates a different meaning:

(1) "Abandoned well" means a well the use of which has been permanently discontinued or which is in such a state of disrepair that it cannot be used for its intended purpose or for observation purposes.

(2) "Annulus" or "Annular Space" means any artificially created void existing between a well casing or liner pipe and a bore hole wall or between two casings or between tubing and casing or liner pipe.

(3) "Aquifer" means a geologic formation, group of formations, or part of a formation capable of yielding a significant amount of ground water to wells, springs or surface water.

(4) "Bentonite" means a pumpable grouting material used for plugging or sealing water wells, consisting of a high solid sodium montmorillonite. The grout shall yield solids ranging from 20 to 30 percent, with a minimum density equal to or greater than 9.4 pounds per gallon, and a permeability or approximately 1x10-7 centimeters per second or less, or shall be dry non-treated, high swelling sodium montmorillonite. High swelling is defined as having a minimum swell index of 18 cubic centimeters as determined by ASTM standard D-5890-95.

(5) "Construction of Water Wells" means all parts and acts necessary to obtain ground water by wells, including the location and excavation of the wells, but excluding the installation of pumps and pumping equipment.

(6) "Department" means the Department of Environmental Protection.

(7) "Dewatering" means the use of wells or other such equipment to temporarily lower a water level as may be necessary during construction activities.

(8) "District" means a water management district created pursuant to Chapter 373, F.S.

(9) "Drive Shoe" means any device specifically designed, fabricated, and installed to protect the bottom end of a water well casing or liner pipe from collapse or other damage while the casing or liner pipe is being driven into place in a water well.

(10) "Driven Casing" means casing that has been installed by driving where the bore hole is equal to or smaller in diameter than the nominal outside diameter of the casing.

(11) "Limited use commercial public water system" means a public water system not covered or included in the Florida Safe Drinking Water Act, which serves one or more nonresidential establishments and provides piped water.

(12) "Limited use community public water system" means a public water system not covered or included in the Florida Safe Drinking Water Act, which serves five or more private residences or two or more rental residences, and provides piped water.

(13) "Liner" means a metallic or nonmetallic pipe which is installed either within the outer casing to improve, repair, or protect the outer casing or below the outer casing to seal off caving material which may be encountered in the open hole of the well.

(14) "Multifamily water system" means a water system that provides piped water fro three to four residences, one of which may be a rental residence.

(15) "Neat Cement Grout" means a mixture consisting of water and Portland cement (American Concrete Institute Type I or American Concrete Institute Type III), or other approved types of cement and acceptable amounts of those additives approved for use in cement grouts by the permitting authority.

(16) "Nominal" means those standard sizes of pipe from one-eighth inch to 12 inches, specified on the inside diameter, which may be less than or greater than the number indicated. When referred to the grouting annulus, nominal means either the available void thickness between telescoped casing varying less than 0.20 inches below standard where one inch of grout is required and 0.35 inches below standard where two inches of grout is required, or the average available void thickness between the borehole and outside wall of the casing.

(17) "Permitting Authority" means the Department or any district, or political subdivision that has been delegated the authority to issue permits under Chapter 373, Part III, F.S.

(18) "Private water system" means a water system that provides piped water to one or two residences, one of which may be a rental residence.

(19) "Public water system" means a system for the provision to the public of water for human consumption through pipes or other constructed conveyances, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

(20) "Repair" means any action which involves the physical alteration or replacement of any part of a well, but does not include the alteration or replacement of any portion of a well which is above ground surface.

(21) "Telescoping Casing" means an interior casing extending below and sealed within an exterior casing.

(22) "Water Well" or "Well" means any excavation that is drilled, cored, bored, washed, driven, dug, jetted, or otherwise constructed when the intended use of such excavation is for the location, acquisition, development, or artificial recharge of ground water, but such term does not include any well for the purpose of obtaining or prospecting for oil, natural gas, minerals, or products of mining or quarrying; for inserting media to dispose of oil brines or to repressure oil-bearing or natural gas-bearing formation; for storing petroleum, natural gas, or other products; or for temporary dewatering of subsurface formation for mining, quarrying, or construction purposes.

(23) "Water Well Contractor" means an individual who is responsible for the construction, repair, or abandonment of a water well and who is licensed under Chapter 62-531, F.A.C., to engage in the business of construction, repair, or abandonment of wells.

(24) "Well Seal" means an approved arrangement or device to prevent contaminants from entering the well at the upper terminal.

Specific Authority 373.309, FS. Law Implemented 373.303, 381.0062, 403.852, FS. History -- New 8-17-74, Amended 7-16-81, Formerly 17-21.02, 17-21.020, Amended 7-30-89, 3-11-92, Formerly 17-532.200, Amended 3-28-02.

62-532.300 General Provisions for Water Well Permitting and Construction. (Repealed)

Specific Authority 373.309, FS. Law Implemented 373.043, 373.106, 373.303, 373.306, 373.309, 373.313, 373.316, FS. History -- New 8-17-74, Formerly 17-21.03, 17-21.030, Amended 7-30-89, 3-11-92, Formerly 17-532.300, Repealed 12-9-96.

62-532.400 Permit for Water Well Construction or Repair.

(1) After the effective date upon which a district implements a permit system pursuant to Chapter 373, Part III, F.S., a permit shall be required before beginning construction or repair of any water well within such area. The permit shall be obtained from the permitting authority by making written application on appropriate forms. The application shall be made and submitted to the permitting authority by the owner or by the water well contractor on behalf of the owner and shall contain: the well location, description, use, and such other pertinent information as the permitting authority shall require. Any required fee shall be submitted with the permit applications.

(2) Permit issuance shall require that:

(a) The application is in the proper form and contains the required information; provided that the proposed construction or repair will not violate applicable laws, rules, or orders of the permitting authority.

(b) Additional information shall be required by the permitting authority if needed to assess site specific conditions. Such information includes, but shall not be limited to: geophysical logs, geologic samples and logs, and well pumping tests.

(3) Receipt of the permit shall constitute permission to begin well construction or repair.

(4) The permit shall be available for inspection at the site of the well during construction or repair of the well.

(5) Any permittee who desires to change the location of a well before construction or repair is completed shall apply to the permitting authority for an amendment of his permit. Where a permit fee was required to obtain the original permit no charge shall be made to amend the permit. As a condition to approving an amended permit, the permitting authority shall require the sealing or plugging of the uncompleted well.

(6) Each permit shall be valid for a period of one year. In the event construction or repair is not completed within that time, the permitting authority shall extend the time limit upon written request by the permittee or require the applicant to obtain a new permit before continuing construction or repair of a water well.

(7) Water wells shall be placed to comply with the set back distances in Table I. A drinking water supply well installed by an installation used to serve that installation's operation is exempt from meeting the 500-foot setback distance from on-site slow rate and rapid rate land application, overland flow systems, domestic wastewater residuals land application, phosphogypsum stack systems, and solid waste disposal facilities if reasonable assurance is provided by the installation owner that the ground water and drinking water source are protected. Reasonable assurance shall be demonstrated if:

(a) The planned withdrawal from the drinking water supply well will not cause the discharge from the operation to be captured by the well, or

(b) The drinking water supply well is withdrawing from a confined aquifer, or

(c) Additional monitoring of the ground water and the drinking water is provided to ensure that contaminants are not reaching the drinking water supply well and a commitment is made to treat the drinking water supply if a contaminant is detected or to provide an alternate drinking water supply.

The 100-foot and 75-foot set back distances from sanitary hazards as provided in Table I shall apply.

Specific Authority 373.309, FS. Law Implemented 373.306, 373.308, 373.309, 373.316, 403.862, FS. History New 8-17-74, Amended 9-10-78, Formerly 17-21.04, 17-21.040, Amended 7-30-89, 3-11-92, Formerly 17-532.400, Amended 3-28-02.

62-532.410 Water Well Completion Report.

Within 30 days after completion of the construction or repair of any water well, a written report shall be filed on the appropriate forms.

Specific Authority 373.309, FS. Law Implemented 373.309, FS. History -- New 8-17-74, Formerly 17-21.05, 17-21.050 Amended 7-30-89, Formerly 17-532.410.

62-532.420 Emergency Water Well Permits.

(1) Permission to begin construction or repair of any well may be applied for by telephone when emergency conditions exist which would justify such a request. The permitting authority may grant an emergency permit to avert an imminent and substantial danger to the public health, safety, or welfare.

(2) The applicant for an emergency permit shall reduce his application to writing in accordance with the provisions of Rule 62-532.400, F.A.C., and submit it within ten days. All other provisions of this chapter shall remain applicable.

Specific Authority 373.309, FS. Law Implemented 373.306, 373.309, 373.313, 373.326, FS. History -- New 8-17-74, Formerly 17-21.06, 17-21.060, Amended 7-30-89, Formerly 17-532.420.

62-532.430 Intent to Deny a Water Well Construction Permit.

(1) The permitting authority shall issue an intent to deny whenever it determines that an application for a permit under Rule 62-532.400, F.A.C., fails to meet the requirements of Chapter 373, F.S., or any rule, order, or standard adopted pursuant thereto, or that the proposed well will be harmful to the water resources of the State.

(2) The intent to deny shall:

(a) state the grounds for denial, and

(b) be served in writing upon the owner and user by registered or certified mail.

(3) Any person receiving an intent to deny may petition for a hearing by filing a written petition with the permitting authority within 30 days of the receipt of the intent. The hearing shall be conducted pursuant to Chapter 120, F.S.

Specific Authority 373.309 FS. Law Implemented 373.306, 373.309, 373.313, 373.333, 373.342 FS. History -- New 8-17-74, Formerly 17-21.07,17-21.070, Amended 7-30-89, Formerly 17-532.430.

62-532.440 Abandonment of Water Wells.

A district shall establish a permit system regulating the abandonment of water wells, where it determines such system is reasonably necessary to protect the ground water resources. All abandoned wells shall be filled and sealed in accordance with Rule 62-532.500(4), F.A.C., or with the rules of the permitting authority.

Specific Authority 373.309 FS. Law Implemented 373.306, 373.309, 373.313, 373.316, 373.333, FS. History -- New 8-17-74, Formerly 17-21.09, 17-21.090 Amended 7-30-89, Formerly 17-532.440.

62-532.500 Water Well Construction Standards.

The following minimum standards shall apply to the construction and repair of water wells in the State unless exempted by a water management district rule with the concurrence of the Department. Operation requirements for public water systems are included in Chapter 62-555, F.A.C., and operation requirements for limited use public water systems, multifamily water systems, and private water systems are included in Chapter 64E-8, F.A.C.

(1) Well Casing, Liner Pipe, and Well Screen Requirements.

(a) Well casing, liner pipe, and well screen shall be new or in like new condition. Such well casing, liner pipe, or well screen shall not be used unless free of breaks, corrosion and dents, is straight and true, and not out of round. Welded or seamless black or galvanized steel pipe or casing, or stainless steel pipe or casing; or approved types of nonmetalic pipe shall be used for well casing or liner pipe. All well casing shall conform to one of the following standards: American Society for Testing and Materials (ASTM) A53/A53M-99b, A135-01, A252-98, A589-96, or American Petroleum Institute (API) 5L-2000. Well casing that conforms to any of the aforementioned ASTM or API standards shall also conform to the American National Standard for Welded and Seamless Wrought Steel Pipe (ANSI/ASME B36.10M-2000).

All well casing shall be stenciled with the applicable standard, or proper documentation of manufacturer specifications must be supplied to the permitting authority upon request.

(b) Black or galvanized steel casing installed by driving shall not have less than the dimensions and weights specified below.

Nominal Size (in.)	Outside Diameter (in.)	Wall Thickness (in.)	Plain End Weight (lbs/ft)
1.25	1.660	.140	2.27
1.5	1.900	.145	2.72
2	2.375	.154	3.65
3	3.5	.216	7.58
3.5	4.000	.226	9.11
4	4.5	.237	10.79
5	5.563	.258	14.62
6	6.625	.280	18.97
8	8.625	.277	24.70
10	10.750	.307	34.24
12	12.750	.330	43.77
14-30		.375	
more than 30		.500	

Note: A 4 inch nominal size casing with a wall thickness of .188 inches and a plain end weight of 8.66 pounds/foot may be used if it conforms to standard API 5L-2000, Grade B, 60 KSI tensile strength. Other casing that meets these minimum tensile strength standards shall be acceptable. For example, A53/A53M-99b, Grade B, may also be substituted.

(c) Black or galvanized steel casing or liner pipe set into place without driving shall not have less than the dimensions and weights specified below.

Nominal Size (in.)	Outside Diameter (in.)	Wall Thickness (in.)	Plain End Weight (lbs./ft)
1.25	1.660	.140	2.27
1.5	1.900	.145	2.72
2	2.375	.154	3.65
2.5	2.875	.203	5.79
3	3.500	.18	6.65
3.5	4.00	.188	7.65
4	4.500	.188	8.66

5	5.500	.188	10.79
6	6.625	.188	12.92
8	8.625	.188	16.94
10-16		.250	
>16		.375	

(d) Stainless steel pipe used for casing or liner pipe shall be Schedule 10S of the American National Standards Institute (ANSI/ASME B36.19M-1985), or stronger classification.

(e) Polyvinyl Chloride (PVC) pipe may be used for well casing, liner pipe, and well screens. Any PVC pipe used for well construction or repair shall at a minimum meet the specifications for Schedule 40 or Standard Dimension Ratio (SDR) 21. The appropriate water management district shall require the use of stronger PVC casing if necessary to protect the integrity of the well.

(f) The Department shall approve a well casing or liner pipe not otherwise specified in Rule 62-532.500(1)(a) through (e), F.A.C., if the applicant makes a showing, certified by a professional engineer, to justify that such use would provide an equivalent material strength and durability. The following material has been approved pursuant to this procedure: DNS Well-Cor, Allied Tube and Conduit, A Division of Grinnel Corporation, 1440 Massaro Boulevard, Tampa, Florida, 33619.

Nominal Size (in.)	Outside Diameter (in.)	Wall Thickness (in.)
1.25	1.638	.085
2	2.360	.095
4	4.466	.150

(g) Well casing, liner pipe, and well screens used for potable water well construction or repair shall conform to Section 6 of NSF International Standard 14-2001, Plastics Piping System Components and Related Materials, or NSF International Standard 61-2001, Drinking Water System Components – Health Effects, both of which are adopted and incorporated by reference herein.

(h) Steel well casing and liner pipe shall be joined in a watertight manner by threaded couplings, electrical welding methods, or other methods approved by the appropriate water management district which provide equivalent protection. PVC pipe shall be joined by solvent bonded couplings, threaded couplings, heat welding, or other methods approved by the appropriate water management district which provide equivalent protection.

(i) Nonmetalic and stainless steel well casing or liner pipe shall not be installed by driving unless prior approval is obtained from the appropriate water management

district based on a demonstration that the integrity of the well casing or liner pipe will be maintained. For well casing or liner pipe installed by driving, the casing or pipe shall not butt together inside threaded couplings unless the joint is electrically welded so as to be completely watertight. A drive shoe is required for use on casing or pipe installed by driving unless prior approval is obtained from the appropriate water management district based on a demonstration that a drive shoe is not necessary to maintain the integrity of the casing or pipe.

(2) Well Construction Criteria.

(a) For wells obtaining water from unconsolidated earth materials, casing shall extend from the upper terminus of the well to the well screen. The well screen shall be attached to the casing with a watertight seal.

(b) For wells obtaining water from consolidated earth materials, a continuous casing shall extend from the upper terminus of the well to the top of the uppermost consolidated unit. Wells constructed of telescoping casings shall be considered as a continuous casing provided the grout requirements are satisfied. The bottom end of the well casing shall extend to or below the water level of the aquifer intended to supply water to the well. In addition, all caving zones below the uppermost consolidated unit shall be cased.

(c) For public water system wells using telescoped casing, the casing shall be overlapped by not less than 20 feet when increases or reductions occur in casing size, unless another footage is approved by the appropriate water management district or permitting authority. Not less than two centralizing spacers shall be used in the overlapped sections, and the annular space in the overlapped sections shall be completely sealed with cement grout.

(d) Prevention of Interchange of Water and Loss of Artesian Pressure. All water wells shall be properly designed and constructed to prevent an interchange of water between water bearing zones which may result in deterioration of the quality of water in one or more water bearing zones, or will result in a loss of artesian pressure. If a well cannot be properly completed to prevent such an unauthorized interchange of water between water bearing zones or to prevent a loss of artesian pressure, the well shall be abandoned and plugged in accordance with this chapter or other directions from the permitting authority, which are appropriate for the geological conditions encountered.

(e) Use of Explosives. The use of dynamite or other high-grade explosives in the construction or repair of water wells is prohibited.

(f) Grouting and Sealing.

1. Casing for wells which obtain their water from a rock layer or other such consolidated formation shall, as a minimum, be seated, or sealed with neat cement grout, into that rock layer or other consolidated formation.

2. Except as provided in 3. below, wells with driven casing into natural earth or a bore hole equal to or smaller in diameter than the outside diameter of the casing shall be sealed by adding dry bentonite to the casing string at land surface and allowing that

material to be carried down the outside of the casing as the casing is driven to completion. Dry bentonite shall be applied to maintain a grout seal around the casing.

3. For limited use commercial public water systems, limited use community public water systems, and public water system wells constructed with driven casing, the minimum acceptable seal shall be accomplished by undercutting or under-reaming the last five feet of the hole before seating the casing. A minimum of one foot of such enlarged hole must be into the consolidated formation in which the casing will be seated. The entire enlarged portion of the hole shall be filled with cement grout, and then the casing shall be driven through the cement grout and seated into the enlarged one foot portion of the consolidated formation. The upper 20 feet of casing shall be sealed with no less than a two-inch nominal thickness of cement grout. No other minimum seal shall be acceptable unless approved by the appropriate water management district or delegated permitting authority.

4. For any part of a well casing with an outside diameter of four inches or larger intended to be installed in a bore hole which is larger in diameter than the outside diameter of the casing, the annular space shall be filled from bottom to top with not less than a nominal two inch thickness of neat cement grout. For those well casings with an outside diameter of less than four inches the minimum grout thickness shall be a nominal one inch. The casing shall be centered in the bore hole prior to grouting. In those cases where, during grouting operations, circulation of the grout is lost so that the annular space being grouted cannot be filled in one continuous operation, a tremie pipe shall be installed in the annular space to a point immediately above the zone of lost circulation and the annulus shall be bridged at that point by sand or other approved material introduced through the pipe. Grouting of the annular space shall be completed using the tremie pipe or other equivalent method approved by the permitting authority.

5. Any district may grant individual exceptions or, with the concurrence of the Department, may exempt any areas of that district from the requirements of cement grouting the annular space between the well casing and bore hole wall of that part of a well which penetrates an unconsolidated formation upon demonstration that:

a. The unconsolidated formation material is of such a caving nature that upon stopping the circulation of drilling fluid through the well the aquifer material will immediately cave into and fill up the annular space between the well casing and bore hole wall.

b. A flow space is not created by such construction that will allow any movement of waters along the outside of the well casing which did not naturally occur prior to construction of the well.

6. Except as provided in subparagraph 5. above, grouting and sealing of water wells shall be accomplished by the practices and methods recommended by Appendix C of American Water Works Association (AWWA) Standard A100-97, AWWA Standard for Water Wells, which is adopted and incorporated by reference herein.

7. Alternate grouting methods and materials providing equivalent protection shall be approved in writing by the permitting authority.

(3) Top of the Well.

(a) Well Covers.

1. Whenever there is an interruption in work on the well, such as overnight shutdown, the well opening shall be sealed with a tamper resistant cover.

2. Except for those areas of a district designated by the Department with the concurrence of the permitting authority, any well in which pumping equipment is installed seasonally or periodically shall, whenever pumping equipment is not installed, be capped with steel or reinforced concrete cover, or valve.

3. Any cased well equipped with permanently installed pumping equipment shall have that pumping equipment and any necessary piping installed through a well seal.

4. Any unused well shall be capped in a watertight manner with a threaded, welded, or bolted cover or valve.

(b) Upper Terminus.

1. At the time of well construction, all wells shall be accessible at the upper terminus of the well casing for inspection, servicing, and testing.

2. For private and multi-family water system wells and irrigation wells, the upper terminus of the well casing shall project at least 12 inches above finished grade. Where a potential physical structure or traffic hazard may be present or where a potential public health threat exists, the upper well casing terminus may be placed in an appropriate enclosure terminating at finished grade. The enslosure shall be designed to allow vertical access to the upper well casing terminus for maintenance and inspection and provide for gravity drainage of the enclosure. The upper well casing terminus shall be constructed to a point 18 inches or less below finished grade. The upper well casing terminus shall be sealed with a water tight seal to prevent the entrance of surface water and contaminants into the well.

3. For limited use commercial public water systm wells and limited use community public water system wells constructed on or after April 1, 2002, the upper terminus of the well casing shall project at least 12 inches above the concrete apron around the well.

4. For public water system wells constructed on or after April 1, 2002, the upper terminus of the well casing shall project at least 12 inches above the pump house floor, pump pit floor, or concrete apron around the well.

5. For public water system wells, limited use commercial public water system wells, and limited use community public water system wells constructed on or after April 1, 2002, located at sites subject to flooding, the upper terminus of the well casing shall project at least 12 inches above the 100-year flood elevation and 100-year wave-action elevation. Where it is not practicable to comply with this requirement, the water management district or delegated permitting authority shall allow exceptions on a case-by-case basis provided the upper terminus of the well casing is fitted with a watertight seal.

6. Public water system wells, limited use commercial public water system wells, and limited use community public water system wells, shall be equipped with a sealable opening that will allow introduction of disinfectants and measurement of static water level and drawdown or artesian pressure.

(c) Well Aprons. For public water system wells, limited use commercial public water system wells, and limited use community public water system wells constructed on or after April 1, 2002, not located within a pump house or pump pit, a concrete apron at least six feet by six feet and at least four inches thick shall be centered around the well. The bottom surface of the concrete apron shall be constructed on top of the finished grade, and the top surface of the concrete apron shall be sloped to drain away from the well casing.

(d) Flowing Wells.

If the well flows at land surface, control shall be provided by valved pipe connections, watertight pump connections, or receiving reservoirs set at an altitude corresponding to the artesian head.

(4) Plugging. All abandoned wells shall be plugged by filling them from bottom to top with neat cement grout or bentonite and capped with a minimum of one foot of neat cement grout. An alternate method providing equivalent protection shall be approved in writing by the Department or the permitting authority.

Specific Authority 373.309, FS. Law Implemented 373.309, 373.313, 373.316, FS. History -- New 8-17-74, Formerly 17-21.10, 17-21.100, Amended 7-30-89, 3-11-92, Formerly 17-532.500, Amended 3-28-02.

62-532.510 Water Well Inspections.

(1) During the construction, repair or abandonment of any well, the Department or the permitting authority may conduct inspections as is necessary to ensure conformity with applicable standards. Duly authorized representatives of the Department or the permitting authority shall be given access, at reasonable times, to any premises for the purpose of such inspection.

(2) If during construction, repair, or abandonment, the Department or the permitting authority finds the work does not meet the requirements of rules and standards adopted pursuant to Chapter 373, F.S., the Department or the permitting authority shall give the owner and water well contractor written notice pursuant to the requirements in Section 120.60, F.S.

Specific Authority 373.309, FS. Law Implemented 120.60, 373.316, 373.319, 373.323, 373.333, FS. History -- New 8-17-74, Formerly 17-21.11, 17-21.110, Amended 7-30-89, Formerly 17-532.510.

62-532.600 Enforcement of Water Well Permitting and Construction Requirements.

Enforcement shall be as provided by Section 373.333, F.S.

Specific Authority 373.309, FS. Law Implemented 373.129, 373.333, FS. History -- New 8-17-74, Formerly 17-21.12, 17-21.120, Amended 7-30-89, Formerly 17-532.600.

62-532.610 Penalties for Violation of Water Well Permitting and Construction Requirements.

Penalties shall be as provided by Section 373.336, F.S.
Specific Authority 373.309 FS. Law Implemented 373.336, FS. History -- New 8-17-74, Formerly 17-21.13, Formerly 17-532.610.

Table I

Part A Drinking Water Supply Wells Serving Public Water Systems		
RULE	INSTALLATION	SETBACK (in feet)
Reuse of Reclaimed Water and Land Application 62-610.421(3)	Slow Rate Land Application Restricted Public Access	500 (a)
62-610.521(2)	Rapid Rate Land Application	500 (b)
62-610.621(2)	Overland Flow Systems	500
62-610.621(4)	Transmission Facilities Conveying Reclaimed Water to Restricted Public Access Slow Rate Land Application Systems, Rapid Rate Land Application System, or Overland Flow Systems	100
62-610.471(1)	Public Access, Residential Irrigation, or Edible Crop Slow-rate Land Application Systems	75
62-610.471(3)	Transmission Facilities Conveying Reclaimed Water to Public Access, Residential Irrigation, or Edible Crop Slow-rate Land Application Systems	75
Domestic Wastewater Residuals 62-640.700(4) (b)	Domestic Wastewater Residuals Land Application Areas	500
Phosphogypsum Management 62-673.340(2) (d)	Phosphogypsum Stack Systems	500 (c)
Petroleum Storage Systems 62-761.500(1) (a)	Aboveground or Underground Storage Tanks	100
Solid Waste Management Facilities 62-701.300(2) (b)	Solid Waste Disposal Facilities	500
62-701.300(12) (c)	Yard Trash Disposal	200

62-701.300(13)	Storage or Treatment of Solid Waste in Tanks	100
Permitting and Construction of Public Water Systems 64E-8.002(2)(b)2	Onsite Sewage Disposal Systems	200 (d), 100 (e)
Public Water Systems 62.555.312 (4)	Sanitary Hazard as defined in 62-550 for drinking water supply wells serving public water systems	100
Feedlot and Dairy Wastewater Treatment and Management Requirements 62-670.500(6) (a)	Dairy Farm Waste- Unlined Storage and Treatment, or High Intensity Areas	300
62-670.500(6) (b)	Dairy Farm Waste- Land Application	200

Part B
Drinking Water Supply Wells Serving Limited Use Commercial Public Water Systems and Limited Use Community Public Water Systems

RULE	INSTALLATION	SETBACK (in feet)
Reuse of Reclaimed Water and Land Application 62-610.421(3)	Slow Rate Land Application Restricted Public Access	500 (a)
62-610.521(2)	Rapid Rate Land Application	500 (b)
62-610.621(2)	Overland Flow Systems	100
62-610.621(4)	Transmission Facilities Conveying Reclaimed Water to Restricted Public Access Slow Rate Land Application Systems, Rapid Rate Land Application System, or Overland Flow Systems	100
62-610.471(1)	Public Access, Residential Irrigation, or Edible Crop Slow-rate Land Application Systems	75
62-610.471(3)	Transmission Facilities Conveying Reclaimed Water to Public Access, Residential Irrigation, or Edible Crop Slow-rate Land Application Systems	75

Domestic Wastewater Residuals 62-640.700(4) (b)	Domestic Wastewater Residuals Land Application Areas	500
Phosphogypsum Management 62-673.340(2) (d)	Phosphogypsum Stack Systems	500 (c)
Petroleum Storage Systems 62-761.500(1) (a)	Aboveground or Underground Storage Tanks	100
Solid Waste Management Facilities 62-701.300(2) (b)	Solid Waste Disposal Facilities	500
62-701.300(12) (a)	Yard Trash Disposal (no set back required from on-site yard trash disposal)	100
62-701.300(13)	Storage or Treatment of Solid Waste in Tanks	100
Drinking Water Systems 64E-8.002(2)(b)2	Onsite Sewage Disposal Systems	200 (d), 100 (e)
	Sanitary Hazard	100 (f)
64E-8.002(2)(b)1	Pesticide Treated Slab	25(g)
Feedlot and Dairy Wastewater Treatment and Management Requirements 62-670.500(6)a)	Dairy Farm Waste - Unlined Storage and Treatment, or High Intensity Areas	300
62-670.500(6)a)	Dairy Farm Waste- Land Application	200

Part C
Private Wells
Multifamily Wells

RULE	INSTALLATION	SETBACK (in feet)
Reuse of Reclaimed Water and Land Application 62-610.421(3)	Slow Rate Land Application Restricted Public Access	500 (a)
62-610.521(2)	Rapid Rate Land Application	500 (b)
62-610.621(2)	Overland Flow Systems	100
62-610.471(1)	Public Access, Residential Irrigation, or Edible Crop Slow-rate Land Application Systems	75
Domestic Wastewater Residuals 62-640.700(4) (b)	Domestic Wastewater Residuals Land Application Areas	300
Petroleum Storage Systems 62-761.500(1) (a)	Aboveground or Underground Storage Tanks	100
Solid Waste Management Facilities 62-701.300(2) (b)	Solid Waste Disposal Facilities	500
62-701.300(12) (a)	Yard Trash Disposal	100
62-701.300(13)	Storage of Treatment of Solid Waste in Tanks	100
Drinking Water Systems 64E-8.003(1)	Onsite Sewage Disposal Systems	75
	Sanitary Hazard	75 (f)
64E-8.002(2)(b)1	Pesticide Treated Slab	25 (g)

Feedlot and Dairy Wastewater Treatment and Management Requirements 62-670.500(6) (a)	Dairy Farm Waste- Unlined Storage and Treatment, or High Intensity Areas	300
62-670.500(6) (b)	Dairy Farm Waste- Land Application	200

Part D Irrigation Wells		
RULE	INSTALLATION	SETBACK (in feet)
Standards for Onsite Sewage Treatment and Disposal Systems 64E-6.005(1)(d)	Onsite Sewage Disposal System	50

(a) This distance shall be reduced to 200 feet if facility Class I reliability is provided and shall be reduced to 100 feet if both facility Class I reliability and high-level disinfection are provided.

(b) This distance shall be reduced to 200 feet if both facility Class I reliability and high-level disinfection are provided and if the applicant provides reasonable assurance that applicable water quality standards will not be violated at the point of withdrawal.

(c) This distance applies only to shallow water supply wells (i.e., potable water wells that pump from an unconfined water table aquifer).

(d) This distance applies to public drinking water supply wells that serve water systems having total sewage flows greater than 2,000 gallons per day.

(e) This distance applies to public drinking water supply wells that serve water systems having total sewage flows less than or equal to 2,000 gallons per day.

(f) Sanitary Hazard: means a physical condition which involves or affects any part of a drinking water system or raw water source, and that creates an imminent or potentially serious risk to the health of any person who consumes water from that system. Examples of sanitary hazards include drainage wells; commercial applications of pesticides or fertilizers, such as golf courses, nurseries and crop production sites; animal feeding operations; improperly abandoned wells; active or abandoned phosphate mines; pipelines carrying industrial chemicals; railroad yards; domestic wastewater; cemeteries; stormwater retention/detention basins; tanks or lagoons used to store, treat, or dispose of liquid wastes; cattle dipping vats; tomato or egg wash wastewater land application areas; or waste transfer stations.

(g) This distance shall be reduced to 15 feet for wells that are installed through an impervious strata of clay, hardpan, or rock and that are constructed in accordance with chapter 62-532.500(2)(f)3.

CHAPTER 62-555 PERMITTING, CONSTRUCTION, OPERATION, AND MAINTENANCE OF PUBLIC WATER SYSTEMS

PART I	PURPOSE AND INTENT
62-555.101	Authority, Intent, and Policy. (Repealed)
62-555.102	Scope. (Repealed)
62-555.103	Effective Date. (Repealed)
PART II	DEFINITIONS
62-555.200	Definitions. (Repealed)
PART III	CONSTRUCTION, OPERATION, AND MAINTENANCE OF PUBLIC WATER SYSTEMS
62-555.300	General. (Repealed)
62-555.310	Source and Siting Requirements for Public Water Systems.
62-555.312	Location of Public Water System Wells.
62-555.314	Location of Public Water System Mains.
62-555.315	Public Water System Wells - Security; Number; Capacity; Under the Direct Influence of Surface Water; Control of Copper Pipe Corrosion and Black Water; and Disinfection and Bacteriological Surveys and Evaluations.
62-555.320	Design and Construction of Public Water Systems.
62-555.322	Prohibition on Use of Lead Pipe, Solder, and Flux.
62-555.325	Fluoridation.
62-555.330	Engineering References for Public Water Systems.
62-555.335	Guidance Documents for Public Water Systems.
62-555.340	Disinfection and Bacteriological Evaluation of Public Water System Components.
62-555.345	Certification of Construction Completion and Clearance for Public Water System Components.
62-555.348	Planning for Expansion of Public Water System Source, Treatment, or Storage Facilities.
62-555.350	Operation and Maintenance of Public Water Systems.
62-555.355	Water Samples for Laboratory Test. (Repealed)
62-555.357	New Water System Capacity Development Financial and Managerial Operations Plans.
62-555.360	Cross-Connection Control for Public Water Systems.
62-555.365	Changes in Ownership of Public Water Systems.
PART IV	PUBLIC WATER SYSTEM GENERAL CONSTRUCTION PERMITS
62-555.400	General. (Repealed)
62-555.401	General Permit for Construction of Lead or Copper Corrosion Control, or Iron or Manganese Sequestration, Treatment Facilities for Small or Medium Public Water Systems.
62-555.405	General Permit for Construction of Water Main Extensions for Public Water Systems.
62-555.410	General Conditions for All General Drinking Water Permits. (Repealed)
PART V	PUBLIC WATER SYSTEM CONSTRUCTION PERMITTING
62-555.500	General.
62-555.510	Public Water Supply Well Construction Permit. (Repealed)
62-555.520	Applying for Public Water System Construction Permits.
62-555.525	Capacity Development Provisions of Public Water System Permitting.
62-555.527	Capacity Assessment for Transfer Systems. (Repealed)
62-555.528	Applying for Reratings of Public Water System Treatment Plants.
62-555.530	Processing Applications or Notices for, and Issuing or Denying, Public Water System Construction Permits.
62-555.533	Conditions for Specific Construction Permits for Public Water Systems.
62-555.536	Modification, Transfer, or Revocation of Public Water System Construction Permits.
62-555.540	General Permit for Construction of an Extension to a Public Drinking Water Distribution System. (Transferred to 62-555.405)
PART VI	ADDITIONAL REQUIREMENTS FOR SURFACE WATER SYSTEMS
62-555.600	Scope of Additional Requirements for Surface Water Systems. (Repealed)
62-555.610	Surface Water Treatment Requirements. (Repealed)
62-555.620	Surface Water Filtration. (Repealed)
62-555.630	Surface Water Disinfection. (Repealed)
PART IX	FORMS AND INSTRUCTIONS
62-555.900	Forms and Instructions.
62-555.910	Forms and Instructions for the Public Water System Supervision Program. (Repealed)

PART III CONSTRUCTION, OPERATION, AND MAINTENANCE OF PUBLIC WATER SYSTEMS

62-555.310 Source and Siting Requirements for Public Water Systems.

(1) Suppliers of water shall obtain raw water from the best available source that is economically sensible and technically possible and shall make an effort to protect the source from contamination.

(2) To the extent practicable, suppliers of water and persons constructing public water systems shall avoid locating any part of a new public water system, and any expansion of an existing public water system, at any site that:

(a) Is subject to significant risk from contamination that could adversely affect the quality of drinking water or is subject to significant risk from floods, fires, or other disasters that could cause a breakdown of the public water system or any portion thereof; or

(b) Except for surface water impoundments, reservoirs, or intake structures (including pumping facilities) and except for underground piping and appurtenances, is within the floodplain of a 100-year flood or is lower than any recorded high tide.

Specific Authority 403.861(9) FS. Law Implemented 403.852(12), 403.853(1) FS. History–New 11-19-87, Formerly 17-22.610, Amended 1-18-89, Formerly 17-555.310, Amended 8-28-03.

62-555.312 Location of Public Water System Wells.

For the purpose of this section, the phrase "new wells" shall mean wells being newly connected, or reconnected, to a public water system (PWS).

(1) All wells that were connected to a PWS on or after November 9, 1977, but before December 13, 1983, and wells that are, or will be, supplying a PWS serving premises with an estimated collective sewage flow of 2,000 gallons or less per day and that were, or will be, connected to the PWS on or after December 13, 1983, shall be no closer than 100 feet from any "on-site sewage treatment and disposal system" (OSTDS) as defined in Section 381.0065(2), F.S., and Rule 64E-6.002, F.A.C., regardless of the location of the OSTDS. Wells that are, or will be, supplying a PWS serving premises with an estimated collective sewage flow greater than 2,000 gallons per day and that were, or will be, connected to the PWS on or after December 13, 1983, shall be no closer than 200 feet from any OSTDS, regardless of the location of the OSTDS.

(2) New wells shall not be placed within the setback distances discussed in subsection 62-532.400(7), F.A.C., and listed in Part A of Table I in Chapter 62-532, F.A.C.

(3) New wells shall be located no closer than 100 feet from other sanitary hazards that pose a potentially high risk to ground water quality and public health and shall be located no closer than 50 feet from other sanitary hazards that pose a moderate risk to ground water quality and public health. The following are examples of other sanitary hazards that pose a potentially high risk: active or abandoned mines; airplane or train fueling or maintenance areas at airports and railroad yards; animal feeding operations other than those regulated under Rule 62-670.500, F.A.C.; concentrated aquatic animal production facilities; domestic wastewater collection/transmission systems; drainage or injection wells, oil or gas production wells, and improperly constructed or abandoned wells (i.e., wells not constructed or abandoned in accordance with Chapter 62-532, F.A.C.); fertilizer, herbicide, or pesticide storage areas at agricultural sites, golf courses, nurseries, and parks; graveyards; impoundments and tanks that process, store, or treat domestic wastewater, domestic wastewater residuals, or industrial fluids or waste and that are not regulated under Rule 62-670.500, F.A.C.; industrial waste land application areas other than those regulated under Rule 62-670.500, F.A.C.; junkyards and salvage or scrap yards; pastures with more than five grazing animals per acre; pipelines conveying petroleum products, chemicals, or industrial fluids or wastes; and underground storage tanks that are not regulated under Chapter 62-761, F.A.C., but are used for bulk storage of a liquid pollutant or hazardous substance (as defined in Chapter 62-761, F.A.C.) other than sodium hypochlorite solution. The following are examples of other sanitary hazards that pose a moderate risk: aboveground storage tanks that are not regulated under Chapter 62-761, F.A.C., but are used for bulk storage of a liquid pollutant or hazardous substance (as defined in Chapter 62-761, F.A.C.) other than sodium hypochlorite solution; fertilizer, herbicide, or pesticide application areas that are not under the ownership or control of the supplier of water at agricultural sites, golf courses, nurseries, and parks; railroad tracks; stormwater detention or retention basins; and surface water.

(4) For wells connected to a community water system on or after August 28, 2003, except those connected under a construction permit for which the Department received a complete application before August 28, 2003, continuing protection of the well from the sanitary hazards described in subsection (3) above shall be provided during the entire useful life of the well through one of the following means:

(a) Ownership by the water supplier of all land within 100 feet of the well;

(b) Control by the water supplier of all land within 100 feet of the well via easements, lease agreements, or deed restrictions that appropriately limit use of the land;

(c) Wellhead protection, zoning, or other land use regulations that appropriately limit use of all land within 100 feet of the well; or

(d) Other appropriate means.

(5) New wells shall be located on their sites in such a manner that the wells are in an area free from, or least subject to, inundation with surface drainage and flood water; and to the extent practicable, new wells shall be located on their sites in such a manner that the wells are "upstream" from on-site or off-site sanitary hazards when considering the direction of ground water movement.

(6) The Department or the appropriate water management district or delegated permitting authority shall approve a decrease in the standard well setback distances described in subsections (1) through (4) above if justified by any of the following: the presence, thickness, and extent of natural barriers such as impermeable geological strata; the design and construction of the well, including the depth of the well; the drinking water treatment provided; or the use of alternative means to reduce public health risks, such as the use of encasement or restrained joints to eliminate or minimize leakage from a pipeline that is a sanitary hazard or the use of additional drinking water monitoring. However, water management districts and delegated permitting authorities shall obtain the Department's concurrence before decreasing well setback distances because of either the type of drinking water treatment provided or the use of alternative means to reduce public health risks.

Specific Authority 373.309(1), 373.337, 403.861(9) FS. Law Implemented 373.309(1), 403.852(12) FS. History–Formerly 17-22.615(2), Amended 1-18-89, 5-7-90, Formerly 17-555.312, Amended 8-28-03.

62-555.314 Location of Public Water System Mains.

For the purpose of this section, the phrase "water mains" shall mean mains, including treatment plant process piping, conveying either raw, partially treated, or finished drinking water; fire hydrant leads; and service lines that are under the control of a public water system and that have an inside diameter of three inches or greater.

(1) Horizontal Separation Between Underground Water Mains and Sanitary or Storm Sewers, Wastewater or Stormwater Force Mains, Reclaimed Water Pipelines, and On-Site Sewage Treatment and Disposal Systems.

(a) New or relocated, underground water mains shall be laid to provide a horizontal distance of at least three feet between the outside of the water main and the outside of any existing or proposed storm sewer, stormwater force main, or pipeline conveying reclaimed water regulated under Part III of Chapter 62-610, F.A.C.

(b) New or relocated, underground water mains shall be laid to provide a horizontal distance of at least three feet, and preferably ten feet, between the outside of the water main and the outside of any existing or proposed vacuum-type sanitary sewer.

(c) New or relocated, underground water mains shall be laid to provide a horizontal distance of at least six feet, and preferably ten feet, between the outside of the water main and the outside of any existing or proposed gravity- or pressure-type sanitary sewer, wastewater force main, or pipeline conveying reclaimed water not regulated under Part III of Chapter 62-610, F.A.C. The minimum horizontal separation distance between water mains and gravity-type sanitary sewers shall be reduced to three feet where the bottom of the water main is laid at least six inches above the top of the sewer.

(d) New or relocated, underground water mains shall be laid to provide a horizontal distance of at least ten feet between the outside of the water main and all parts of any existing or proposed "on-site sewage treatment and disposal system" as defined in Section 381.0065(2), F.S., and Rule 64E-6.002, F.A.C.

(2) Vertical Separation Between Underground Water Mains and Sanitary or Storm Sewers, Wastewater or Stormwater Force Mains, and Reclaimed Water Pipelines.

(a) New or relocated, underground water mains crossing any existing or proposed gravity- or vacuum-type sanitary sewer or storm sewer shall be laid so the outside of the water main is at least six inches, and preferably 12 inches, above or at least 12 inches below the outside of the other pipeline. However, it is preferable to lay the water main above the other pipeline.

(b) New or relocated, underground water mains crossing any existing or proposed pressure-type sanitary sewer, wastewater or stormwater force main, or pipeline conveying reclaimed water shall be laid so the outside of the water main is at least 12 inches above or below the outside of the other pipeline. However, it is preferable to lay the water main above the other pipeline.

(c) At the utility crossings described in paragraphs (a) and (b) above, one full length of water main pipe shall be centered above or below the other pipeline so the water main joints will be as far as possible from the other pipeline. Alternatively, at such crossings, the pipes shall be arranged so that all water main joints are at least three feet from all joints in vacuum-type sanitary sewers, storm sewers, stormwater force mains, or pipelines conveying reclaimed water regulated under Part III of Chapter 62-610, F.A.C., and at least six feet from all joints in gravity- or pressure-type sanitary sewers, wastewater force mains, or pipelines conveying reclaimed water not regulated under Part III of Chapter 62-610, F.A.C.

(3) Separation Between Water Mains and Sanitary or Storm Sewer Manholes.

(a) No water main shall pass through, or come into contact with, any part of a sanitary sewer manhole.

(b) Effective August 28, 2003, water mains shall not be constructed or altered to pass through, or come into contact with, any part of a storm sewer manhole or inlet structure. Where it is not technically feasible or economically sensible to comply with this requirement (i.e., where there is a conflict in the routing of a water main and a storm sewer and where alternative routing of the water main or the storm sewer is not technically feasible or is not economically sensible), the Department shall allow exceptions to this requirement (i.e., the Department shall allow construction of conflict manholes), but suppliers of water or persons proposing to construct conflict manholes must first obtain a specific permit from the Department in accordance with Part V of this chapter and must provide in the preliminary design report or drawings, specifications, and design data accompanying their permit application the following information:

1. Technical or economic justification for each conflict manhole.
2. A statement identifying the party responsible for maintaining each conflict manhole.
3. Assurance of compliance with the design and construction requirements in sub-subparagraphs a. through d. below.

a. Each water main passing through a conflict manhole shall have a flexible, watertight joint on each side of the manhole to accommodate differential settling between the main and the manhole.

b. Within each conflict manhole, the water main passing through the manhole shall be installed in a watertight casing pipe having high impact strength (i.e., having an impact strength at least equal to that of 0.25-inch-thick ductile iron pipe).

c. Each conflict manhole shall have an access opening, and shall be sized, to allow for easy cleaning of the manhole.

d. Gratings shall be installed at all storm sewer inlets upstream of each conflict manhole to prevent large objects from entering the manhole.

(4) Separation Between Fire Hydrant Drains and Sanitary or Storm Sewers, Wastewater or Stormwater Force Mains, Reclaimed Water Pipelines, and On-Site Sewage Treatment and Disposal Systems. New or relocated fire hydrants with underground drains shall be located so that the drains are at least three feet from any existing or proposed storm sewer, stormwater force main, or pipeline conveying reclaimed water regulated under Part III of Chapter 62-610, F.A.C.; at least three feet, and preferably ten feet, from any existing or proposed vacuum-type sanitary sewer; at least six feet, and preferably ten feet, from any existing or proposed gravity- or pressure-type sanitary sewer, wastewater force main, or pipeline conveying reclaimed water not regulated under Part III of Chapter 62-610, F.A.C.; and at least ten feet from any existing or proposed "on-site sewage treatment and disposal system" as defined in Section 381.0065(2), F.S., and Rule 64E-6.002, F.A.C.

(5) Exceptions. Where it is not technically feasible or economically sensible to comply with the requirements in subsection (1) or (2) above, the Department shall allow exceptions to these requirements if suppliers of water or construction permit applicants provide technical or economic justification for each exception and provide alternative construction features that afford a similar level of reliability and public health protection. Acceptable alternative construction features include the following:

(a) Where an underground water main is being laid less than the required minimum horizontal distance from another pipeline and where an underground water main is crossing another pipeline and joints in the water main are being located less than the required minimum distance from joints in the other pipeline:

1. Use of pressure-rated pipe conforming to the American Water Works Association standards incorporated into Rule 62-555.330, F.A.C., for the other pipeline if it is a gravity- or vacuum-type pipeline;

2. Use of welded, fused, or otherwise restrained joints for either the water main or the other pipeline; or

3. Use of watertight casing pipe or concrete encasement at least four inches thick for either the water main or the other pipeline.

(b) Where an underground water main is being laid less than three feet horizontally from another pipeline and where an underground water main is crossing another pipeline and is being laid less than the required minimum vertical distance from the other pipeline:

1. Use of pipe, or casing pipe, having high impact strength (i.e., having an impact strength at least equal to that of 0.25-inch-thick ductile iron pipe) or concrete encasement at least four inches thick for the water main; and

2. Use of pipe, or casing pipe, having high impact strength (i.e., having an impact strength at least equal to that of 0.25-inch-thick ductile iron pipe) or concrete encasement at least four inches thick for the other pipeline if it is new and is conveying wastewater or reclaimed water.

Specific Authority 403.861(9) FS. Law Implemented 403.853(3), 403.861(12) FS. History–New 1-1-93, Formerly 17-555.314, Amended 8-28-03.

62-555.315 Public Water System Wells - Security; Number; Capacity; Under the Direct Influence of Surface Water; Control of Copper Pipe Corrosion and Black Water; and Disinfection and Bacteriological Surveys and Evaluations.
In addition to the rules set forth in Chapters 62-524 and 62-532, F.A.C., the requirements of this section apply to public water system wells.

(1) Well Security. Wellheads shall be enclosed by fences with lockable access gates, housed in lockable buildings or enclosures, or otherwise protected against tampering, vandalism, and sabotage.

(2) Number of Wells. A minimum of two wells shall be connected to each community water system that is using only ground water and that is serving, or is designed to serve, 350 or more persons or 150 or more service connections.

(3) Well Capacity. The total well capacity connected to a water system using only ground water shall equal at least the system's design maximum-day water demand (including design fire-flow demand if fire protection is being provided). In addition, if the water system is a community system serving, or designed to serve, 350 or more persons or 150 or more service connections, the total well capacity with the largest producing well out of operation shall equal at least the design average daily water demand, and preferably the design maximum-day water demand, for the system. If a community water system interconnects with another community water system to meet the requirements in subsection (2) above regarding number of wells, the total well capacity for the combined systems shall equal at least the total design maximum-day water demand for the combined systems and, with the largest producing well out of operation for the combined systems, shall equal at least the design average daily water demand, and preferably the design maximum-day water demand, for the combined systems.

(4) Wells Under the Direct Influence of Surface Water. Ground water from some wells, especially shallow wells and radial horizontal collector wells, and ground water from springs or infiltration galleries may be under the direct influence of surface water. The Department shall determine whether ground water is under the direct influence of surface water by using the procedures

described in subsection 62-550.517(2), F.A.C., and subparagraph 62-550.817(2)(a)1., F.A.C. Suppliers of water using ground water that is determined by the Department to be under the direct influence of surface water shall comply with applicable requirements under Rule 62-550.817, F.A.C.

(5) Control of Copper Pipe Corrosion and Black Water. Applicants for a construction permit to connect a new or altered well to a community water system, except those applicants who have submitted a complete application to the Department before August 28, 2003, shall include in the preliminary design report or design data accompanying their permit application the results of measurements for alkalinity, dissolved iron, dissolved oxygen, pH, total sulfide, and turbidity in a minimum of one sample of raw water from the new or altered well. These measurements may be performed by any authorized representative of the supplier of water or applicant; but field measurements for dissolved oxygen, pH, and turbidity shall be performed following the appropriate procedures in the Department of Environmental Protection Standard Operating Procedures for Field Activities, DEP-SOP-001/01, as incorporated into Rule 62-160.800, F.A.C., and all other measurements shall be performed using an appropriate method referenced in subsection 62-550.550(1), F.A.C., or in *Standard Methods for the Examination of Water and Wastewater* as adopted in Rule 62-555.335, F.A.C. If the result for total sulfide equals or exceeds 0.3 mg/L, the applicant shall do the following:

(a) Provide aeration or other appropriate treatment of the water from the new or altered well to remove total sulfide as necessary. Recommended types of aeration treatment for different water quality ranges are listed in the table below, which is incorporated herein as guidance and not as a requirement. Direct chlorination shall not be used to remove (i.e., oxidize) 0.3 mg/L or more of total sulfide unless the elemental sulfur formed during chlorination is removed.

POTENTIAL FOR IMPACTS WITHOUT TOTAL SULFIDE REMOVAL	WATER QUALITY RANGES	POTENTIAL WATER TREATMENT
Low	Total Sulfide < 0.3 mg/L Dissolved Iron < 0.1 mg/L[1]	Direct Chlorination[2]
Moderate	0.3 mg/L ≤ Total Sulfide ≤ 0.6 mg/L @ pH ≤ 7.2 or 0.3 mg/L ≤ Total Sulfide ≤ 0.6 mg/L @ pH > 7.2	Conventional Aeration[3] (maximum removal efficiency ≈ 40-50%) or Conventional Aeration with pH Adjustment[4,5] (maximum removal efficiency ≈ 40-50%)
Significant	0.6 mg/L < Total Sulfide ≤ 3.0 mg/L @ pH ≤ 7.2 or 0.6 mg/L < Total Sulfide ≤ 3.0 mg/L @ pH > 7.2	Forced Draft Aeration[3] (maximum removal efficiency ≈ 90%) or Forced Draft Aeration with pH Adjustment[4,5] (maximum removal efficiency ≈ 90%)
Very Significant	Total Sulfide > 3.0 mg/L	Packed Tower Aeration with pH Adjustment[4,5] (maximum removal efficiency > 90%)

[1]High iron content raises concern if chlorination alone is used and significant dissolved oxygen exists in the source water. Filtration may be required to remove particulate iron prior to water distribution.

[2]Direct chlorination of sulfide in water in the pH range normally found in potable sources produces elemental sulfur and increased turbidity. Finished-water turbidity should not be more than two nephelometric turbidity units greater than raw-water turbidity.

[3]Increased dissolved oxygen entrained during aeration may increase corrosivity.

[4]Reduction of alkalinity during pH adjustment and high dissolved oxygen entrained during aeration may increase corrosivity. Corrosion control treatment such as pH adjustment, alkalinity recovery, or use of inhibitors may be required.

[5]High alkalinity will make pH adjustment more costly, and use of other treatment may be in order. Treatment that preserves the natural alkalinity of the source water may enhance the stability of finished water.

(b) Provide in the preliminary design report or design data accompanying the applicant's permit application a water quality and treatment evaluation affirmatively demonstrating that the secondary maximum contaminant levels for color and odor will not be exceeded in the water supplier's drinking water distribution system or in water customers' potable water systems.

(6) Disinfection of Wells and Bacteriological Surveys and Evaluations of Wells. Wells shall be disinfected to inactivate any microbiological contaminant that may have been introduced into the wells during construction, repair, or maintenance and to allow the true microbiological character of well water to be determined through a bacteriological survey.

(a) Before new or altered wells, wells out of operation for more than six months, wells in which new pumping equipment has been installed, and wells taken out of operation for maintenance that might have contaminated the well are placed into, or returned to, operation, they shall be disinfected in accordance with Sections 1. through 4. and Section 5.2 of American Water Works Association (AWWA) Standard C654 as incorporated into Rule 62-555.330, F.A.C. In Section 5.2 of the aforementioned AWWA standard, references to Section 5.1 shall be interpreted to mean paragraph 62-555.315(6)(b) or (c), F.A.C., as appropriate. This paragraph does not apply to, and disinfection is not required for, wells that officially have been determined to be under the direct influence of surface water per subsection 62-550.517(2), F.A.C., and subparagraph 62-550.817(2)(a)1., F.A.C., and that are pumping to treatment plants with filtration and disinfection facilities meeting all applicable requirements in Rule 62-550.817, F.A.C.

(b) Following disinfection of a new or altered well or a well that has been out of operation for more than six months, a bacteriological survey of the well shall be conducted as set forth in subparagraphs 1. through 3. below unless the well is already considered microbially contaminated or susceptible to microbial contamination per subparagraph 2. below or paragraph (f) below. The total residual chlorine measurements required under subparagraph 1. may be performed by any authorized representative of the supplier of water or person constructing or altering the well but shall be performed following the appropriate procedures in the Department of Environmental Protection Standard Operating Procedures for Field Activities, DEP-SOP-001/01 as incorporated into Rule 62-160.800, F.A.C. The total coliform or *E. coli* analyses required under subparagraph 1. shall be performed by a laboratory of the Department of Health (DOH) or a laboratory certified by the DOH to perform bacteriological analyses of drinking water and shall be performed using an appropriate method referenced in subsection 62-550.550(1), F.A.C.

1. A total of at least 20 samples – each taken on a separate but consecutive workday and taken at least six hours apart from the other samples – shall be collected after first pumping the well to waste to remove all residual chlorine and then pumping the well to waste at a rate approximately equal to that of the permanent well pump for at least 15 minutes before each sample is collected, and the samples shall be analyzed for the presence of total residual chlorine, total coliform, and *E. coli*. Upon a showing by the supplier of water, or a determination by the Department, that historical records or other circumstances warrant it, the Department shall allow the required number of samples or the sample collection interval to be modified. Under no circumstances shall the Department allow fewer than ten samples to be collected, and under no circumstances shall the Department allow more than two samples to be collected per day. If the Department allows collection of two samples per day, the samples shall be collected at least six hours apart, and the well shall be pumped to waste for at least 15 minutes before each sample is collected.

2. If any sample shows the presence of free or combined chlorine, the sample shall be considered invalid. If any sample shows the presence of *E. coli*, the well shall be considered microbially contaminated unless the Department invalidates the sample or the supplier of water determines and eliminates the source of the *E. coli*, in which case the well shall be redisinfected in accordance with paragraph (a) above and resampled in accordance with subparagraph 1. above. If more than ten percent of the total number of samples collected show the presence of total coliform or if either of the last two samples collected shows the presence of total coliform, the well shall be redisinfected as necessary in accordance with paragraph (a) above and resampled in accordance with subparagraph 1. above or shall be considered susceptible to microbial contamination. If a well is considered microbially contaminated or susceptible to microbial contamination, the supplier of water shall provide treatment that reliably achieves at least four-log inactivation or removal of viruses in accordance with paragraph 62-555.320(12)(b), F.A.C. Additionally, the supplier of water shall conduct physical characteristics monitoring in accordance with subsection 62-550.517(2), F.A.C., when notified in writing by the Department to do so.

3. Bacteriological test results shall be considered unacceptable if the tests were completed more than 60 days before the Department received the results.

(c) Following disinfection of a well in which new pumping equipment has been installed or a well taken out of operation for maintenance that might have contaminated the well, a bacteriological evaluation of the well shall be conducted as set forth in subparagraphs 1. through 3. below unless the well is already considered microbially contaminated or susceptible to microbial contamination per subparagraph 62-555.315(6)(b)2., F.A.C., or paragraph (f) below. The total residual chlorine measurements required under subparagraph 1. may be performed by any authorized representative of the supplier of water but shall be performed following the appropriate procedures in the Department of Environmental Protection Standard Operating Procedures for Field Activities, DEP-SOP-001/01 as incorporated into Rule 62-160.800, F.A.C. The total coliform analyses required under subparagraph 1. shall be performed by a laboratory of the Department of Health (DOH) or a laboratory certified by the DOH to perform bacteriological analyses of drinking water and shall be performed using an appropriate method referenced in subsection 62-550.550(1), F.A.C.

1. After pumping the well to waste for at least 15 minutes with zero chlorine residual, a total of at least two samples – each taken on a separate day and taken at least six hours apart from the other sample(s) – shall be collected, and the samples shall be analyzed for the presence of total residual chlorine and total coliform.

2. If any sample shows the presence of free or combined chlorine, the sample shall be considered invalid. If any sample shows the presence of total coliform, the well shall be redisinfected as necessary in accordance with paragraph (a) above and resampled in accordance with subparagraph 1. above until two consecutive samples show the absence of total coliform.

3. Bacteriological test results shall be considered unacceptable if the tests were completed more than 60 days before the Department received the results.

(d) Except as allowed under paragraph (e) below and except as allowed under any special construction permit condition established in accordance with paragraph 62-555.533(2)(f), F.A.C., no disinfected well shall be placed into, or returned to, operation until a bacteriological survey or evaluation has been completed if required by paragraph (b) or (c) above, results of the survey or evaluation have been submitted to the appropriate Department of Environmental Protection (DEP) District Office or Approved County Health Department (ACHD) if a survey or evaluation is required, and said DEP District Office or ACHD has approved the well for operation.

(e) When installing new well pumping equipment for which a public water system construction permit is not required per subsection 62-555.520(1), F.A.C., or when taking a well out of operation for maintenance that might contaminate the well, the well may be returned to operation without the Department's approval after completion of disinfection and after satisfactory completion of a bacteriological evaluation if such an evaluation is required under paragraph (c) above. If a bacteriological evaluation is required, the results of the evaluation shall be submitted to the appropriate Department of Environmental Protection District Office or Approved County Health Department along with the next monthly operation report(s) required under paragraph 62-555.350(12)(b), F.A.C., or if no monthly operation report is required under paragraph 62-555.350(12)(b), F.A.C., within ten days after the end of the month during which the evaluation was completed.

(f) All public water systems using ground water not under the direct influence of surface water are required by subsections 62-550.518(2), (3), and (10), F.A.C., to periodically sample the raw ground water for microbiological contamination. In the event a raw water sample is positive for *E. coli*, the relevant well(s) shall be considered microbially contaminated unless the Department invalidates the sample or the supplier of water determines and eliminates the source of the *E. coli*, after which the supplier of water shall disinfect and bacteriologically survey the well(s) in accordance with paragraphs (a) and (b) above. If a raw water sample is positive for total coliform bacteria and if the relevant well(s) are not already considered microbially contaminated or susceptible to microbial contamination, the supplier of water shall disinfect and bacteriologically survey the well(s) in accordance with paragraphs (a) and (b) above when notified in writing by the Department to do so.

Specific Authority 373.309, 373.337, 403.861(9) FS. Law Implemented 373.309, 403.861(12), (17) FS. History–New 11-19-87, Formerly 17-22.615, Amended 1-18-89, 5-7-90, 1-1-93, Formerly 17-555.315, Amended 8-28-03.

62-555.320 Design and Construction of Public Water Systems.

Public water systems shall be designed and constructed to provide sufficient drinking water of a quality that will meet all applicable standards in Chapters 62-550, F.A.C., and requirements in this chapter. This section addresses the design and construction of all public water system components other than wells (but including well pumping equipment and appurtenances). Public water system wells are addressed in Chapters 62-524 and 62-532, F.A.C., and Rule 62-555.315, F.A.C.

(1) Sound Engineering Practice. New or altered public water system components shall be designed in accordance with sound engineering practice. Engineering references are listed in Rule 62-555.330, F.A.C.

(2) Innovative or Alternative Processes and Equipment. The Department encourages the development of new treatment processes and equipment. However, construction permits for innovative or alternative treatment processes or equipment (i.e., treatment processes or equipment not covered in the engineering references listed in Rule 62-555.330, F.A.C.) shall not be issued unless construction permit applicants include in the preliminary design report or design data accompanying their permit application supporting information demonstrating to the Department that the process or equipment is capable of consistently and reliably producing drinking water meeting applicable standards in Chapter 62-550, F.A.C., and requirements in this chapter. Supporting information shall include the following:

(a) The manufacturer's technical information;

(b) Data and reports from full-scale or pilot-plant installations that are operated under conditions comparable to those for which the process or equipment is being proposed and that are operated for a sufficient time to verify satisfactory performance of the process or equipment; and

(c) Operation and maintenance requirements and availability of technical support.

(3) Direct or Indirect Drinking Water Additives.

(a) Drinking water additives and treatment chemicals, including chemicals used to regenerate ion-exchange resins or generate disinfectants on site at treatment plants, shall conform to one of the following:

1. NSF International Standard 60 as adopted in Rule 62-555.335, F.A.C.;

2. The standards in *Water Chemicals Codex* as adopted in Rule 62-555.335, F.A.C.; or

3. The standards in *Food Chemicals Codex* as adopted in Rule 62-555.335, F.A.C.

(b) Newly installed or constructed public water system (PWS) components that come into contact with drinking water or drinking water treatment chemicals shall conform to the applicable standards, regulations, or requirements referenced in subparagraphs 1. through 3. below. Fire hydrants are not covered by this paragraph; and mechanical devices that were previously

installed in a PWS and then are removed, repaired or refurbished, and reinstalled in the same PWS are not covered by this paragraph. In addition, this paragraph does not apply to PWS components that either come into contact with drinking water prior to its treatment by reverse osmosis or come into contact with drinking water treatment chemicals and that are installed or constructed under a construction permit for which the Department received a complete application before August 28, 2003.

1. Except for ion-exchange resins, precast or cast-in-place concrete structures, and cement mortar, which are addressed in subparagraphs 2. and 3. below, newly installed or constructed PWS components that come into contact with drinking water or drinking water treatment chemicals shall conform to one of the following:

a. NSF International Standard 61 as adopted in Rule 62-555.335, F.A.C.;

b. NSF International Standard 42, 44, 53, 55, 58, or 62 as adopted in Rule 62-555.335, F.A.C.;

c. Section 6 of NSF International Standard 14 as adopted in Rule 62-555.335, F.A.C.; or

d. The Food and Drug Administration's regulations for indirect food additives as contained in the April 1, 2002, revision of 21 CFR Parts 174 through 189, which are incorporated herein by reference.

2. Newly installed ion-exchange resins that come into contact with drinking water shall be part of an ion-exchange water softener that conforms to NSF International Standard 44 as adopted in Rule 62-555.335, F.A.C., or shall conform to one of the following:

a. NSF International Standard 61 as adopted in Rule 62-555.335, F.A.C.; or

b. The Food and Drug Administration's regulations for secondary direct food additives from ion-exchange resins as contained in the April 1, 2002, revision of 21 CFR 173.25, which is incorporated herein by reference.

3. Any newly installed or constructed precast or cast-in-place concrete structure or newly installed cement mortar that is not coated by a barrier material meeting the requirements of subparagraph 1 above and that comes into contact with drinking water or drinking water treatment chemicals shall meet the following requirements:

a. All cement, admixtures, form release agents, curing compounds, and sealers used in or on the concrete or mortar shall conform to NSF International Standard 61 as adopted in Rule 62-555.335, F.A.C.

b. Aggregate used in the concrete or mortar shall be clean (i.e., free of excess clay, silt, mica, organic matter, chemical salts, and coated grains) and shall be essentially free of those metals and radionuclides regulated under applicable primary drinking water standards.

c. Water used in the concrete or mortar shall meet applicable primary drinking water standards for inorganics, organics, and radionuclides.

(c) To determine or document whether drinking water additives or treatment chemicals or public water system components conform to the standards, regulations, or requirements listed in paragraph (a) or (b) above, suppliers of water or construction permit applicants may conduct their own evaluations or may rely upon third-party or manufacturer certifications.

(d) The Department shall allow exceptions to the requirements in paragraph (b) above if suppliers of water or construction permit applicants provide the following:

1. Documentation that components conforming to the applicable standards, regulations, or requirements in paragraph (b) are not readily available; and

2. Assurance that the components being provided will not impart into drinking water or drinking water treatment chemicals any contaminant in an amount that could cause adverse human health effects.

(4) Flood Protection. Community water systems (CWSs) shall be designed and constructed so that structures, and electrical or mechanical equipment, used to treat, pump, or store drinking water, apply drinking water treatment chemicals, or handle drinking water treatment residuals are protected from physical damage by the 100-year flood and, in coastal areas subject to flooding by wave action, from physical damage by the 100-year wave action. Additionally, CWSs shall be designed and constructed so that the aforementioned structures and equipment remain fully operational and accessible during the 25-year flood and, in coastal areas subject to flooding by wave action, the 25-year wave action; a lesser flood or wave action may be used if suppliers of water or construction permit applicants provide justification for using a lesser flood or wave action, but in no case shall less than the ten-year flood or wave action be used.

(5) Security. Drinking water treatment or pumping facilities shall be enclosed by fences with lockable access gates, housed in lockable buildings or enclosures, or otherwise protected to prevent tampering, vandalism, and sabotage. Finished-drinking-water storage facilities shall be enclosed by fences with lockable access gates, shall have lockable access openings and lockable cages or enclosures obstructing access to ladders, or shall be otherwise protected to prevent tampering, vandalism, and sabotage.

(6) Capacity of Drinking Water Source and Treatment Facilities. The total capacity of all water source and treatment facilities connected to a water system shall at least equal the water system's design maximum-day water demand (including design fire-flow demand if fire protection is being provided). Applicants for a permit to construct or alter a drinking water treatment plant's source water or treatment facilities shall establish in the preliminary design report or drawings, specifications, and design data accompanying their permit application the design maximum-day capacity of the plant's source water facilities and the plant's treatment facilities and, if the plant is being designed to meet peak water demand or to supplement finished-drinking-water storage facilities in meeting peak water demand, the design peak capacity of the plant's source water facilities and the plant's treatment facilities. In turn, the Department shall specify in its construction permit for the plant's new or altered source water or treatment facilities the permitted maximum-day operating capacity of the plant and, if the plant is being designed to meet peak water demand or to supplement finished-water storage facilities in meeting peak water demand, the permitted peak operating capacity of the plant.

The Department shall not specify a permitted plant operating capacity greater than the design capacity of the plant's treatment facilities as established by the applicant. However, the Department shall specify a permitted plant operating capacity less than the design capacity of the plant's treatment facilities if the actual design capacity of the plant's source water facilities, regardless of any water use permit limitations set by the water management district, is less than the design capacity of the plant's treatment facilities; in such a case:

(a) The construction permit for the plant's new or altered source water or treatment facilities shall indicate the design capacity of the plant's treatment facilities, shall state that permitted plant operating capacity is being limited because of the actual design capacity of the plant's source water facilities, and shall specify a permitted plant operating capacity equal to the actual design capacity of the plant's source water facilities.

(b) Each subsequent construction permit for new or altered source water facilities for the plant shall update the permitted plant operating capacity as appropriate.

(7) Raw Surface Water Pumping Stations. At each raw surface water pumping station that is constructed or altered under a construction permit for which the Department receives a complete application on or after August 28, 2003, and that is connected to a community water system (CWS) serving, or designed to serve, 350 or more persons or 150 or more service connections, the supplier of water shall provide an installed or uninstalled standby pump of sufficient capacity to replace the largest pump. However, for CWSs that have multiple pumping stations subject to this requirement, the supplier of water may provide one uninstalled standby pump for each size of raw surface water pump installed in the water system instead of providing a standby pump on site at each raw surface water pumping station; and for CWSs that have only one pumping station subject to this requirement and that are designed to serve 10,000 or fewer persons, as many as three water systems located in the same county, or within 50 miles of one another, may enter into a mutual aid agreement to share one appropriately sized, uninstalled standby pump instead of providing a standby pump on site at each water system's raw surface water pumping station.

(8) Well Pump Housing, Well Pump Discharge Piping, and Well Pump Appurtenances.

(a) Housing of Well Pumps.

1. Well pumps shall be housed in a weatherproof building, room, or pit unless the pumps are submersible or completely weatherproof, in which case the pumps need only be protected against tampering, vandalism, and sabotage in accordance with subsection (5) above.

2. Well pumphouses (i.e., buildings or rooms) for which the Department receives a complete construction permit application on or after August 28, 2003, shall have a concrete floor that is elevated above the adjacent finished ground surface and that is sloped to drain away from wells and well pumps. In addition, such well pumphouses shall have an access opening or removable roof or walls as necessary to provide full access for servicing wells and well pumps.

3. Well pump pits are allowed only where the finished ground surface is above the 100-year flood elevation and, in coastal areas subject to flooding by wave action, the 100-year wave-action elevation. All pump pit access openings shall have watertight covers or shall be flanged upward and provided with overlapping covers, and all pump pits shall be drained by gravity or by dual sump pumps with an alarm system that is activated in the event either sump pump fails. Sump pump alarm systems shall include an audio-visual alarm near the pump pit, and if the pump pit is not at a site staffed 24 hours per day and seven days per week, the alarm also shall be telemetered to a place staffed 24 hours per day and seven days per week, or shall trigger an automatic telephone dialing or paging device, to enable notification of an authorized representative of the supplier of water. Pump pits for which the Department receives a complete construction permit application on or after August 28, 2003, shall have an opening as necessary to provide full access for servicing wells and well pumps and shall have a concrete floor sloped to drain away from wells and well pumps.

(b) Well Pump Discharge Piping.

1. New or altered discharge piping shall be designed and constructed in accordance with Section 3.2.7.3 in *Recommended Standards for Water Works* as incorporated into Rule 62-555.330, F.A.C., except that a check valve is not required in the discharge piping from a jet pump and except that the required smooth-nosed sampling tap shall be located as specified in subparagraph 2. below.

2. The discharge piping from each well pump shall include a smooth-nosed tap for sampling raw well water. All such sampling taps shall be located upstream of the check valve in the discharge piping if possible and upstream of all treatment facilities and chemical application points; shall be located at least 12 inches above the finished floor, pad, or ground surface below the tap; and shall be conveniently accessible and downward-opening. Raw well water sampling taps installed on or after August 28, 2003, except those installed under a construction permit for which the Department received a complete application before August 28, 2003, shall have no interior or exterior threads.

(c) Well Vents. Well pumps installed on or after August 28, 2003, except those installed under a construction permit for which the Department received a complete application before August 28, 2003, shall pump from a well that is vented to the atmosphere unless the well pump is a packer-type jet pump, the well casing also serves as well pump suction piping, the well is a flowing artesian well, there is no appreciable drawdown in the well, or the supplier of water provides justification for not venting the well to the atmosphere. All well vents shall terminate at least 12 inches above the 100-year flood elevation and, in coastal areas subject to flooding by wave action, at least 12 inches above the 100-year wave-action elevation. New or altered well vents shall be designed and constructed in accordance with Section 3.2.7.5 in *Recommended Standards for Water Works* as incorporated into Rule 62-555.330, F.A.C.

(9) Odor Control at Drinking Water Treatment Plants. Drinking water treatment plants shall comply with the objectionable odor prohibition under subsection 62-296.320(2), F.A.C. ("Objectionable odor" is defined in Rule 62-210.200, F.A.C.) Applicants for a permit to construct or alter drinking water treatment facilities, except those applicants who have submitted a complete application to the Department before August 28, 2003, shall provide in the preliminary design report or drawings, specifications, and design data accompanying their permit application assurance of compliance with subsection 62-296.320(2), F.A.C. Assurance of compliance may be based upon water quality data; use of appropriate water treatment processes and chemicals; proper treatment of vented gases; use of mitigative measures such as buffer zones owned or under the control of the supplier of water; etc.

(10) Color Coding of Piping at Drinking Water Treatment Plants. All new or altered, aboveground piping at drinking water treatment plants shall be color coded and labeled as recommended in Section 2.14 of *Recommended Standards for Water Works* as incorporated into Rule 62-555.330, F.A.C. In addition, all underground water main pipe that is installed at drinking water treatment plants on or after August 28, 2003, and that is conveying finished drinking water shall be color coded as required under subparagraph 62-555.320(21)(b)3., F.A.C. This subsection does not apply to drinking water treatment plant piping installed or altered under a construction permit for which the Department received a complete application before August 28, 2003.

(11) Alarms for Nitrate/Nitrite Removal Equipment. An alarm system shall be provided for any drinking water treatment plant equipment that is installed or altered under a construction permit for which the Department receives a complete application on or after August 28, 2003, and that is necessary to achieve compliance with the primary drinking water standard for nitrate or nitrite. The alarm system shall be activated in the event of equipment failure and shall include an audio-visual alarm at the plant. If the plant is not staffed during all hours the plant is in operation, the alarm also shall be telemetered to a place staffed during all hours the plant is in operation, or shall trigger an automatic telephone dialing or paging device, to enable notification of an appropriately licensed water treatment plant operator.

(12) Disinfection of Drinking Water. All suppliers of water shall provide continuous disinfection of the drinking water they distribute. The necessary equipment and tanks shall be designed to comply with the applicable requirements in paragraphs (a) through (d) below and subsections 62-555.350(5) and (6), F.A.C. Applicants for a permit to construct or alter disinfection facilities at a drinking water treatment plant where the requirements in paragraph (a) or (b) below apply shall establish in the preliminary design report or drawings, specifications, and design data accompanying their permit application the following: the design level of *Cryptosporidium, Giardia lamblia,* or virus inactivation to be achieved by disinfection; if chemical disinfection is being used to achieve *Giardia lamblia* or virus inactivation, the design minimum residual disinfectant concentration (C) before or at the first customer and the corresponding design minimum disinfectant contact time (T); and if ultraviolet disinfection is being used to achieve *Cryptosporidium, Giardia lamblia,* or virus inactivation, the design minimum ultraviolet dose.

(a) Suppliers of water using surface water or ground water under the direct influence of surface water shall comply with applicable requirements under Rule 62-550.817, F.A.C.

(b) Suppliers of water using ground water that is not under the direct influence of surface water but that is from a well considered microbially contaminated or susceptible to microbial contamination per paragraph 62-555.315(6)(b) or (f), F.A.C., shall provide treatment that reliably achieves at least four-log (99.99 percent) inactivation or removal of viruses before or at the first customer at all flow rates. Additionally, by no later than December 31, 2005, suppliers of water using ground water that is not under the direct influence of surface water but that is exposed during treatment to the open atmosphere and possible microbial contamination shall provide treatment that reliably achieves at least four-log inactivation or removal of viruses before or at the first customer at all flow rates. For the purpose of this paragraph, aerators and other facilities that are protected against contamination from birds, insects, wind-borne debris, rainfall, and drainage are not considered to be exposing water to the open atmosphere and possible microbial contamination. Direct filtration and diatomaceous-earth filtration are considered to be achieving one-log (90 percent) removal of viruses when properly operated, and conventional filtration treatment and slow sand filtration are considered to be achieving two-log (99 percent) removal of viruses when properly operated. Chemical disinfection using free chlorine, chlorine dioxide, or ozone and chemical disinfection using chloramines with chlorine added prior to ammonia are considered to be achieving two-log, three-log (99.9 percent), or four-log inactivation of viruses when meeting the applicable CT value listed in Appendix E of the *Guidance Manual for Compliance with the Filtration and Disinfection Requirements for Public Water Systems Using Surface Water Sources* as adopted in Rule 62-555.335, F.A.C.

(c) Disinfectant contact time shall be calculated or determined as described in the definition of "disinfectant contact time" under Rule 62-550.200, F.A.C.

(d) All suppliers of water shall maintain a minimum free chlorine residual of 0.2 milligram per liter, or a minimum combined chlorine residual of 0.6 milligram per liter or an equivalent chlorine dioxide residual, throughout their drinking water distribution system at all times.

(13) Chlorination Facilities for Disinfection of Drinking Water.

(a) Gas Chlorination Facilities.

1. New chlorinators shall be the vacuum-operated, solution-feed type.

2. Chlorinator capacity shall be such that any applicable minimum CT value and the minimum residual disinfectant level specified in paragraph 62-555.320(12)(d), F.A.C., and subsection 62-555.350(6), F.A.C., can be maintained when maximum chlorine demand coincides with maximum flow rate at the point of chlorine application.

3. At each drinking water treatment plant that is using gas chlorination facilities to achieve *Giardia lamblia* or virus inactivation in accordance with paragraph 62-555.320(12)(a) or (b), F.A.C.; at each treatment plant that is using gas chlorination facilities for disinfection and that is connected to a community water system (CWS) having an actual or design average daily chlorine consumption equaling or exceeding ten pounds per day; and at each treatment plant that has gas chlorine disinfection facilities constructed or altered under a construction permit for which the Department receives a complete application on or after August 28, 2003, and that is connected to a CWS serving, or designed to serve, 350 or more persons or 150 or more service connections, the supplier of water shall provide installed or uninstalled standby gas chlorination equipment (i.e., a standby chlorinator, including a standby vacuum regulator and a standby eductor, which is also referred to as an injector or ejector; a standby booster pump where booster pumps are used; and a standby evaporator where evaporators are used) of sufficient capacity to replace the largest equipment. However, for water systems that have multiple interconnected plants subject to this requirement, the supplier of water may provide one uninstalled standby for each type and size of gas chlorination equipment installed in the water system instead of providing standby gas chlorination equipment on site at each plant; and for water systems that have only one plant subject to this requirement and that are designed to serve 10,000 or fewer persons, as many as three water systems located in the same county, or within 50 miles of one another, may enter into a mutual aid agreement to share appropriately sized, uninstalled standby gas chlorination equipment instead of providing standby gas chlorination equipment on site at each water system's plant.

4. At each drinking water treatment plant that is using gas chlorination facilities to achieve *Giardia lamblia* or virus inactivation in accordance with paragraph 62-555.320(12)(a) or (b), F.A.C.; at each treatment plant that is using gas chlorination facilities for disinfection and that is connected to a community water system (CWS) having an actual or design average daily chlorine consumption equaling or exceeding ten pounds per day; and at each treatment plant that has gas chlorine disinfection facilities constructed or altered under a construction permit for which the Department receives a complete application on or after August 28, 2003, and that is connected to a CWS serving, or designed to serve, 350 or more persons or 150 or more service connections, the supplier of water shall provide devices for automatic switch-over of chlorine cylinders or containers.

5. Chlorine shall be fed into drinking water proportional to flow. Where the flow rate is reasonably constant, this may be accomplished by electrically interconnecting gas chlorination equipment with well or service pumps or by otherwise designing gas chlorination equipment to operate only when well or service pumps operate. Automatic flow proportioning control of chlorinators shall be provided where the flow rate fluctuates significantly. Furthermore, automatic residual control of chlorinators shall be provided where the chlorine demand fluctuates significantly, and automatic compound-loop control of chlorinators shall be provided where both the flow rate and the chlorine demand fluctuate significantly.

6. Scales shall be provided to accurately weigh chlorine cylinders or containers in use.

7. Chlorine shall be rapidly and thoroughly mixed with all drinking water being treated.

8. Chlorine storage and feed facilities shall be located in a room or area separate from other operating areas. If chlorine storage or feed facilities are enclosed in a room, the room shall be located at ground level and shall be provided with floor-level ventilation. New or altered chlorine rooms shall be designed and constructed in accordance with Section 5.4.1 in *Recommended Standards for Water Works* as incorporated into Rule 62-555.330, F.A.C. If chlorine storage or feed facilities are not enclosed in a room, they shall be shielded from direct sunlight and rain and shall be located at ground level in an area that either has adequate natural ventilation or is equipped with a mechanical ventilation system. For the purpose of this subparagraph, an area is considered to have adequate natural ventilation if walls are not completely obstructing more than one side of the perimeter of the area. New or altered mechanical ventilation systems for chlorine storage or feed areas shall meet applicable requirements in Section 5.4.1.c of *Recommended Standards for Water Works* as incorporated into Rule 62-555.330, F.A.C.

9. At each drinking water treatment plant that is using gas chlorination facilities to achieve *Giardia lamblia* or virus inactivation in accordance with paragraph 62-555.320(12)(a) or (b), F.A.C., and at each treatment plant that is using gas chlorination facilities for disinfection and that is connected to a community water system serving, or designed to serve, 350 or more persons or 150 or more service connections, the supplier of water shall provide an audio-visual alarm system that is activated by high- and low-vacuum switches, a continuous chlorine residual analyzer, or a continuous oxidation-reduction potential meter to indicate loss of chlorination capability or chlorine residual. If the plant is not staffed during all hours the plant is in operation, the alarm also shall be telemetered to a place staffed during all hours the plant is in operation, or shall trigger an automatic telephone dialing or paging device, to enable notification of an appropriately licensed water treatment plant operator.

10. Suppliers of water shall provide the following safety or protective equipment at drinking water treatment plants with gas chlorination facilities.

a. At each treatment plant with gas chlorination facilities, the supplier of water shall provide in a convenient location, but not inside any room where chlorine is stored or handled, a self-contained breathing apparatus (SCBA) meeting the requirements of the National Institute for Occupational Safety and Health. However, for water systems that have multiple interconnected plants withdrawing chlorine from only 150-pound or smaller cylinders, the supplier of water may provide an SCBA in each vehicle used by plant operators instead of providing an SCBA at each plant withdrawing chlorine from only 150-pound or smaller cylinders.

b. At each treatment plant with gas chlorination facilities, the supplier of water shall provide appropriate protective equipment in accordance with Table 15.5 in *Water Treatment Plant Design* as incorporated into Rule 62-555.330, F.A.C., except that the supplier of water shall provide a self-contained breathing apparatus in accordance with sub-subparagraph a. above instead of providing a gas mask in accordance with this sub-subparagraph and Table 15.5.

c. At each treatment plant withdrawing chlorine from ton containers or tank cars or trucks, the supplier of water shall provide continuous chlorine leak detection equipment that is connected to an alarm system. The alarm system shall include an audio-visual alarm at the plant, and if the plant is not staffed 24 hours per day and seven days per week, the alarm also shall be telemetered to a place staffed 24 hours per day and seven days per week, or shall trigger an automatic telephone dialing or paging device, to enable notification of an authorized representative of the supplier of water.

d. At each treatment plant withdrawing chlorine from ton containers or tank cars or trucks, the supplier of water shall provide an emergency chlorine leak repair kit meeting the requirements of the Chlorine Institute.

(b) Hypochlorination Facilities.

1. New hypochlorinators shall be positive displacement metering pumps or accurate vacuum-operated dosers.

2. Hypochlorinator capacity shall be such that any applicable minimum CT value and the minimum residual disinfectant level specified in paragraph 62-555.320(12)(d), F.A.C., and subsection 62-555.350(6), F.A.C., can be maintained when maximum chlorine demand coincides with maximum flow rate at the point of hypochlorite application.

3. At each drinking water treatment plant that is using hypochlorination facilities to achieve Giardia lamblia or virus inactivation in accordance with paragraph 62-555.320(12)(a) or (b), F.A.C.; at each treatment plant that is using hypochlorination facilities for disinfection and that is connected to a community water system (CWS) having an actual or design average daily chlorine consumption equaling or exceeding ten pounds per day; and at each treatment plant that has hypochlorite disinfection facilities constructed or altered under a construction permit for which the Department receives a complete application on or after August 28, 2003, and that is connected to a CWS serving, or designed to serve, 350 or more persons or 150 or more service connections, the supplier of water shall provide installed or uninstalled standby hypochlorination equipment (i.e., a standby electrolytic generator and brine pump where sodium hypochlorite is generated on site; a standby metering pump where metering pumps are used; a standby doser, including a standby vacuum regulator and a standby eductor, which is also referred to as an injector or ejector, where vacuum-operated dosers are used; and a standby booster pump where booster pumps are used) of sufficient capacity to replace the largest equipment. However, for water systems that have multiple interconnected plants subject to this requirement, the supplier of water may provide one uninstalled standby for each type and size of hypochlorination equipment installed in the water system instead of providing standby hypochlorination equipment on site at each plant; and for water systems that have only one plant subject to this requirement and that are designed to serve 10,000 or fewer persons, as many as three water systems located in the same county, or within 50 miles of one another, may enter into a mutual aid agreement to share appropriately sized, uninstalled standby hypochlorination equipment instead of providing standby hypochlorination equipment on site at each water system's plant.

4. Hypochlorite shall be fed into drinking water proportional to flow. Where the flow rate is reasonably constant, this may be accomplished by electrically interconnecting hypochlorination equipment with well or service pumps or by otherwise designing hypochlorination equipment to operate only when well or service pumps operate. Automatic flow proportioning control of hypochlorinators shall be provided where the flow rate fluctuates significantly. Furthermore, automatic residual control of hypochlorinators shall be provided where the chlorine demand fluctuates significantly, and automatic compound-loop control of hypochlorinators shall be provided where both the flow and the chlorine demand fluctuate significantly.

5. Hypochlorite metering pumps shall have antisiphon protection. For new or altered hypochlorination facilities, the antisiphon protection for metering pumps shall be in accordance with Section 5.1.5 in *Recommended Standards for Water Works* as incorporated into Rule 62-555.330, F.A.C.

6. For sodium hypochlorite facilities that are constructed or altered under a construction permit for which the Department receives a complete application on or after August 28, 2003, and that include a metering pump:

a. The pump shall be located as close as possible to, and lower than, the hypochlorite source with the pump suction line sloping upward from the pump to the hypochlorite source; or

b. The hypochlorite facilities shall be otherwise designed to prevent gas binding of the pump.

7. For hypochlorination facilities constructed or altered under a construction permit for which the Department receives a complete application on or after August 28, 2003:

a. Hypochlorinator suction lines shall be located with the intake above the bottom of the hypochlorite container or shall be equipped with a strainer; or

b. The hypochlorination facilities shall be otherwise designed to avoid feeding sediment into the drinking water.

8. Sodium hypochlorite shall not be stored or handled together with any acid or any ammonia or organic compound, and calcium hypochlorite shall not be stored or handled together with any acid or any combustible, organic, or oxidizable material. The storage of sodium hypochlorite shall be carefully managed to limit degradation of the hypochlorite and to limit formation of chlorate; alternative approaches for managing sodium hypochlorite storage are discussed on page 243 in *Water Treatment Plant Design* as incorporated into Rule 62-555.330, F.A.C. Tanks for bulk storage of sodium hypochlorite shall have a liquid-level indicator, a vent, and an overflow discharging to a basin capable of containing accidental spills or overflows without uncontrolled discharge. Where bulk storage of sodium hypochlorite is provided, a day tank also shall be provided unless there is an alternative means for accurately measuring the daily amount of hypochlorite fed and there are alternative safeguards (e.g., continuous chlorine residual monitoring; audio-visual alarms activated by high chlorine residual levels; and staffing at the water treatment plant, or at a monitoring and control center for the plant, during all hours the plant is in operation) that maintain a similar level of protection against overfeeding of hypochlorite. Sodium hypochlorite bulk storage tanks that are installed on or after August 28, 2003, and that

cannot be completely drained to a day tank shall be equipped with a valved drain to allow for complete drainage and periodic cleaning of the bulk storage tank; however, this requirement does not apply to bulk storage tanks installed under a construction permit for which the Department received a complete application before August 28, 2003.

9. Hypochlorite solution or day tanks shall have a lid or cover, shall have a valved drain, and shall be scale-mounted or have a means for measuring the liquid level in the tank. For new or altered hypochlorination facilities, solution or day tanks shall be designed and constructed in accordance with Sections 5.1.10 and 5.1.11 in *Recommended Standards for Water Works* as incorporated into Rule 62-555.330, F.A.C.

10. Hypochlorite shall be rapidly and thoroughly mixed with all drinking water being treated.

11. Housing for new or altered hypochlorite storage or feed facilities shall be designed and constructed in accordance with Section 5.1.14 in *Recommended Standards for Water Works* as incorporated into Rule 62-555.330, F.A.C. Waste hydrogen from on-site sodium hypochlorite generation systems constructed or altered under a construction permit for which the Department receives a complete application on or after August 28, 2003, shall be vented directly to the outside atmosphere using a dilution air blower as necessary to ensure the concentration of hydrogen always will be below the explosion level.

12. At each drinking water treatment plant that is using hypochlorination facilities to achieve *Giardia lamblia* or virus inactivation in accordance with paragraph 62-555.320(12)(a) or (b), F.A.C., and at each treatment plant that has hypochlorite disinfection facilities constructed or altered under a construction permit for which the Department receives a complete application on or after August 28, 2003, and that is connected to a CWS serving, or designed to serve, 350 or more persons or 150 or more service connections, the supplier of water shall provide an audio-visual alarm system that is activated by high- and low-pressure switches, a low-flow switch or flow meter, high- and low-vacuum switches, a continuous chlorine residual analyzer, or a continuous oxidation-reduction potential meter to indicate loss of hypochlorination capability or chlorine residual. If the plant is not staffed during all hours the plant is in operation, the alarm also shall be telemetered to a place staffed during all hours the plant is in operation, or shall trigger an automatic telephone dialing or paging device, to enable notification of an appropriately licensed water treatment plant operator.

13. At each drinking water treatment plant with hypochlorination facilities, the supplier of water shall provide appropriate safety or protective equipment in accordance with Table 15.5 in *Water Treatment Plant Design* as incorporated into Rule 62-555.330, F.A.C.

(14) Standby Power.

(a) By no later than December 31, 2005, each community water system (CWS) serving, or designed to serve, 350 or more persons or 150 or more service connections shall provide standby power for operation of that portion of the system's water source, treatment, and pumping facilities necessary to deliver drinking water meeting all applicable primary or secondary standards at a rate at least equal to the average daily water demand for the system. If a CWS interconnects with another CWS to meet this requirement, the portion of the combined systems' components provided with standby power shall be sufficient to deliver water at a rate at least equal to the average daily water demand for the combined systems.

(b) Where standby power is required under paragraph (a) above, it shall be provided through:

1. Connection to at least two independent power feeds from separate substations; or

2. One or more auxiliary power sources (i.e., generators or engines).

(c) Where standby power is required under paragraph (a) above and is provided through connection to independent power feeds from separate substations, the power feeds shall not be located in the same conduit or supported from the same utility pole and, if overhead power feeds are used, shall not cross or be located in an area where a single plausible occurrence (e.g., a fallen tree) could disrupt both power feeds.

(d) Where standby power is required under paragraph (a) above and is provided through an auxiliary power source, an in-place auxiliary power source is preferred. A portable auxiliary power source may be provided only if all of the following conditions are met:

1. A system to automatically start up the auxiliary power source and transfer electrical loads is not required under paragraph (e) below.

2. The supplier of water demonstrates that the water system has first priority for use of the portable auxiliary power source.

3. The supplier of water demonstrates that the portable auxiliary power source will at all times be in reasonably close proximity to (i.e., within 25 miles of) the water system components for which standby power is required.

(e) Where standby power is required under paragraph (a) above and the time delay required to manually transfer electrical loads from one power source to another could result in failure to maintain the minimum water distribution system pressure required under subsection 62-555.350(7), F.A.C., the supplier of water shall provide a system to automatically start up the auxiliary power source if an auxiliary power source is provided and to automatically transfer electrical loads.

(f) At each site where standby power is required under paragraph (a) above, the supplier of water shall provide by December 31, 2005, an audio-visual alarm system that is activated in the event any power source fails. If the site is not staffed during all hours the standby-powered water system components are in operation, the alarm also shall be telemetered to a place staffed during all hours the standby-powered water system components are in operation, or shall trigger an automatic telephone dialing or paging device, to enable notification of an authorized representative of the supplier of water.

(15) High-Service or Booster Pumps. For purposes of this subsection, well pump installations shall be considered high-service pumping stations if the well pumps serve as high-service pumps.

(a) Unless elevated finished-drinking-water storage is provided, the total capacity of all high-service pumping stations connected to a water system, or the capacity of a booster pumping station, shall be sufficient to:

1. Meet at least the water system's, or the booster station service area's, peak-hour water demand (and if fire protection is being provided, meet at least the water system's, or the booster station service area's, design fire-flow rate plus a background water demand equivalent to the maximum-day demand other than fire-flow demand); and

2. Maintain a minimum gauge pressure of 20 pounds per square inch throughout the water system's, or the booster station service area's, distribution system up to each customer's point of connection to the distribution system.

(b) Where elevated finished-drinking-water storage is provided, the total capacity of all high-service pumping stations connected to a water system, or the capacity of a booster pumping station, shall be sufficient to at least meet the water system's, or the booster station service area's, maximum-day water demand (including design fire-flow demand if fire protection is being provided) and to maintain distribution system pressure as specified in subparagraph 62-555.320(15)(a)2., F.A.C. In addition, the total capacity of the high-service pumping stations, or the capacity of the booster pumping station, combined with the useful elevated finished-water storage capacity shall be sufficient to meet the water system's, or the booster station service area's, peak-hour water demand for at least four consecutive hours (and if fire protection is being provided, shall be sufficient to meet the water system's, or the booster station service area's, design fire-flow rate plus a background water demand equivalent to the maximum-day demand other than fire-flow demand for the design fire-flow duration).

(c) At each high-service or booster pumping station that is constructed or altered under a construction permit for which the Department receives a complete application on or after August 28, 2003, and that is connected to a community water system (CWS) serving, or designed to serve, 350 or more persons or 150 or more service connections, the supplier of water shall provide an installed or uninstalled standby pump of sufficient capacity to replace the largest pump. However, for CWSs that have multiple interconnected pumping stations subject to this requirement, the supplier of water may provide one uninstalled standby pump for each size of high-service or booster pump installed in the water system instead of providing a standby pump on site at each high-service or booster pumping station; and for water systems that have only one pumping station subject to this requirement and that are designed to serve 10,000 or fewer persons, as many as three water systems located in the same county, or within 50 miles of one another, may enter into a mutual aid agreement to share one appropriately sized, uninstalled standby pump instead of providing a standby pump on site at each water system's high-service or booster pumping station.

(16) Finished-Drinking-Water Meters. All water treatment plants that are connected to a community water system and water treatment plants that are connected to a non-community water system and that are constructed or altered under a construction permit for which the Department receives a complete application on or after August 28, 2003, shall be equipped with a totalizing flow meter to measure the net quantity of finished drinking water, excluding any filter backwash water, produced at the plant each day. All other drinking water treatment plants shall be equipped with at least elapsed time meters that can be used in conjunction with calibrated pumps to measure the net quantity of finished drinking water produced at the plant each day.

(17) Finished-Drinking-Water Sampling Taps. A conveniently accessible sampling tap shall be provided at each entry point to a drinking water distribution system (i.e., at each point where drinking water source and treatment facilities discharge to a drinking water distribution system) so that samples of finished drinking water may be taken in accordance with subsection 62-550.500(5), F.A.C. Each such sampling tap shall be located downstream from all water treatment processes at a point where all treatment chemicals have been thoroughly mixed with the water and shall be located upstream from all water customers. If a water system draws water from more than one source and combines the sources before distribution, a single finished-water sampling tap may be provided downstream from where all of the sources are combined at a point where all of the sources have been thoroughly mixed together.

(18) Pump Suction Piping. All pump suction piping that is conveying raw, partially treated, or finished drinking water shall be protected against infiltration. Pump suction piping that is conveying raw, partially treated, or finished drinking water and that is constructed or altered under a construction permit for which the Department receives a complete application on or after August 28, 2003, must be located aboveground or, if located underground, must be constantly under positive gauge pressure.

(19) Finished-Drinking-Water Storage Capacity. This subsection addresses finished-water storage capacity necessary for operational equalization to meet peak water demand. (If fire protection is being provided, additional finished-water storage capacity shall be provided as necessary to meet the design fire-flow rate for the design fire-flow duration.) The finished-water storage capacity necessary to meet the peak water demand for a consecutive system may be provided by the consecutive system or by a wholesale system delivering water to the consecutive system.

(a) Except as noted in paragraph (b) below, the total useful finished-water storage capacity (excluding any storage capacity for fire protection) connected to a water system shall at least equal 25 percent of the system's maximum-day water demand, excluding any design fire-flow demand.

(b) A total useful finished-water storage capacity less than that specified in paragraph (a) above is acceptable if the supplier of water or construction permit applicant makes one of the following demonstrations:

1. A demonstration consistent with Section 10.6.3 in *Water Distribution Systems Handbook* as incorporated into Rule 62-555.330, F.A.C., showing that the water system's total useful finished-water storage capacity (excluding any storage capacity for fire protection) is sufficient for operational equalization.

2. A demonstration showing that, in conjunction with the capacity of the water system's source, treatment, and finished-water pumping facilities, the water system's total useful finished-water storage capacity (excluding any storage capacity for fire protection) is sufficient to meet the water system's peak-hour water demand for at least four consecutive hours. For small water systems with hydropneumatic tanks that are installed under a construction permit for which the Department receives a complete application on or after August 28, 2003, the supplier of water or construction permit applicant also shall demonstrate that, in conjunction with the capacity of the water system's source, treatment, and finished-water pumping facilities, the water system's total useful finished-water storage capacity (i.e., the water system's total effective hydropneumatic tank volume) is sufficient to meet the water system's peak instantaneous water demand for at least 20 consecutive minutes.

(20) Hydropneumatic Tanks. New hydropneumatic tanks, including bladder- or diaphragm-type tanks, shall be designed and constructed in accordance with Section 7.2 in *Recommended Standards for Water Works* as incorporated into Rule 62-555.330, F.A.C., except that:

(a) The tanks need not be housed.

(b) Tanks installed on or after August 28, 2003, except those installed under a construction permit for which the Department received a complete application before August 28, 2003, shall have an automatic air or pressure relief valve.

(c) Bladder- or diaphragm-type tanks need not have an access manhole, water sight glass, or means for adding air other than a recharging valve.

(21) Drinking Water Piping and Appurtenances.

(a) All new or altered mains, including treatment plant process piping, and appurtenances conveying raw or partially treated drinking water shall be designed and constructed in accordance with Sections 8.0, 8.4, 8.5, and 8.7 in *Recommended Standards for Water Works* as incorporated into Rule 62-555.330, F.A.C., except that:

1. Asbestos-cement water mains shall be pressure and leakage tested in accordance with American Water Works Association (AWWA) Standard C603 as incorporated into Rule 62-555.330, F.A.C., and polyvinyl chloride water mains shall be pressure and leakage tested in accordance with AWWA Standard C605 as incorporated into Rule 62-555.330, F.A.C., while all other types of water mains shall be pressure and leakage tested in accordance with AWWA Standard C600 as incorporated into Rule 62-555.330, F.A.C.

2. Water mains and appurtenances that normally convey surface water, or ground water under the direct influence of surface water, and that are located upstream of all filtration and disinfection treatment facilities need not be disinfected.

3. All water mains and appurtenances other than those described in subparagraph 2. above shall be disinfected and bacteriologically evaluated in accordance with Rule 62-555.340, F.A.C.

(b) All new or altered piping, including treatment plant process piping, and appurtenances conveying finished drinking water shall be designed and constructed in accordance with Sections 8.0 through 8.5 and 8.7 through 8.11 in *Recommended Standards for Water Works* as incorporated into Rule 62-555.330, F.A.C., except that:

1. Asbestos-cement water mains shall be pressure and leakage tested in accordance with American Water Works Association (AWWA) Standard C603 as incorporated into Rule 62-555.330, F.A.C., and polyvinyl chloride water mains shall be pressure and leakage tested in accordance with AWWA Standard C605 as incorporated into Rule 62-555.330, F.A.C., while all other types of water mains shall be pressure and leakage tested in accordance with AWWA Standard C600 as incorporated into Rule 62-555.330, F.A.C.

2. All water mains and appurtenances shall be disinfected and bacteriologically evaluated in accordance with Rule 62-555.340, F.A.C.

3. All water main pipe, including fittings, installed on or after August 28, 2003, except pipe installed under a construction permit for which the Department received a complete application before August 28, 2003, shall be color coded or marked using blue as a predominant color to differentiate drinking water from reclaimed or other water. Underground plastic pipe shall be solid-wall blue pipe, shall have a co-extruded blue external skin, or shall be white or black pipe with blue stripes incorporated into, or applied to, the pipe wall; and underground metal or concrete pipe shall have blue stripes applied to the pipe wall. Pipe striped during manufacturing of the pipe shall have continuous stripes that run parallel to the axis of the pipe, that are located at no greater than 90-degree intervals around the pipe, and that will remain intact during and after installation of the pipe. If tape or paint is used to stripe pipe during installation of the pipe, the tape or paint shall be applied in a continuous line that runs parallel to the axis of the pipe and that is located along the top of the pipe; for pipes with an internal diameter of 24 inches or greater, tape or paint shall be applied in continuous lines along each side of the pipe as well as along the top of the pipe. Aboveground pipe at drinking water treatment plants shall be color coded and labeled in accordance with subsection 62-555.320(10), F.A.C., and all other aboveground pipe shall be painted blue or shall be color coded or marked like underground pipe.

(c) The Department shall allow the use of pipe and appurtenances that do not conform to applicable American Water Works Association (AWWA) standards as incorporated into Rule 62-555.330, F.A.C., only if suppliers of water or construction permit applicants provide documentation showing that the alternate pipe and appurtenances provide strength, durability, reliability, and public health protection at least equal to that provided by pipe and appurtenances that conform to applicable AWWA standards.

Specific Authority 403.861(9) FS. Law Implemented 403.861(7) FS. History–New 11-19-87, Formerly 17-22.620, Amended 1-18-89, 5-7-90, 1-1-93, 3-8-94, Formerly 17-555.320, Amended 8-28-03.

62-555.322 Prohibition on Use of Lead Pipe, Solder, and Flux.

(1) As of January 18, 1989, any pipe, pipe fitting, solder, and flux that is used in the construction, alteration, or repair of any public water system shall be lead free as defined in subsection (2) below, and as of August 28, 2003, any plumbing fitting or fixture that is intended to dispense water for human consumption and that is used in the construction, alteration, or repair of any public water system shall be lead free as defined in subsection (2) below. This subsection shall not apply to leaded joints necessary for the repair of cast iron pipes.

(2) The phrase "lead free" shall mean:

(a) When used with respect to solder and flux, solder and flux containing not more than 0.2 percent lead;

(b) When used with respect to pipe and pipe fittings, pipe and pipe fittings containing not more than 8.0 percent lead; and

(c) When used with respect to plumbing fittings and fixtures intended to dispense water for human consumption, plumbing fittings and fixtures in compliance with Section 9 of NSF International Standard 61 as adopted in Rule 62-555.335, F.A.C.

Specific Authority 403.861(9) FS. Law Implemented 403.853(1) FS. History–New 1-18-89, Formerly 17-555.322, Amended 8-28-03.

62-555.325 Fluoridation.

(1) Fluoride levels in drinking water shall not exceed the primary maximum contaminant level under Rule 62-550.310, F.A.C., or the secondary maximum contaminant level under Rule 62-550.320, F.A.C. The recommended optimal fluoride concentration for fluoridated community water systems is 0.8 milligram per liter. The recommended fluoride control range for fluoridated community water systems is 0.7 to 1.3 milligrams per liter.

(2) Equipment and Installation.

(a) Fluoride chemicals shall be fed into drinking water proportional to flow. Where the flow rate is reasonably constant, this may be accomplished by electrically interconnecting fluoride metering pumps with well or service pumps or by otherwise designing fluoride metering pumps to operate only when well or service pumps operate. Automatic flow proportioning control of fluoride metering pumps shall be provided where the flow rate varies significantly (i.e., where the flow rate varies by more than 20 percent).

(b) Fluoride metering pumps shall have antisiphon protection.

(c) Tanks and containers holding fluorosilicic acid shall be vented only to the outside atmosphere.

(d) Scales, loss-of-weight recorders, liquid-level indicators, or flow meters, as appropriate, shall be provided to accurately measure quantities of fluoride chemicals used.

(e) At each drinking water treatment plant with fluoridation facilities, the supplier of water shall provide appropriate safety or protective equipment in accordance with Table 15.5 in *Water Treatment Plant Design* as incorporated into Rule 62-555.330, F.A.C.

(f) Suppliers of water who fluoridate their water shall provide analytical equipment that uses the colorimetric or ion electrode method to measure the fluoride concentration in the treated water.

(g) New or altered fluoridation facilities shall be designed and constructed in accordance with Section 4.7 and Part 5 in *Recommended Standards for Water Works* as incorporated into Rule 62-555.330, F.A.C., and in accordance with *Water Fluoridation: A Manual for Engineers and Technicians* as incorporated into Rule 62-555.330, F.A.C.

(3) Quality Assurance and Reporting.

(a) For each drinking water treatment plant fluoridating water, the supplier of water shall measure and record daily the quantity of fluoride chemical used, calculate and record daily the fluoride dose, and measure and record daily the fluoride concentration in the finished drinking water at the entry to the drinking water distribution system. The daily measurements of fluoride concentration in finished water may be performed by any authorized representative of the supplier of water but shall be performed using an appropriate method referenced in subsection 62-550.550(1), F.A.C. If the daily measurements of fluoride concentration in finished water are not performed by a laboratory certified by the Department of Health to perform fluoride analyses of drinking water, the supplier of water shall collect check samples and have them analyzed in accordance with paragraph (b) below.

(b) For each public water system (PWS) fluoridating water and not using a certified laboratory to perform all daily measurements of fluoride concentration in the finished drinking water from each of the PWS's treatment plants, the supplier of water shall collect two check samples per month from the PWS's distribution system. Each check sample shall be "split" into two samples, one which shall be analyzed by an authorized representative of the supplier of water and one which shall be analyzed by a laboratory of the Department of Health or a laboratory certified by the Department of Health to perform fluoride analyses of drinking water.

(c) For each drinking water treatment plant fluoridating water, the supplier of water shall report the information required under paragraph (a) above and, if applicable, the results of the analyses required under paragraph (b) above to the Department of Health's Bureau of Dental Health within ten days after each month of operation using Form 62-555.900(5), Monthly Operation Report for PWSs Fluoridating Water, hereby adopted and incorporated by reference, effective August 28, 2003. Copies of this form are available from the Department of Environmental Protection, Drinking Water Section, M.S. 3520, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

(4) The Department of Health's Bureau of Dental Health is authorized to conduct inspections of fluoridation facilities at public water systems.

Specific Authority 403.853(3), 403.861(6), (9), 403.862(1) FS. Law Implemented 403.852(12), (13), 403.853(3), (5) FS. History–New 11-19-87, Formerly 17-22.625, Amended 1-18-89, 1-3-91, Formerly 17-555.325, Amended 8-28-03.

62-555.330 Engineering References for Public Water Systems.

In addition to the requirements of this chapter, the requirements and standards contained in the following technical publications are hereby incorporated by reference and shall be applied in determining whether permits to construct or alter public water system components, excluding wells (but including well pumping equipment and appurtenances), shall be issued or denied. Each of these publications is available from the publisher or source listed for the publication. The specific requirements contained in this chapter supersede the requirements and standards contained in these publications. Where there are conflicts between these publications, suppliers of water and construction permit applicants shall comply with any one of the publications. Where there are multiple options or alternatives in these publications, suppliers of water and construction permit applicants shall comply with any one of the options or alternatives. The Department shall allow exceptions to the requirements and standards in these publications if suppliers of water or construction permit applicants provide justification for each exception and provide alternative design and construction features that achieve the same purpose and that afford a similar level of strength, durability, reliability, and public health protection.

(1) *Water Quality and Treatment: A Handbook of Community Water Supplies*, Fifth Edition, 1999, American Water Works Association. Published by McGraw-Hill, Post Office Box 182604, Columbus, OH 43218-2605.

(2) *Water Treatment Plant Design*, Third Edition, 1997, American Society of Civil Engineers and American Water Works Association. Published by McGraw-Hill, Post Office Box 182604, Columbus, OH 43218-2605.

(3) *Recommended Standards for Water Works*, 1997 Edition, Great Lakes – Upper Mississippi River Board of State Public Health and Environmental Managers. Published by Health Research, Inc., Health Education Services Division, P. O. Box 7126, Albany, NY 12224.

(4) Standards of the American Water Works Association (AWWA) in effect on January 1, 2003. Published by the AWWA, 6666 W. Quincy Avenue, Denver, CO 80235.

(5) *Water Fluoridation: A Manual for Engineers and Technicians*, September 1986, Thomas G. Reeves, P.E. Published by the U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control, Dental Disease Prevention Activity, Atlanta, GA 30333.

(6) *Recommended Practice for Backflow Prevention and Cross-Connection Control*, AWWA Manual M14, Second Edition, 1990, American Water Works Association (AWWA). Published by the AWWA, 6666 W. Quincy Avenue, Denver, CO 80235.

(7) *Ultraviolet Disinfection Guidelines for Drinking Water and Water Reuse*, December 2000, National Water Research Institute (NWRI) and American Water Works Association Research Foundation. Published by the NWRI, P.O. Box 20865, Fountain Valley, CA 92728-0865.

(8) *Water Distribution Systems Handbook*, 1999, Larry W. Mays, Editor in Chief. Published by McGraw-Hill, Post Office Box 182604, Columbus, OH 43218-2605.

Specific Authority 403.861(9) FS. Law Implemented 403.861(7) FS. History–New 11-19-87, Formerly 17-22.630, Amended 1-18-89, 1-3-91, 1-1-93, Formerly 17-555.330, Amended 9-22-99, 8-28-03.

62-555.335 Guidance Documents for Public Water Systems.

The following publications are adopted as financial, managerial, and technical guidance to assist suppliers of water in achieving compliance with Chapters 62-550, 62-555, and 62-560, F.A.C. Each of these publications is available from the publisher or source listed for the publication. Specific portions of these publications may be referenced as enforceable requirements in Chapters 62-550, 62-555, and 62-560, F.A.C. But otherwise, these publications are to be used only as guidance, and the specific requirements contained in Chapters 62-550, 62-555, and 62-560, F.A.C., shall supersede the guidance in these publications.

(1) *Guidance Manual for Compliance with the Filtration and Disinfection Requirements for Public Water Systems Using Surface Water Sources*, March 1991 Edition, U.S. Environmental Protection Agency (USEPA). Available from the following sources:

(a) USEPA, Office of Ground Water and Drinking Water (4601), Ariel Rios Building, 1200 Pennsylvania Avenue, NW, Washington, DC 20460-0003.

(b) Educational Resources Information Center, Clearinghouse for Sciences, Mathematics, and Environmental Education, 1929 Kenny Road, Columbus, OH 43210-1080.

(c) U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

(2) *Lead and Copper Rule Guidance Manual, Volume I: Monitoring*, September 1991, U.S. Environmental Protection Agency. Available from the U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

(3) *Lead and Copper Rule Guidance Manual, Volume II: Corrosion Control Treatment*, September 1992, U.S. Environmental Protection Agency. Available from the U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

(4) *Lead and Copper Monitoring and Reporting Guidance for Public Water Systems*, February 2002, U.S. Environmental Protection Agency (USEPA). Available from the following sources:

(a) USEPA, Office of Ground Water and Drinking Water (4601), Ariel Rios Building, 1200 Pennsylvania Avenue, NW, Washington, DC 20460-0003.

(b) U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

(5) *Alternative Disinfectants and Oxidants Guidance Manual*, April 1999, U.S. Environmental Protection Agency (USEPA). Available from the following sources:

(a) USEPA, Office of Ground Water and Drinking Water (4601), Ariel Rios Building, 1200 Pennsylvania Avenue, NW, Washington, DC 20460-0003.

(b) Educational Resources Information Center, Clearinghouse for Sciences, Mathematics, and Environmental Education, 1929 Kenny Road, Columbus, OH 43210-1080.

(c) U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

(6) *Guidance Manual for Compliance with the Interim Enhanced Surface Water Treatment Rule: Turbidity Provisions*, April 1999, U.S. Environmental Protection Agency (USEPA). Available from the following sources:

(a) USEPA, Office of Ground Water and Drinking Water (4601), Ariel Rios Building, 1200 Pennsylvania Avenue, NW, Washington, DC 20460-0003.

(b) Educational Resources Information Center, Clearinghouse for Sciences, Mathematics, and Environmental Education, 1929 Kenny Road, Columbus, OH 43210-1080.

(c) U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

(7) *Enhanced Coagulation and Enhanced Precipitative Softening Guidance Manual*, May 1999, U.S. Environmental Protection Agency (USEPA). Available from the following sources:

(a) USEPA, Office of Ground Water and Drinking Water (4601), Ariel Rios Building, 1200 Pennsylvania Avenue, NW, Washington, DC 20460-0003.

(b) Educational Resources Information Center, Clearinghouse for Sciences, Mathematics, and Environmental Education, 1929 Kenny Road, Columbus, OH 43210-1080.

(c) U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

(8) *Disinfection Profiling and Benchmarking Guidance Manual*, August 1999, U.S. Environmental Protection Agency (USEPA). Available from the following sources:

(a) USEPA, Office of Ground Water and Drinking Water (4601), Ariel Rios Building, 1200 Pennsylvania Avenue, NW, Washington, DC 20460-0003.

(b) Educational Resources Information Center, Clearinghouse for Sciences, Mathematics, and Environmental Education, 1929 Kenny Road, Columbus, OH 43210-1080.

(c) U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

(9) *Microbial and Disinfection Byproduct Rules Simultaneous Compliance Manual*, August 1999, U.S. Environmental Protection Agency (USEPA). Available from the following sources:

(a) USEPA, Office of Ground Water and Drinking Water (4601), Ariel Rios Building, 1200 Pennsylvania Avenue, NW, Washington, DC 20460-0003.

(b) Educational Resources Information Center, Clearinghouse for Sciences, Mathematics, and Environmental Education, 1929 Kenny Road, Columbus, OH 43210-1080.

(c) U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

(10) NSF International (NSF) Standard 14-2003, Plastics Piping System Components and Related Materials; NSF Standard 42-2002, Drinking Water Treatment Units – Aesthetic Effects; NSF Standard 44-2002, Residential Cation Exchange Water Softeners; NSF Standard 53-2002, Drinking Water Treatment Units – Health Effects; NSF Standard 55-2002, Ultraviolet Microbiological Water Treatment Systems; NSF Standard 58-2002, Reverse Osmosis Drinking Water Treatment Systems; NSF Standard 60-2002, Drinking Water Treatment Chemicals – Health Effects; NSF Standard 61-2002, Drinking Water System Components – Health Effects; and NSF Standard 62-1999, Drinking Water Distillation Systems. Available from Techstreet, 1327 Jones Drive, Ann Arbor, MI 48105.

(11) *Water Chemicals Codex*, 1982, National Research Council. Published by the National Academies Press, 500 Fifth Street, NW, Lockbox 285, Washington, DC 20055.

(12) *Food Chemicals Codex*; Fourth Edition, 1996; First Supplement to the Fourth Edition, 1997; Second Supplement to the Fourth Edition, 2000; and Third Supplement to the Fourth Edition, 2001; Institute of Medicine. Published by the National Academies Press, 500 Fifth Street, NW, Lockbox 285, Washington, DC 20055.

(13) *Standard Methods for the Examination of Water and Wastewater*, 20th Edition, 1998, American Public Health Association (APHA), American Water Works Association, and Water Environment Federation. Published by the APHA, 800 I Street, NW, Washington, DC 20001.

(14) *Emergency Planning for Water Utilities*, AWWA Manual M19, Fourth Edition, 2001, American Water Works Association (AWWA). Published by the AWWA, 6666 W. Quincy Avenue, Denver, CO 80235.

(15) *Manual of Small Public Water Supply Systems*, May 1991, U.S. Environmental Protection Agency. Available from the U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

(16) *Design and Construction of Small Water Systems*, An AWWA Small Systems Resource Book, Second Edition, 1999, American Water Works Association (AWWA). Published by the AWWA, 6666 W. Quincy Avenue, Denver, CO 80235.

(17) *Design of Small Water Systems*; Engineer Manual 1110-2-503; February 27, 1999; U.S. Army Corps of Engineers. Available from the U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

(18) "Guidelines for the Issuance of Precautionary Boil Water Notices;" August 26, 1999; Florida Department of Health (FDOH). Available from the FDOH, Bureau of Water Programs, 4052 Bald Cypress Way, Bin A08, Tallahassee, Florida 32399-1709.

(19) *Sources of Technical and Financial Assistance for Small Drinking Water Systems*, July 2002, U.S. Environmental Protection Agency (USEPA). Available from the USEPA, Office of Ground Water and Drinking Water (4601), Ariel Rios Building, 1200 Pennsylvania Avenue, NW, Washington, DC 20460-0003.

(20) *System Partnership Solutions to Improve Public Health Protection*, September 2002, U.S. Environmental Protection Agency (USEPA). Available from the USEPA, Office of Ground Water and Drinking Water (4601), Ariel Rios Building, 1200 Pennsylvania Avenue, NW, Washington, DC 20460-0003.

(21) *New Water System Capacity Development Planning Manual*, April 2003, Florida Department of Environmental Protection (FDEP). Available from the FDEP, Drinking Water Section, 2600 Blair Stone Road, M.S. 3520, Tallahassee, Florida 32399-2400.

(22) *Uniform System of Accounts for Class A Water Utilities*, 1996; *Uniform System of Accounts for Class B Water Utilities*, 1996; *Uniform System of Accounts for Class C Water Utilities*, 1996; National Association of Regulatory and Utility Commissioners (NARUC). Published by the NARUC, 1101 Vermont Avenue, NW, Suite 200, Washington, DC 20005.

Specific Authority 403.861(9) FS. Law Implemented 403.861(7), 403.8615 FS. History–New 1-3-91, Amended 1-1-93, Formerly 17-555.335, Amended 9-22-99, 8-28-03.

62-555.340 Disinfection and Bacteriological Evaluation of Public Water System Components.

This section addresses disinfection and bacteriological evaluation of the following public water system (PWS) components: treatment or storage facilities and water mains. These PWS components shall be disinfected to inactivate any microbiological contaminant that might have been introduced into the facilities or mains during construction, alteration, repair, or maintenance. For the purpose of this section, the phrase "water mains" shall mean mains, including treatment plant process piping, conveying either raw, partially treated, or finished drinking water; fire hydrant leads; and service lines that are under the control of a PWS and that have an inside diameter of three inches or greater. Disinfection of public water system wells and bacteriological surveys and evaluations of such wells are addressed in subsection 62-555.315(6), F.A.C.

(1) Before new or altered treatment or storage facilities, new or altered water mains, and treatment or storage facilities and water mains taken out of operation for repair or maintenance that might lead to contamination of water are placed into, or returned to, operation, they shall be properly disinfected in accordance with the applicable American Water Works Association (AWWA) standard (i.e., AWWA Standard C651, C652, or C653) as incorporated into Rule 62-555.330, F.A.C., except that bacteriological evaluations to verify proper disinfection shall be conducted in accordance with subsection (2) below. This subsection does not apply to, and disinfection and bacteriological evaluations are not required for, the following treatment or storage facilities and water mains:

(a) Treatment or storage facilities and water mains that normally are treating, storing, or conveying surface water, or ground water under the direct influence of surface water, and that are located upstream of all filtration and disinfection treatment facilities;

(b) Disinfectant storage, feed, or application facilities;

(c) Treatment facilities handling residuals that are not recycled to the drinking water treatment train; and

(d) Water mains that are repaired with clamping devices while remaining full of pressurized water.

(2) Bacteriological evaluations to verify proper disinfection of treatment or storage facilities and water mains shall be conducted as set forth in paragraphs (a) through (c) below. The total residual chlorine measurements required under paragraph (a) may be performed by any authorized representative of the supplier of water or person constructing or altering the treatment or storage facilities or water mains but shall be performed following the appropriate procedures in the Department of Environmental Protection Standard Operating Procedures for Field Activities, DEP-SOP-001/01, as incorporated into Rule 62-160.800, F.A.C. The total coliform analyses required under paragraph (a) shall be performed by a laboratory of the Department of Health (DOH) or a laboratory certified by the DOH to perform bacteriological analyses of drinking water and shall be performed using an appropriate method referenced in subsection 62-550.550(1), F.A.C.

(a) After reducing the total chlorine residual in the facilities or mains to no more than four milligrams per liter, a total of at least two samples – each taken on a separate day and taken at least six hours apart from the other sample(s) – shall be collected at each of the locations indicated in the applicable AWWA standard referenced in subsection (1) above, and the samples shall be analyzed for total residual chlorine and for the presence of total coliform.

(b) If any sample contains more than four milligrams per liter of total chlorine, the sample shall be considered invalid. If any sample shows the presence of total coliform, the facilities or mains shall be redisinfected as necessary in accordance with subsection (1) above and resampled in accordance with paragraph (a) above until two consecutive samples at each sampling location show the absence of total coliform.

(c) Bacteriological test results shall be considered unacceptable if the tests were completed more than 60 days before the Department received the results.

(3) Except as allowed under subsections (4) and (5) below and except as allowed under special construction permit conditions established in accordance with paragraph 62-555.533(2)(f), F.A.C., no disinfected treatment or storage facilities or water mains shall be placed into, or returned to, operation until a bacteriological evaluation has been satisfactorily completed in accordance with subsection (2) above, results of the evaluation have been submitted to the appropriate Department of Environmental Protection (DEP) District Office or Approved County Health Department (ACHD), and said DEP District Office or ACHD has approved the facilities or mains for operation.

(4) When constructing or altering treatment or storage facilities, or water mains, for which a public water system construction permit is not required per subsection 62-555.520(1), F.A.C., and when taking treatment or storage facilities or water mains out of operation for repair or maintenance that might lead to contamination of water, the facilities or mains may be placed into, or returned to, operation without the Department's approval after disinfection and satisfactory completion of a bacteriological evaluation in accordance with subsection (2) above. The results of the bacteriological evaluation shall be submitted to the appropriate Department of Environmental Protection District Office or Approved County Health Department along with the next monthly operation report(s) required under paragraph 62-555.350(12)(b), F.A.C., or if no monthly operation report is required under paragraph 62-555.350(12)(b), F.A.C., within ten days after the end of the month during which the bacteriological evaluation was completed.

(5) When taking water mains out of operation for repair or rehabilitation that might lead to contamination of water, the mains may be returned to operation without the Department's approval after disinfection and before completion of a bacteriological evaluation in order to minimize the time customers are without water. An advisory or a precautionary "boil water" notice shall be issued if deemed necessary by the supplier of water or if recommended in the Department of Health's "Guidelines for the Issuance of Precautionary Boil Water Notices" as adopted in Rule 62-555.335, F.A.C. A bacteriological evaluation still must be satisfactorily completed in accordance with subsection (2) above after the mains are returned to operation. If any bacteriological sample shows the presence of total coliform, the supplier of water shall telephone, and speak directly to a person at, the appropriate Department of Environmental Protection (DEP) District Office or Approved County Health Department (ACHD) as soon as possible, but never later than noon of the next business day. Otherwise, the results of the bacteriological evaluation shall be submitted to the appropriate DEP District Office or ACHD along with the next monthly operation report(s) required under paragraph 62-555.350(12)(b), F.A.C., or if no monthly operation report is required under paragraph 62-555.350(12)(b), F.A.C., within ten days after the end of the month during which the bacteriological evaluation was completed.

Specific Authority 403.861(9) FS. Law Implemented 403.852(12), (13), 403.853(1), (3) FS. History–New 11-19-87, Formerly 17-22.640, Amended 1-18-89, Formerly 17-555.340, Amended 8-28-03.

62-555.345 Certification of Construction Completion and Clearance for Public Water System Components.
Except as allowed under subsection 62-555.340(5), F.A.C., or by special permit condition established in accordance with paragraph 62-555.533(2)(f), F.A.C., no public water system (PWS) components constructed or altered under a permit granted by the Department shall be placed into permanent operation without prior Department approval, or clearance, as described below.

(1) Upon completing, or substantially completing, the construction of new or altered PWS components, and before placing the components into operation for any purpose other than disinfection, testing for leaks, or testing equipment operation, the permittee shall submit to the appropriate Department of Environmental Protection (DEP) District Office or Approved County Health Department one copy of a completed certification of construction completion using Form 62-555.900(9), Certification of Construction Completion and Request for Clearance to Place Permitted PWS Components into Operation, hereby adopted and incorporated by reference, effective August 28, 2003. Copies of this form are available from the Department of Environmental Protection, Drinking Water Section, M.S. 3520, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. This certification shall be accompanied by one copy of the following information:

(a) The portion of record drawings showing deviations from the DEP construction permit, including the approved preliminary design report or drawings and specifications, if there are any deviations from said permit. (Note that it is necessary to submit a copy of only the portion of record drawings showing deviations and not a complete set of record drawings.)

(b) Bacteriological test results, including a sketch or description of all bacteriological sampling locations, demonstrating compliance with subsection 62-555.315(6), F.A.C., or Rule 62-555.340, F.A.C., if any of the new or altered PWS components must be disinfected and bacteriologically surveyed or evaluated per said subsection or said rule.

(c) Analytical test results demonstrating compliance with Part III of Chapter 62-550, F.A.C., or subsection 62-524.650(2), F.A.C., if any of the new or altered PWS components are necessary to achieve, or affect, compliance with said part or said subsection.

(d) A completed Form 62-555.900(20), New Water System Capacity Development Financial and Managerial Operations Plan, as incorporated into Rule 62-555.357, F.A.C., if the new or altered PWS components were constructed under a permit issued by the Department before the effective date of Rule 62-555.525, F.A.C., (9-22-99) and create a "new system" as described under subsection 62-555.525(1), F.A.C.

(e) Any other information required by conditions in the DEP construction permit.

(2) Within 14 days after receiving a certification of construction completion for PWS components constructed or altered under a general permit, the Department shall review the certification. If the Department finds anything that will prevent the new or altered components from functioning in compliance with Chapters 62-550 and 62-555, F.A.C., or if the Department finds that the new or altered components will cause, or contribute to, a PWS's noncompliance with Chapter 62-550 or 62-555, F.A.C., the Department shall issue to the permittee, within the aforementioned 14-day review period, a written request for corrective action and for resubmittal of the certification after the corrective action is completed.

(3) Within 30 days after receiving a certification of construction completion for PWS components constructed or altered under a specific permit, the Department shall review the certification and, if the new or altered components create a "new system" as described under subsection 62-555.525(1), F.A.C., shall inspect the "new system." If the Department finds anything that will prevent the new or altered components from functioning in compliance with Chapters 62-550 and 62-555, F.A.C., if the Department finds anything that will prevent a "new system" from functioning in compliance with Chapters 62-550, 62-555, 62-560, and 62-699, F.A.C., or if the Department finds that the new or altered components will cause, or contribute to, an existing PWS's noncompliance with Chapter 62-550 or 62-555, F.A.C., the Department shall issue to the permittee, within the aforementioned 30-day review/inspection period, a written request for corrective action and for resubmittal of the certification after the corrective action is completed.

(4) Within 14 days after receiving a satisfactory certification of construction completion for PWS components constructed or altered under a general permit and within 30 days after receiving a satisfactory certification of construction completion for PWS components constructed or altered under a specific permit, the Department shall issue written approval, or clearance, to place the new or altered components into permanent operation. The Department shall issue the clearance to the permittee and shall provide a copy of the clearance to the PWS supplying water to the new or altered components if said PWS is not the permittee.

(5) Suppliers of water shall ensure that permittees have obtained written clearance from the Department before suppliers of water turn on water service to permittees.

Specific Authority 403.853(3), 403.861(9) FS. Law Implemented 403.0877, 403.853(1), (3), 403.861(10), 403.8615 FS. History–New 11-19-87, Formerly 17-22.645, Amended 1-18-89, 5-7-90, 1-3-91, 1-1-93, Formerly 17-555.345, Amended 9-22-99, 8-28-03.

62-555.348 Planning for Expansion of Public Water System Source, Treatment, or Storage Facilities.
This section applies to all community water systems serving, or designed to serve, 350 or more persons or 150 or more service connections.

(1) Suppliers of water shall provide for the timely planning, design, permitting, and construction of necessary public water system source, treatment, or storage facilities.

(2) Suppliers of water shall routinely compare the total net quantity of finished drinking water produced each day by their treatment plant(s) with the total permitted maximum-day operating capacity of their plant(s). The permitted maximum-day operating capacity of each plant shall be as specified in the latest Department of Environmental Protection (DEP) construction permit concerning source water or treatment facilities for the plant. In cases where no permitted maximum-day operating capacity has been specified in the latest DEP construction permit concerning source water or treatment facilities for a plant, the Department shall establish the permitted maximum-day operating capacity of the plant based upon information that is included in or with pertinent permit applications or that is provided by the supplier of water and based upon design requirements in Part III of this chapter, including design requirements in the engineering references listed in Rule 62-555.330, F.A.C.

(3) When the total maximum-day quantity of finished water produced by all treatment plants connected to a water system, including water produced to meet any fire-flow demand but excluding water produced to meet any demand that the supplier of water documents to be highly unusual and nonrecurring, exceeds 75 percent of the total permitted maximum-day operating capacity of the plants, the supplier of water shall submit source/treatment/storage capacity analysis reports to the Department according to the schedule described in paragraphs (a) and (b) below; however, in no case shall it be necessary to submit more than one report annually. The reports shall be submitted to the appropriate Department of Environmental Protection District Office or Approved County Health Department.

(a) The initial report shall be submitted within six months after the month in which the total maximum-day quantity of finished water produced by the treatment plant(s) first exceeds 75 percent of the total permitted maximum-day operating capacity of the plant(s) or by August 28, 2004, whichever occurs later.

(b) Updated reports shall be submitted as follows:

1. If the initial report or the latest updated report indicates that maximum-day water demand (including fire-flow demand if fire protection is being provided) at build-out will not exceed the total permitted maximum-day operating capacity of the treatment plant(s) and that finished-water storage need (including fire storage if fire protection is being provided) at build-out will not exceed the existing total useful finished-water storage capacity, no additional report is required.

2. If the initial report or the latest updated report indicates that maximum-day water demand (including fire-flow demand if fire protection is being provided) will not exceed the total permitted maximum-day operating capacity of the treatment plant(s) for at least ten years and that finished-water storage need (including fire storage if fire protection is being provided) will not exceed the existing total useful finished-water storage capacity for at least ten years, the next updated report shall be submitted within five years after submittal of the previous report.

3. If the initial report or the latest updated report indicates that maximum-day water demand (including fire-flow demand if fire protection is being provided) will exceed the total permitted maximum-day operating capacity of the treatment plant(s) in less than ten years but greater than or equal to five years or that finished-water storage need (including fire storage if fire protection is being provided) will exceed the existing total useful finished-water storage capacity in less than ten years but greater than or equal to five years, the next updated report shall be submitted within two years after submittal of the previous report.

4. If the initial report or the latest updated report indicates that maximum-day water demand (including fire-flow demand if fire protection is being provided) will exceed the total permitted maximum-day operating capacity of the treatment plant(s) in less than five years or that finished-water storage need (including fire storage if fire protection is being provided) will exceed the existing total useful finished-water storage capacity in less than five years, the next updated report shall be submitted within one year after submittal of the previous report.

(4) Each initial or updated source/treatment/storage capacity analysis report shall evaluate the capacity of all source, treatment, or storage facilities connected to a water system and shall contain the following information:

(a) The capacity of each water treatment plant's source water facilities and treatment facilities; the permitted maximum-day operating capacity and, if applicable, permitted peak operating capacity of each plant; and the useful capacity of each finished-water storage facility;

(b) The maximum-day and annual average daily quantities of finished water produced by each plant during each of the past ten years or during each of the years the plant has been in operation, whichever is less;

(c) Projected total water demands – total annual average daily demand and total maximum-day demand (including fire-flow demand if fire protection is being provided) – for at least the next ten years and projected total finished-water storage need (including fire storage if fire protection is being provided) for at least the next ten years;

(d) An estimate of the time required for maximum-day water demand (including fire-flow demand if fire protection is being provided) to exceed the total permitted maximum-day operating capacity of the plant(s) and an estimate of the time required for finished-water storage need (including fire storage if fire protection is being provided) to exceed the existing total useful finished-water storage capacity;

(e) Recommendations for new or expanded source, treatment, or storage facilities; and

(f) A recommended schedule showing dates for design, permitting, and construction of recommended new or expanded source, treatment, or storage facilities.

(5) Each initial or updated source/treatment/storage capacity analysis report shall be prepared under the responsible charge of one or more professional engineers licensed in Florida and shall be signed, sealed, and dated by the professional engineer(s) in responsible charge.

(6) If an initial or updated source/treatment/storage capacity analysis report indicates that maximum-day water demand (including fire-flow demand if fire protection is being provided) will exceed the total permitted maximum-day operating capacity of the water treatment plant(s) in less than five years or that finished-water storage need (including fire storage if fire protection is being provided) will exceed the existing total useful finished-water storage capacity in less than five years, documentation of timely design, permitting, and construction of recommended new or expanded source, treatment, or storage facilities shall be submitted with the report. The documentation shall consist of a written statement that is signed by an authorized representative of the supplier of water and that certifies the supplier is meeting, and intends to meet, the report's recommended schedule for design, permitting, and construction of recommended new or expanded source, treatment, or storage facilities.

Specific Authority 403.861(9) FS. Law Implemented 403.861(17) FS. History–New 8-28-03.

62-555.350 Operation and Maintenance of Public Water Systems.

(1) Suppliers of water shall operate and maintain their public water systems so as to comply with applicable standards in Chapter 62-550, F.A.C., and requirements in this chapter.

(2) Suppliers of water shall keep all necessary public water system components in operation and shall maintain such components in good operating condition so the components function as intended. Preventive maintenance on electrical or mechanical equipment – including exercising of auxiliary power sources, checking the calibration of finished-drinking-water meters at treatment plants, testing of air or pressure relief valves for hydropneumatic tanks, and exercising of isolation valves – shall be performed in accordance with the equipment manufacturer's recommendations or in accordance with a written preventive maintenance program established by the supplier of water; however, in no case shall auxiliary power sources be run under load less frequently than monthly. Accumulated sludge and biogrowths shall be cleaned routinely (i.e., at least annually) from all treatment facilities that are in contact with raw, partially treated, or finished drinking water and that are not specifically designed to collect sludge or support a biogrowth; and blistering, chipped, or cracked coatings and linings on treatment or storage facilities in contact with raw, partially treated, or finished drinking water shall be rehabilitated or repaired. Finished-drinking-water storage tanks, including conventional hydropneumatic tanks with an access manhole but excluding bladder- or diaphragm-type hydropneumatic tanks without an access manhole, shall be checked at least annually to ensure that hatches are closed and screens are in place; shall be cleaned at least once every five years to remove biogrowths, calcium or iron/manganese deposits, and sludge from inside the tanks; and shall be inspected for structural and coating integrity at least once every five years by personnel under the responsible

charge of a professional engineer licensed in Florida. Dead-end water mains conveying finished drinking water shall be flushed quarterly or in accordance with a written flushing program established by the supplier of water; additionally, dead-end or other water mains conveying finished water shall be flushed as necessary whenever legitimate water quality complaints are received.

(3) Suppliers of water shall ensure that drinking water treatment chemicals conform to the standards referenced in paragraph 62-555.320(3)(a), F.A.C., and shall have their lead/chief water treatment plant operators certify in writing on the monthly operation reports required under subsection (12) below that drinking water treatment chemicals conform to the standards referenced in paragraph 62-555.320(3)(a), F.A.C. Lead/chief water treatment plant operators may base their certifications upon evaluations conducted by the supplier of water or upon third-party or manufacturer certifications.

(4) No supplier of water shall operate any drinking water treatment plant at a capacity greater than the plant's permitted operating capacity except with the Department's prior approval, which shall be given when such operation will not cause a violation of a maximum contaminant level, a treatment technique requirement, or other operating requirements and is for no more than three months, or under circumstances that the supplier of water documents as highly unusual and nonrecurring. The permitted operating capacity of each plant shall be as specified in the latest Department of Environmental Protection (DEP) construction permit concerning source water or treatment facilities for the plant. In cases where no permitted operating capacity has been specified in the latest DEP construction permit concerning source water or treatment facilities for a plant, the Department shall establish the permitted maximum-day operating capacity of the plant and, if the plant is designed to meet peak water demand or to supplement finished-water storage facilities in meeting peak water demand, the permitted peak operating capacity of the plant based upon information that is included in or with pertinent permit applications or that is provided by the supplier of water and based upon design requirements in Part III of this chapter, including design requirements in the engineering references listed in Rule 62-555.330, F.A.C. Each day that a supplier of water is required under Chapter 62-699, F.A.C., to have a licensed operator staff or visit a plant, the supplier of water shall measure and record in the logs and reports required under subsection (12) below the net quantity of finished drinking water, excluding any filter backwash water, produced by the plant.

(5) Suppliers of water who are using ground water not under the direct influence of surface water and who are required to provide treatment to reliably achieve at least four-log inactivation or removal of viruses in accordance with paragraph 62-555.320(12)(b), F.A.C., shall monitor, record, and maintain the effectiveness and reliability of disinfection treatment as described in paragraphs (a) through (c) below. The residual disinfectant, temperature, or pH measurements required under paragraph (a) or (b) may be performed by any authorized representative of the supplier of water; but field measurements of residual chlorine, temperature, and pH shall be performed following the appropriate procedures in the Department of Environmental Protection Standard Operating Procedures for Field Activities, DEP-SOP-001/01, as incorporated into Rule 62-160.800, F.A.C., and all other measurements shall be performed using an appropriate method referenced in subsection 62-550.550(1), F.A.C., or in *Standard Methods for the Examination of Water and Wastewater* as adopted in Rule 62-555.335, F.A.C.

(a) For each day a supplier of water serving 3,300 or more persons serves water to the public from a drinking water treatment plant that includes chemical disinfection for virus inactivation, the supplier of water shall continuously monitor the residual disinfectant concentration (C) before or at the first customer and shall record in the logs and reports required under subsection (12) below the lowest C measured before or at the first customer during peak flow, the corresponding disinfectant contact time (T) at the C monitoring point during peak flow, and the resulting lowest CT provided before or at the first customer during peak flow. In addition, at least once for each day the supplier of water serves water to the public from the plant, the supplier of water shall measure and record the temperature of the water at the point where C is monitored; shall measure and record the pH of the water at the point where C is monitored if free chlorine is being used for virus inactivation; and with this temperature and pH information, shall determine and record the minimum CT required to comply with paragraph 62-555.320(12)(b), F.A.C. If there is a failure of equipment used to continuously monitor C, the supplier of water may temporarily monitor C by taking grab samples every four hours but may do so for no more than one week following the equipment failure. If at any time the "CT provided" falls below the minimum CT required, the supplier of water shall increase the disinfectant dose until the "CT provided" is at least equal to the minimum CT required and shall notify the Department in accordance with subsection (10) below.

(b) For each day a supplier of water serving less than 3,300 persons serves water to the public from a drinking water treatment plant that includes chemical disinfection for virus inactivation, the supplier of water shall monitor the residual disinfectant concentration (C) before or at the first customer by taking at least one grab sample during peak flow and shall record in the logs and reports required under subsection (12) below the lowest C measured before or at the first customer during peak flow, the corresponding disinfectant contact time (T) at the C monitoring point during peak flow, and the resulting CT provided before or at the first customer during peak flow. In addition, at least once for each day the supplier of water serves water to the public from the plant, the supplier of water shall measure and record the temperature of the water at the point where C is monitored; shall measure and record the pH of the water at the point where C is monitored if free chlorine is being used for virus inactivation; and with this temperature and pH information, shall determine and record the minimum CT required to comply with paragraph 62-555.320(12)(b), F.A.C. If any measurement of the "CT provided" falls below the minimum CT required, the supplier of water shall increase the disinfectant dose and take follow-up grab samples at least every four hours until the "CT provided" is at least equal to the minimum CT required and shall notify the Department in accordance with subsection (10) below.

(c) For each day a supplier of water serves water to the public from a drinking water treatment plant that includes ultraviolet (UV) disinfection for virus inactivation, the supplier of water shall continuously monitor the operating UV dose and shall record in the logs and reports required under subsection (12) below the lowest operating UV dose measured. If at any time the operating UV

dose falls below the minimum UV dose required to comply with paragraph 62-555.320(12)(b), F.A.C., the supplier of water shall clean the UV lamp sleeves or replace the UV lamps to restore the operating UV dose to a level at least equal to the required minimum UV dose and shall notify the Department in accordance with subsection (10) below.

(6) Suppliers of water shall maintain a minimum free chlorine residual of 0.2 milligram per liter, or a minimum combined chlorine residual of 0.6 milligram per liter or an equivalent chlorine dioxide residual, throughout their drinking water distribution system at all times. If at any time the residual disinfectant concentration in any portion of a distribution system falls below the required minimum level, the supplier of water shall increase the disinfectant dose as necessary and flush said portion of the distribution system until the residual disinfectant concentration is restored to the required minimum level. Suppliers of water shall monitor and record the residual disinfectant concentration in their distribution system as described in paragraphs (a) and (b) below. The residual disinfectant measurements required under paragraph (a) or (b) may be performed by any authorized representative of the supplier of water; but field measurements of chlorine residual shall be performed following the appropriate procedures in the Department of Environmental Protection Standard Operating Procedures for Field Activities, DEP-SOP-001/01, as incorporated into Rule 62-160.800, F.A.C., and all other measurements shall be performed using an appropriate method referenced in subsection 62-550.550(1), F.A.C.

(a) Each supplier of water serving 3,300 or more persons shall take at least one grab sample each day the supplier serves water to the public or at least five days per week, whichever is less, at a point in the water supplier's distribution system reflecting maximum residence time after disinfectant addition, shall measure the residual disinfectant concentration, and shall record the residual disinfectant concentration in the logs and reports required under subsection (12) below.

(b) Each supplier of water serving less than 3,300 persons shall take at least one grab sample each day the supplier serves water to the public or at least two days per week, whichever is less, at a point in the water supplier's distribution system reflecting maximum residence time after disinfectant addition, shall measure the residual disinfectant concentration, and shall record the residual disinfectant concentration in the logs and reports required under subsection (12) below.

(7) Except when a water main breaks or treatment or pumping equipment fails and except under circumstances that the supplier of water documents to be highly unusual and nonrecurring, suppliers of water shall maintain a minimum gauge pressure of 20 pounds per square inch throughout their drinking water distribution system up to each customer's point of connection to the water supplier's distribution system.

(8) Suppliers of water shall employ licensed operation personnel in accordance with Chapters 62-602 and 62-699, F.A.C., for all public water systems except transient non-community water systems using only ground water and serving only businesses other than public food service establishments as defined in, and regulated under, Chapter 361, 500, or 509, F.S.

(9) No supplier of water shall alter or replace underground portions of, or abandon, any public water system well without first obtaining a permit from the appropriate water management district or delegated permitting authority if such a permit is required under Chapter 62-532, F.A.C. In addition, no supplier of water shall introduce a new source of water into any public water system; alter, or discontinue use of, any public water system components other than wells (but including well pumping equipment and appurtenances); or alter the type of chemicals being used to treat drinking water without first obtaining a construction permit or written approval from the Department if such a permit or such approval is required under subsection 62-555.520(1), F.A.C., or first submitting written notification to the Department if such notification is required under subsection 62-555.520(1), F.A.C.

(10) Suppliers of water shall notify the State Warning Point (SWP), the appropriate Department of Environmental Protection (DEP) District Office or Approved County Health Department (ACHD), and water customers in accordance with the following procedures in the event of the following circumstances.

(a) Suppliers of water shall telephone the SWP at 1(800)320-0519 immediately (i.e., within two hours) after discovery of any actual or suspected sabotage or security breach, or any suspicious incident, involving a public water system.

(b) Suppliers of water shall telephone, and speak directly to a person at, the appropriate DEP District Office or ACHD as soon as possible, but never later than noon of the next business day, in the event of any of the following emergency or abnormal operating conditions:

1. The occurrence of any abnormal color, odor, or taste in a public water system's raw or finished water;

2. The failure of a public water system to comply with applicable disinfection requirements; or

3. The breakdown of any water treatment or pumping facilities, or the break of any water main, in a public water system if the breakdown or break is expected to adversely affect finished-water quality, interrupt water service to 150 or more service connections or 350 or more people, interrupt water service to any one service connection for more than eight hours, or necessitate the issuance of a precautionary "boil water" notice in accordance with the Department of Health's "Guidelines for the Issuance of Precautionary Boil Water Notices" as adopted in Rule 62-555.335, F.A.C.

(c) Suppliers of water shall notify the appropriate DEP District Office or ACHD and affected water customers by no later than the previous business day before initiating any planned permanent or temporary conversion from free chlorine to chloramines or vice versa for disinfection. Notices to the appropriate DEP District Office or ACHD shall be delivered by telephoning, and speaking directly to a person at, the DEP District Office or ACHD, and notices to affected water customers shall be delivered in writing or via telephone, newspaper, radio, or television. A single notice may be provided to cover both a planned temporary conversion from chloramines to free chlorine and the planned subsequent conversion back to chloramines. Notification is not required before unplanned temporary conversions from chloramines to free chlorine to protect public health during emergency operating conditions caused by circumstances such as source water contamination, water main breaks, or backflow incidents.

(d) Suppliers of water shall notify affected water customers in writing or via telephone, newspaper, radio, or television by no later than the previous business day before taking public water system (PWS) components out of operation for planned maintenance or repair work if the work is expected to adversely affect finished-water quality or interrupt water service to any service connection. Additionally, suppliers of water shall telephone, and speak directly to a person at, the appropriate DEP District Office or ACHD by no later than the previous business day before taking PWS components out of operation for planned maintenance or repair work if the work is expected to adversely affect finished-water quality, interrupt water service to 150 or more service connections or 350 or more people, interrupt water service to any one service connection for more than eight hours, or necessitate the issuance of a precautionary "boil water" notice in accordance with the Department of Health's "Guidelines for the Issuance of Precautionary Boil Water Notices" as adopted in Rule 62-555.335, F.A.C.

(e) Suppliers of water shall describe in the monthly operation reports required under subsection (12) below all emergency or abnormal operating conditions and all maintenance or repair work that involves taking out of operation public water system components other than water service lines.

(11) Suppliers of water shall issue precautionary "boil water" notices as required or recommended in the Department of Health's "Guidelines for the Issuance of Precautionary Boil Water Notices" as adopted in Rule 62-555.335, F.A.C.

(12) Suppliers of water shall keep and submit operation and maintenance logs, reports, and records as described below.

(a) All suppliers of water shall keep operation and maintenance logs at their drinking water treatment plants. For plants that are part of a transient non-community water system using only ground water and serving only businesses other than public food service establishments, the operation and maintenance logs shall contain a minimum of three months of data at all times and shall contain the date and type of all maintenance performed and the date and results of all sampling and analyses performed unless the sampling or analyses are documented on a laboratory sheet. For all other plants, the operation and maintenance logs shall contain the information listed in, and shall be maintained as described in, subsection 62-602.650(4), F.A.C.

(b) For all public water systems except transient non-community water systems using only ground water and serving only businesses other than public food service establishments, suppliers of water shall submit monthly operation reports to the appropriate Department of Environmental Protection District Office or Approved County Health Department within ten days after each month of operation per paragraph 62-550.730(1)(d), F.A.C., and shall do so using the following forms as applicable: Form 62-555.900(2), Monthly Operation Report for Subpart H Systems as incorporated into paragraph 62-550.817(11)(a), F.A.C.; Form 62-555.900(3), Monthly Operation Report for PWSs Treating Raw Ground Water or Purchased Finished Water, hereby adopted and incorporated by reference, effective August 28, 2003; Form 62-555.900(4), Monthly Operation Report for Consecutive Systems that Do Not Treat Water, hereby adopted and incorporated by reference, effective August 28, 2003; Form 62-555.900(6), Monthly Operation Report for Consecutive Systems that Receive Purchased Finished Water from a Subpart H System as incorporated into paragraph 62-550.817(11)(b), F.A.C.; Form 62-555.900(11), Monthly Operation Report for Summation of Finished-Water Production by CWSs that Have Multiple Treatment Plants, hereby adopted and incorporated by reference, effective August 28, 2003. Copies of these forms are available from the Department of Environmental Protection Drinking Water Section, M.S. 3520, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Suppliers of water shall keep copies of monthly operation reports, together with any additional operation records required by the monthly operation reports, for at least ten years in accordance with subsection 62-550.720(5), F.A.C.

(c) All suppliers of water shall keep records documenting that their finished-drinking-water storage tanks, including conventional hydropneumatic tanks with an access manhole but excluding bladder- or diaphragm-type hydropneumatic tanks without an access manhole, have been cleaned and inspected during the past five years in accordance with subsection 62-555.350(2), F.A.C. In addition, all suppliers of water shall keep records documenting that their isolation valves are being exercised, and their water mains conveying finished drinking water are being flushed, in accordance with subsection 62-555.350(2), F.A.C.

(13) Suppliers of water shall provide an operation and maintenance manual for each of their drinking water treatment plants by no later than December 31, 2005, and shall update the manual thereafter as necessary to reflect plant alterations and additions. The manual shall contain operation and control procedures, and preventive maintenance and repair procedures, for all plant equipment and shall be made available for reference at the plant or at a convenient location near the plant. Bound and indexed equipment manufacturer manuals shall be considered sufficient to meet the requirements of this subsection.

(14) By December 31, 2005, suppliers of water who own or operate a community water system serving, or designed to serve, 350 or more persons or 150 or more service connections shall have, and thereafter maintain, an up-to-date map of their drinking water distribution system. Such a map shall show the location and size of water mains if known; the location of valves and fire hydrants; and the location of any pressure zone boundaries, pumping facilities, storage tanks, and interconnections with other public water systems.

(15) Suppliers of water who own or operate a community water system serving, or designed to serve, 350 or more persons or 150 or more service connections shall develop a written emergency preparedness/response plan in accordance with *Emergency Planning for Water Utilities,* AWWA Manual M19, as adopted in Rule 62-555.335, F.A.C., by no later than December 31, 2004, and shall update and implement the plan as necessary thereafter. Said suppliers of water shall coordinate with their Local Emergency Planning Committee and their Florida Department of Law Enforcement Regional Security Task Force when developing their emergency plan and shall include in their plan all of the information in paragraphs (a) through (e) below.

(a) A communication chart as described in Chapter 5 of AWWA Manual M19.

(b) Written agreements with other agencies, utilities, or response organizations.

(c) A disaster-specific preparedness/response plan as described in Chapter 5 of AWWA Manual M19 for each of the following disasters: vandalism or sabotage; a drought; a hurricane; a structure fire; and if applicable, a flood, a forest or brush fire, and a hazardous material release. Each disaster-specific preparedness/response plan shall incorporate the results of a vulnerability assessment; shall include actions and procedures, and identify equipment, that can obviate or lessen the impact of such a disaster; and shall include plans and procedures that can be implemented, and identify equipment that can be utilized, in the event of such a disaster.

(d) Details about how the water system meets the standby power requirements under subsection 62-555.320(14), F.A.C., and, if applicable, recommendations regarding the amount of fuel to maintain on site, and the amount of fuel to hold in reserve under contracts with fuel suppliers, for operation of auxiliary power sources.

(e) If applicable, recommendations regarding the amount of drinking water treatment chemicals, including chemicals used for regeneration of ion-exchange resins or for onsite generation of disinfectants, to maintain in inventory at treatment plants.

Specific Authority 403.861(9) FS. Law Implemented 403.852(12), 403.853(6), 403.861(17) FS. History–New 11-19-87, Formerly 17-22.650, Amended 1-18-89, 1-1-93, Formerly 17-555.350, Amended 8-28-03.

62-555.357 New Water System Capacity Development Financial and Managerial Operations Plans.

A New Water System Capacity Development Financial and Managerial Operations Plan consists of a completed Form 62-555.900(20), hereby adopted and incorporated by reference, effective August 28, 2003, including all supporting attachments. Copies of this form are available from the Department of Environmental Protection, Drinking Water Section, M.S. 3520, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

(1) For each water system that is considered a "new system" per subsection 62-555.525(1), F.A.C., but for which a construction permit is not required, the supplier of water shall submit a New Water System Capacity Development Financial and Managerial Operations Plan to the Department within 90 days after commencing operations as a community or non-transient non-community water system. The plan shall be submitted to the appropriate Department of Environmental Protection District Office or Approved County Health Department.

(2) For each water system that is considered a "new system" per subsection 62-555.525(1), F.A.C., the supplier of water shall submit an updated New Water System Capacity Development Financial and Managerial Operations Plan to the Department within 90 days after the third anniversary of the system commencing operations as a community or non-transient non-community water system. The updated plan shall be submitted to the appropriate Department of Environmental Protection District Office or Approved County Health Department.

(3) For each water system that is considered a "new system" per subsection 62-555.525(1), F.A.C., and that changes ownership on or after August 28, 2003, the supplier of water acquiring ownership of the system shall submit an updated New Water System Capacity Development Financial and Managerial Operations Plan to the Department within 90 days after acquiring ownership of the system. The updated plan shall be submitted to the appropriate Department of Environmental Protection District Office or Approved County Health Department.

(4) Within 30 days after the Department receives a New Water System Capacity Development Financial and Managerial Operations Plan required under subsection (1), (2), or (3) above, the Department shall review the plan. If the Department finds anything that will prevent the "new system" from functioning in compliance with Chapters 62-550, 62-555, 62-560, and 62-699, F.A.C., the Department shall issue to the supplier of water, within the aforementioned 30-day review period, a written request for changes to the plan and for resubmittal of the plan after the changes are made. Within 30 days after receiving a satisfactory plan (i.e., a plan that is complete and that indicates the "new system" has the capacity to function in compliance with Chapters 62-550, 62-555, 62-560, and 62-699, F.A.C.), the Department shall issue to the supplier of water written approval of the plan.

Specific Authority 403.861(9), 403.8615(1) FS. Law Implemented 403.8615 FS. History–New 9-22-99, Amended 8-28-03.

62-555.360 Cross-Connection Control for Public Water Systems.

(1) Cross-connection, as defined in Rule 62-550.200, F.A.C., is prohibited. However, a person who owns or manages a public water system may interconnect to another public water system if that system is operated and maintained in accordance with this chapter.

(2) Community water systems, and all public water systems that have service areas also served by reclaimed water systems regulated under Part III of Chapter 62-610, F.A.C., shall establish and implement a routine cross-connection control program to detect and control cross-connections and prevent backflow of contaminants into the water system. This program shall include a written plan that is developed using recommended practices of the American Water Works Association set forth in *Recommended Practice for Backflow Prevention and Cross-Connection Control,* AWWA Manual M14, as incorporated into Rule 62-555.330, F.A.C.

(3) Upon discovery of a prohibited cross-connection, public water systems shall either eliminate the cross-connection by installation of an appropriate backflow prevention device acceptable to the Department or shall discontinue service until the contaminant source is eliminated.

(4) Only the following are considered to be backflow prevention devices. They shall be installed in agreement with and under the supervision of the supplier of water or his designated representative (plumbing inspector, etc.) at the consumer's meter, at the property line of the consumer when a meter is not used, or at a location designated by the supplier of water or the Department. The devices are:

(a) Air gap separation – A physical separation between the free-flowing discharge end of a potable water supply pipeline and an open or non-pressure receiving vessel. An "approved airgap separation" shall be at least double the diameter of the supply pipe measured vertically above the top of the rim of the vessel. In no case shall it be less than 1 inch.

(b) Reduced pressure backflow preventer – A device containing within its structure a minimum of two independently acting approved check valves, together with an automatically operating pressure differential relief valve located between the two check valves. The first check valve reduces the supply pressure a predetermined amount so that during normal flow and at cessation of normal flow the pressure between the checks shall be less than the supply pressure. In case of leakage of either check valve, the differential relief valve, by discharging to the atmosphere, shall operate to maintain the pressure between the checks less than the supply pressure. The unit shall include tightly closing shutoff valves located at each end of the device, and each device shall be fitted with properly located test cocks.

(c) Atmospheric vacuum breaker – A backflow prevention device which is operated by atmospheric pressure in combination with the force of gravity. The unit is designed to work on a vertical plane only. The one moving part consists of a poppet valve which must be carefully sized to slide in a guided chamber and effectively shut off the reverse flow of water when a negative pressure exists.

(d) Pressure vacuum breaker – A pressure vacuum breaker is similar to an atmospheric vacuum breaker except that the checking unit poppet valve is activated by a spring. This type of vacuum breaker does not require a negative pressure to react and can be used on the pressure side of a valve.

(e) Double check valve assembly – An assembly composed of two single, independently acting, check valves, including tightly closing shutoff valves located at each end of the assembly and suitable connections for testing the water tightness of each check valve. A check valve is a valve that is drip-tight in the normal direction of flow when the inlet pressure is one psi and the outlet pressure is zero. The check valve shall permit no leakage in a direction reverse to the normal flow. The closure element (e.g., clapper) shall be internally weighted or otherwise internally loaded to promote rapid and positive closure.

(f) Residential Dual Check – A compact unit manufactured with two independent spring actuated check valves. The residential dual check is acceptable only as added back-flow prevention in areas served by reuse systems defined in Chapter 62-610, Part III, F.A.C., when the cross connection control program identifies activities specific to paragraphs (5)(a) and (5)(b) of this section.

(5) Cross connection control programs specific to reuse systems defined in Chapter 62-610, Part III, F.A.C., shall consider the following:

(a) Enhanced public education efforts towards prevention of cross connections.

(b) Enhanced inspection programs for portions of the distribution system in areas of reuse for detection and elimination of cross connections.

(c) Dual check valves shall be considered acceptable for reducing risks from back-flow only at residential properties served by reclaimed water unless:

1. Local codes, ordinances, or regulations require greater levels of back-flow prevention.
2. Other hazards exist on the property that require a greater level of back-flow prevention.

Specific Authority 403.086(8), 403.861(9) FS. Law Implemented 403.086(8), 403.855(3) FS. History–New 11-19-87, Formerly 17-22.660, Amended 1-18-89, 1-3-91, 1-1-93, Formerly 17-555.360, Amended 8-28-03.

62-555.365 Changes in Ownership of Public Water Systems.

At least 30 days before the proposed sale, or legal transfer of ownership, of a public water system, the current owner of the system and the proposed owner of the system shall jointly notify the Department in writing of the proposed change in ownership of the system. The notification shall be submitted to the appropriate Department of Environmental Protection District Office or Approved County Health Department and shall include the following information: the public water system name and identification number; the name of the current owner of the system; the name of the proposed owner of the system and the name, title, mailing address, telephone number, fax number, and e-mail address of a designated responsible official of the proposed owner; and the proposed date for the change in ownership of the system.

Specific Authority 403.861(9) FS. Law Implemented 403.861(14) FS. History–New 8-28-03.

PART IV PUBLIC WATER SYSTEM GENERAL CONSTRUCTION PERMITS

62-555.401 General Permit for Construction of Lead or Copper Corrosion Control, or Iron or Manganese Sequestration, Treatment Facilities for Small or Medium Public Water Systems.

(1) A general permit is hereby granted to any small or medium system, as defined in Rule 62-550.200, F.A.C., for the construction of lead or copper corrosion control treatment facilities, provided that the facilities are designed in accordance with Part III of this chapter and provided that:

(a) Per subsections 62-4.530(1) and 62-555.520(2), F.A.C., the system notifies the Department at least 30 days before beginning construction using Form 62-555.900(18), Notice of Intent to Use the General Permit for Construction of Lead or Copper Corrosion Control, or Iron or Manganese Sequestration, Treatment Facilities for Small or Medium PWSs, as incorporated into subsection 62-555.520(2), F.A.C. The completed notice form shall be submitted to the appropriate Department of Environmental Protection District Office or Approved County Health Department and shall be accompanied by the permit processing fee described in subsection 62-555.520(6), F.A.C., and listed in paragraph 62-4.050(4)(p), F.A.C.

(b) The selected lead or copper corrosion control treatment is consistent with the guidance and recommendations in the *Lead and Copper Guidance Manual, Volume II: Corrosion Control Treatment* as adopted in Rule 62-555.335, F.A.C.

(2) A general permit is hereby granted to any small or medium system, as defined in Rule 62-550.200, F.A.C., for the construction of iron or manganese sequestration treatment facilities, provided that the facilities are designed in accordance with Part III of this chapter and provided that, per subsections 62-4.530(1) and 62-555.520(2), F.A.C., the system notifies the Department at least 30 days before beginning construction using Form 62-555.900(18), Notice of Intent to Use the General Permit for Construction of Lead or Copper Corrosion Control, or Iron or Manganese Sequestration, Treatment Facilities for Small or Medium PWSs, as incorporated into subsection 62-555.520(2), F.A.C. The completed notice form shall be submitted to the appropriate Department of Environmental Protection District Office or Approved County Health Department and shall be accompanied by the permit processing fee described in subsection 62-555.520(6), F.A.C., and listed in paragraph 62-4.050(4)(p), F.A.C.

(3) This general permit is subject to the general conditions in Rule 62-4.540, F.A.C., and the following specific conditions:

(a) If the treatment facilities being constructed under this general permit were designed under the responsible charge of a professional engineer, the permittee shall retain a Florida-licensed professional engineer in accordance with subsection 62-555.530(3), F.A.C., to take responsible charge of inspecting construction of the facilities for the purpose of determining in general if the construction proceeds in compliance with this general permit, including the approved preliminary design report for the facilities.

(b) In accordance with subsection 62-555.530(4), F.A.C., the permittee shall have complete record drawings produced for the treatment facilities being constructed under this general permit.

(c) To fulfill the requirements under subsection 62-555.350(13), F.A.C., the permittee shall provide an operation and maintenance manual for the treatment facilities constructed under this general permit.

(d) Per Rule 62-555.345, F.A.C., the permittee shall submit a certification of construction completion to the Department and obtain approval, or clearance, from the Department before placing any treatment facilities constructed under this general permit into operation for any purpose other than disinfection, testing for leaks, or testing equipment operation. This specific condition does not prohibit the permittee from cutting into existing water mains and returning the water mains to operation in accordance with subsection 62-555.340(5), F.A.C., without the Department's approval.

Specific Authority 403.814(1), 403.861(9) FS. Law Implemented 403.0877, 403.814(1), (4), 403.861(7), (10) FS. History–New 12-10-96, Amended 8-28-03.

62-555.405 General Permit for Construction of Water Main Extensions for Public Water Systems.

(1) A general permit is hereby granted to any person for the construction of an extension to public water system mains conveying finished drinking water, provided that the extension is designed in accordance with Part III of this chapter and provided that:

(a) Per subsections 62-4.530(1) and 62-555.520(2), F.A.C., the person notifies the Department at least 30 days before beginning construction using Form 62-555.900(7), Notice of Intent to Use the General Permit for Construction of Water Main Extensions for PWSs, as incorporated into subsection 62-555.520(2), F.A.C. The completed notice form shall be submitted to the appropriate Department of Environmental Protection District Office or Approved County Health Department and shall be accompanied by the permit processing fee described in subsection 62-555.520(6), F.A.C., and listed in paragraph 62-4.050(4)(p), F.A.C.

(b) The public water system to which the water main extension will be connected has the capacity necessary to meet the design water demands of all customers to be served by the water main extension, and said public water system is in compliance with applicable planning requirements under Rule 62-555.348, F.A.C.; applicable cross-connection control requirements under Rule 62-555.360, F.A.C.; and all other applicable rules in Chapters 62-550, 62-555, and 62-699, F.A.C.

(c) Construction of the water main extension will not include construction of any drinking water treatment, pumping, or storage facilities or any conflict manholes.

(d) The water main extension will not be installed in areas contaminated by low-molecular-weight petroleum products or organic solvents.

(e) The water main extension will not interconnect previously separate public water systems or create a "new system" as described under subsection 62-555.525(1), F.A.C.

(f) No portion of the water main extension will remain dry following completion of construction.

(2) This general permit is subject to the general conditions in Rule 62-4.540, F.A.C., and the following specific conditions:

(a) If the water main extension being constructed under this general permit was designed under the responsible charge of a professional engineer, the permittee shall retain a Florida-licensed professional engineer in accordance with subsection 62-555.530(3), F.A.C., to take responsible charge of inspecting construction of the water main extension for the purpose of determining in general if the construction proceeds in compliance with this general permit, including the approved preliminary design report for the water main extension.

(b) In accordance with subsection 62-555.530(4), F.A.C., the permittee shall have complete record drawings produced for the water main extension being constructed under this general permit.

(c) Per Rule 62-555.345, F.A.C., the permittee shall submit a certification of construction completion to the Department and obtain approval, or clearance, from the Department before placing any water main extension constructed under this general permit into operation for any purpose other than disinfection or testing for leaks. This specific condition does not prohibit the permittee from cutting into existing water mains and returning the water mains to operation in accordance with subsection 62-555.340(5), F.A.C., without the Department's approval.

Specific Authority 403.814(1), 403.861(9) FS. Law Implemented 403.0877, 403.814(1), (4), 403.861(7), (9), (10) FS. History–New 7-8-82, Formerly 17-4.63, 17-4.630, 17-22.801, Amended 1-18-89, 1-1-93, Formerly 17-555.540, Amended 12-19-94, 12-10-96, 8-28-03.

PART V PUBLIC WATER SYSTEM CONSTRUCTION PERMITTING

62-555.500 General.

This part addresses construction permitting requirements for all public water system components other than wells (but including well pumping equipment and appurtenances) Permitting requirements for construction or repair of public water system wells are addressed in Chapters 62-524 and 62-532, F.A.C.

Specific Authority 403.861(2), (6), (9) FS. Law Implemented 403.861(2), (6), (7), (10) FS. History–New 11-19-87, Formerly 17-22.710, Amended 1-18-89, Formerly 17-555.500, Amended 8-28-03.

62-555.520 Applying for Public Water System Construction Permits.

(1) Except as noted in paragraphs (a) through (d) below, a construction permit is required for construction or alteration of any public water system component.

(a) No construction permit is required for use of point-of-entry (POE) or point-of-use (POU) treatment devices in lieu of centralized treatment to comply with a maximum contaminant level as allowed under subsection 62-550.340(2), F.A.C. However, suppliers of water shall submit a written request to, and obtain written approval from, the Department in accordance with subsection 62-550.340(2), F.A.C., before installing such POE or POU treatment devices. Additionally, suppliers of water are responsible for ensuring that such POE or POU treatment devices comply with the requirements in subsection 62-550.340(2), F.A.C.

(b) No construction permit is required for the types work or alterations listed in subparagraphs 1. through 5. below. However, suppliers of water shall obtain written approval from the Department before beginning such work or alterations. Each request for approval shall be submitted in writing to the appropriate Department of Environmental Protection District Office or Approved County Health Department and shall include the following: a description of the scope, purpose, and location of the work or alterations; and assurance that the work or alterations will comply with applicable requirements in Part III of this chapter, including applicable requirements in the engineering references listed in Rule 62-555.330, F.A.C. Additionally, each request for approval to discontinue use of existing drinking water treatment facilities, each request for approval to change drinking water treatment chemicals, and each request for approval to add tracer chemicals shall include assurance of continuing compliance with applicable primary or secondary drinking water standards; and each request for approval to conduct demonstration testing of existing drinking water treatment facilities that will discharge directly to downstream treatment, storage, or distribution facilities and each request for approval to construct or install a temporary pilot plant that will discharge to a public water system shall include the following: technical and reliability information, third-party technology verifications or historical study data, and jar test results to provide assurance of continuing compliance with applicable primary or secondary drinking water standards during times of demonstration testing or pilot plant operation; a plan to monitor at least daily for applicable process control parameters and acute contaminants and at least weekly for applicable chronic contaminants during times of demonstration testing or pilot plant operation; a plan for start-up, normal operation, and emergency shutdown of the demonstration testing or pilot plant and for emergency flushing of storage and distribution facilities; and a plan to properly train operators and to staff the affected drinking water treatment plant with a licensed operator during all times of demonstration testing or pilot plant operation. Within 30 days after the Department receives a request for approval, the Department shall issue written approval of the work or alterations described in the request, shall issue written comments asking for resubmittal of the request with all information and assurances required under this paragraph, or shall issue a written determination that a construction permit is required because the work/alterations described in the request is/are not of a type listed under this paragraph. The Department shall approve work or alterations described in a request for approval if the work/alterations is/are of a type listed under this paragraph and if the request includes all information and assurances required under this paragraph.

1. Discontinuing use of any existing drinking water treatment, pumping, or storage facilities.

2. Changing any type of drinking water treatment chemicals other than temporarily converting from chloramines to free chlorine (to protect public health during emergency operating conditions or to eliminate excess ammonia, oxidize nitrite and nitrifying bacteria, and control biofilm in a water distribution system), provided the change in chemicals will be made without construction or alteration of any chemical application facilities or other drinking water treatment facilities.

3. Temporarily adding any chemical to raw, partially treated, or finished drinking water for the purpose of conducting a tracer study.

4. Demonstration testing of any existing drinking water treatment facilities if the water from the facilities being tested will be discharged directly to downstream treatment, storage, or distribution facilities (instead of being discharged to waste or to upstream treatment facilities for full treatment at no greater than the maximum permitted rate).

5. Construction or installation of any pilot plant that will discharge water to a public water system (instead of discharging water to waste), provided the plant will discharge to the water system for no more than three months.

(c) No construction permit is required for the types of work or alterations listed in subparagraphs 1 through 5 below. However, suppliers of water shall submit written notification to the Department before beginning such work or alterations. Each notification shall be submitted to the appropriate Department of Environmental Protection District Office or Approved County Health Department and shall include the following: a description of the scope, purpose, and location of the work or alterations; and assurance that the work or alterations will comply with applicable requirements in Part III of this chapter, including applicable requirements in the engineering references listed in Rule 62-555.330, F.A.C. Suppliers of water may begin such work or alterations 14 days after providing notification to the Department unless they are advised by the Department that the notification is incomplete or that a construction permit is required because the work/alterations is/are not of a type listed under this paragraph.

1. Replacement of any existing drinking water pumping, storage, or treatment facilities, including chemical application facilities and residuals handling facilities, with new facilities of the same design and capacity, and at the same general location, as the existing facilities.

2. Replacement of any existing water main with a new main at the same location as the existing main, provided the new main will be either the same size as the existing main, no more than two sizes larger than the existing main, or no larger than the minimum size required or recommended in *Recommended Standards for Water Works* as incorporated into Rule 62-555.330, F.A.C.

3. Relocation of any existing water main to accommodate other utilities, provided the length of main being moved at each location will be no more than 100 linear feet.

4. Alteration, excluding maintenance or repair, of any structures that are not used to treat, store, or handle drinking water, drinking water treatment chemicals, or drinking water treatment residuals but that are used to house drinking water pumping or treatment facilities, including chemical application facilities and residuals handling facilities.

5. Installation or alteration, excluding maintenance or repair, of any alarm equipment required under Part III of this chapter.

(d) No construction permit is required for the types of work or alterations listed in subparagraphs 1. through 13. below. However, suppliers of water are responsible for ensuring that such work/alterations complies/comply with applicable requirements in Part III of this chapter, including applicable requirements in the engineering references listed in Rule 62-555.330, F.A.C. Additionally, suppliers of water are responsible for notifying others about emergency or abnormal operating conditions, planned conversions from free chlorine to chloramines or vice versa, and planned maintenance or repair work as required under subsection 62-555.350(10), F.A.C.

1. Discontinuing use of any existing water main.

2. Temporarily converting from chloramines to free chlorine to protect public health during emergency operating conditions or to eliminate excess ammonia, oxidize nitrite and nitrifying bacteria, and control biofilm in a water distribution system.

3. Demonstration testing of any existing drinking water treatment facilities if the water from the facilities being tested will be discharged to waste or to upstream treatment facilities for full treatment at no greater than the maximum permitted rate (instead of being discharged directly to downstream treatment, storage, or distribution facilities).

4. Construction or installation of any pilot plant that will discharge water to waste (instead of discharging water to a public water system).

5. Any maintenance or repair work.

6. Construction or alteration of any roads, landscaping, or fencing.

7. Construction or alteration of any structures that are not used to treat, store, or handle drinking water, drinking water treatment chemicals, or drinking water treatment residuals and that are not used to house drinking water pumping or treatment facilities, including chemical application facilities and residuals handling facilities.

8. Installation or alteration of any well vent.

9. Any electrical work that does not affect compliance with Part III of this chapter, including installation or alteration of auxiliary power sources for water systems not subject to the standby power requirements in Part III of this chapter.

10. Any instrumentation work that does not affect compliance with Part III of this chapter, including installation or alteration of chlorination or hypochlorination alarm equipment where such equipment is not required under Part III of this chapter and including installation or alteration of power failure alarm equipment for water systems not subject to the standby power requirements in Part III of this chapter.

11. Installation or alteration of any valve, flow meter, or backflow preventer.

12. Installation or alteration of any fire hydrant or hydrant lead.

13. Installation or alteration of any water service line to a single building, including any water service line dedicated exclusively to a fire protection or irrigation system serving a single building or its premises.

(2) Before commencing work or alterations for which a construction permit is required per subsection (1) above, the supplier of water or person who will perform such work or alterations shall submit a construction permit application to the Department using Form 62-555.900(1), Application for a Specific Permit to Construct PWS Components, effective August 28, 2003; or for a water main extension to be constructed under the general permit provision of Rule 62-555.405, F.A.C., shall notify the Department using Form 62-555.900(7), Notice of Intent to Use the General Permit for Construction of Water Main Extensions for PWSs, effective August 28, 2003; or for lead or copper corrosion control, or iron or manganese sequestration, treatment facilities to be constructed under the general permit provision of Rule 62-555.401, F.A.C., shall notify the Department using Form 62-555.900(18), Notice of Intent to Use the General Permit for Construction of Lead or Copper Corrosion Control, or Iron or Manganese Sequestration, Treatment Facilities for Small or Medium PWSs, effective August 28, 2003. The above Forms 62-555.900(1), 62-555.900(7), and 62-555.900(18) are hereby adopted and incorporated by reference into this subsection. Copies of these forms are available from the Department of Environmental Protection, Drinking Water Section, M.S. 3520, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. One copy of the appropriate application or notice form shall be executed in full and submitted to the appropriate Department of Environmental Protection District Office or Approved County Health Department. A separate application or notice shall be submitted for each non-contiguous project; non-contiguous projects are projects that are neither interconnected nor located nearby one another (i.e., on the same site, on adjacent streets, or in the same neighborhood). Suppliers of water or persons applying for a permit to construct public water system components that will create a "new system" as described in subsection 62-555.525(1), F.A.C., shall also complete and submit, with their permit application, Form 62-555.900(20), New Water System Capacity Development Financial and Managerial Operations Plan, as incorporated into Rule 62-555.357, F.A.C. No supplier of water or person shall begin work for which a construction permit is required until obtaining a specific permit from the Department or until the Department determines that the work qualifies for use of a general permit.

(3) Per Section 471.003, F.S., projects involving construction or alteration of public water system components shall be designed under the responsible charge of one or more professional engineers licensed in Florida except as noted in paragraphs (a) and (b) below. The professional engineer(s) in responsible charge of designing a project shall certify on the construction permit application or notice that the design of the project provides assurance of compliance with Chapter 62-550, F.A.C., if applicable, and complies with this chapter.

(a) Any person acting as a public officer employed by any state, county, municipal, or other governmental unit of Florida may design any project that has a total estimated cost of $10,000 or less.

(b) Any plumbing contractor licensed in Florida may design any project that he or she will install if the project has a value of $50,000 or less and involves a plumbing system, which includes any public water system serving a single property, with fewer than 250 fixture units.

(4) Each "Application for a Specific Permit to Construct PWS Components" shall be accompanied by one copy of either a preliminary design report as described in paragraph (a) below or drawings, specifications, and design data as described in paragraph (b) below. (When completed, Part II of the "Notice of Intent to Use the General Permit for Construction of Water Main Extensions for PWSs" or Part II of the "Notice of Intent to Use the General Permit for Construction of Lead or Copper Corrosion Control, or Iron or Manganese Sequestration, Treatment Facilities for Small or Medium PWSs" serves as a preliminary design report, and thus, it is unnecessary to submit a separate preliminary design report or drawings, specifications, and design data with a notice of intent to use a general permit.) Additional information may be required by the Department to clarify any construction permit application or notice; to clarify any preliminary design report or drawings, specifications, and design data; or to demonstrate that new or altered public water system components will comply with requirements in this chapter and provide drinking water meeting all applicable standards in Chapter 62-550, F.A.C

(a) Preliminary Design Reports. Preliminary design reports prepared under the responsible charge of one or more Florida-licensed professional engineers in accordance with subsection (3) above shall be signed, sealed, and dated by the professional engineer(s) in responsible charge. Preliminary design reports shall contain the following information where pertinent:

1. A brief description of the project and its purpose and an estimate of the cost to construct the project.

2. If the project will connect to, or become part of, an existing public water system, a description of the existing water system and discussion of the impact that the project will have on the existing water system. The description of the existing water system shall include the information in sub-subparagraphs a. through c. below if the project involves new or altered drinking water source facilities, drinking water treatment facilities, or finished-drinking-water pumping or storage facilities.

a. The name/location of existing water sources and the number and capacity of existing wells and raw surface water pumps.

b. The name/location of existing water treatment plants, the existing design capacity of each plant's source water facilities and each plant's treatment facilities and the permitted operating capacity of each plant, the existing type of treatment provided at each plant, and the number and capacity of existing finished-water pumps.

c. The name/location, type, and useful capacity of existing finished-water storage tanks.

3. The water service area, water use, and water service pressure information in sub-subparagraphs a. through d. below for the water system's service area or for the project's service area if the project involves only new or altered water mains or new or altered, finished-drinking-water booster pumping facilities.

a. A description of the nature and extent of both the present and the design water service area, including both the present and the design number of water service connections; an appraisal of both present and design commercial, institutional, and industrial water needs and fire fighting requirements; and discussion of both existing and proposed interconnections with other public water systems, including regulated consecutive systems.

b. Discussion of historical water use trends in the present water service area.

c. Both the present and the design water demands-average daily demand; maximum-day demand (including fire-flow demand, i.e., fire-flow rate times fire-flow duration, if fire protection is being provided); peak-hour demand (and if fire protection is being provided, fire-flow rate plus a background water demand equivalent to maximum-day demand other than fire-flow demand); and for small water systems that use hydropneumatic tanks or that are not designed to provide fire protection, peak instantaneous demand.

d. Both the present and the design water service pressure range.

4. If the project involves new or altered drinking water source facilities, the information in sub-subparagraphs a. through d. below.

a. The name/location of new water sources and documentation that new water sources are the best available sources as required under subsection 62-555.310(1), F.A.C.

b. Documentation that new wells meet applicable construction requirements in Chapter 62-532, F.A.C.

c. Discussion of sanitary hazards located within 500 feet of new wells or located less than 500 feet upstream of new surface water intakes; and for each well being connected to a community water system, documentation of continuing protection of the well from sanitary hazards as required under subsection 62-555.312(4), F.A.C.

d. A description of new or altered surface water intake structures, impoundments, and reservoirs.

5. If the project involves new or altered source water or treatment facilities for a drinking water treatment plant, the information in sub-subparagraphs a. through d. below.

a. The design capacity of the plant's source water facilities and the plant's treatment facilities. Refer to subsection 62-555.320(6), F.A.C.

b. Water quality data assessing applicable microbiological, physical, chemical, and radiological characteristics of raw water from all new, altered, or existing water sources for the plant. For new or altered wells, the water quality data shall include the sulfide-related measurements required under subsection 62-555.315(5), F.A.C., if applicable, and the results of the bacteriological survey required under paragraph 62-555.315(6)(b), F.A.C.

c. Discussion of applicable primary or secondary drinking water standards, including treatment technique requirements, in Part III of Chapter 62-550, F.A.C.; applicable sulfide treatment requirements in subsection 62-555.315(5), F.A.C.; and applicable disinfection requirements in subsection 62-555.320(12), F.A.C.

d. An evaluation of the adequacy of new, altered, or existing treatment facilities to meet applicable standards and requirements given the quality of raw water from all new, altered, or existing water sources for the plant. If the sulfide treatment requirements in subsection 62-555.315(5), F.A.C., are applicable, the water quality and treatment evaluation shall include the affirmative demonstration required under paragraph 62-555.315(5)(b), F.A.C.

6. If the project involves new or altered drinking water treatment facilities, the information in sub-subparagraphs a. through l. below.

a. The design daily operating period for the treatment facilities.

b. A flow diagram showing all new, altered, or existing water treatment operations and processes (including residuals handling operations), chemical application points, water pumping facilities, bypass arrangements, and recycle flows.

c. A hydraulic profile establishing operating water elevations through new, altered, or existing water treatment facilities at design flow rates.

d. For new or altered disinfection facilities, the design level of *Cryptosporidium*, *Giardia lamblia*, or virus inactivation to be achieved, if applicable, and the design minimum CT or ultraviolet dose if chemical or ultraviolet disinfection will be used to achieve *Cryptosporidium*, *Giardia lamblia*, or virus inactivation. Refer to subsection 62-555.320(12), F.A.C.

e. The design dose of water treatment chemicals.

f. An evaluation of the types, quantities, and characteristics of residuals generated by existing, altered, or new water treatment facilities.

g. Sizes, capacities, retention times, loading rates, schematic diagrams, and other design parameters and details sufficient to demonstrate that new or altered water treatment facilities (including chemical application facilities and residuals handling facilities) and water pumping facilities will comply with applicable requirements in Part III of this chapter, including applicable requirements in the engineering references listed in Rule 62-555.330, F.A.C. The schematic diagrams of water treatment facilities, including chemical application facilities, shall show proper air gaps between drains or overflows from such facilities and sanitary or storm sewers.

h. For innovative or alternative processes and equipment, the supporting information required under subsection 62-555.320(2), F.A.C.

i. Assurance of compliance with the odor control requirements referenced under subsection 62-555.320(9), F.A.C.

j. For new or altered storage tank systems subject to regulation under Chapter 62-761, F.A.C., assurance that the storage tank systems will meet applicable performance standards in Chapter 62-761, F.A.C.

k. Discussion of housing and safety or protective equipment for new or altered chemical application facilities.

l. For new or altered fluoridation facilities, discussion of how the analytical equipment required under paragraph 62-555.325(2)(f), F.A.C., will be provided.

7. If the project involves new or altered, raw-water or finished-drinking-water pumping facilities, including well pumping facilities, the number and capacity of pumps and the basis therefor, schematic diagrams, and other design parameters and details sufficient to demonstrate compliance with applicable requirements in Part III of this chapter, including applicable requirements in the engineering references listed in Rule 62-555.330, F.A.C.

8. If the project involves new or altered, finished-drinking-water storage facilities, the name/location and type of storage tanks, the useful capacity of storage tanks and the basis therefor, schematic diagrams, and other design parameters and details sufficient to demonstrate compliance with applicable requirements in Part III of this chapter, including applicable requirements in the engineering references listed in Rule 62-555.330, F.A.C.

9. If the project involves new or altered water mains, including treatment plant process piping, conveying either raw, partially treated, or finished drinking water, the information in sub-subparagraphs a. through g. below.

a. Hydraulic analyses or other justification for the size of new or altered water mains.

b. Discussion of color coding or marking of new or relocated water main pipe that will convey finished water. Refer to subparagraph 62-555.320(21)(b)3., F.A.C.

c. Discussion of installation procedures for new or altered water mains, including bedding and cover for underground mains; thrust restraint at new or altered tees, bends, plugs, and hydrants; pressure and leakage testing of new or altered mains; support, anchorage, and protection for new or altered mains crossing above surface water; and special construction of flexible, restrained, or welded watertight joints for new or altered mains crossing under surface water.

d. Discussion of separation distances between new or relocated, underground water mains, including hydrant drains, and existing or proposed sanitary or storm sewers, wastewater force mains, reclaimed water pipelines, and on-site sewage treatment and disposal systems. The Department shall allow exceptions to the separation distances required under subsections 62-555.314(1) and (2), F.A.C., only if justification and alternative construction features are provided in accordance with subsection 62-555.314(5), F.A.C.

e. Justification for each conflict manhole, identification of the party responsible for maintaining each conflict manhole, and assurance of compliance with design and construction requirements relative to conflict manholes. Refer to paragraph 62-555.314(3)(b), F.A.C.

f. Discussion of how proper backflow protection will be provided at those new or altered service connections where backflow protection is required or recommended under Rule 62-555.360, F.A.C., or in *Recommended Practice for Backflow Prevention and Cross-Connection Control*, AWWA Manual M14, as incorporated into Rule 62-555.330, F.A.C.

g. Schematic diagrams and other design parameters and details sufficient to demonstrate that new or altered hydrants and hydrant leads; air relief valves; valve, meter, or blow-off chambers; and backflow preventer installations will comply with applicable requirements in Part III of this chapter, including applicable requirements in the engineering references listed in Rule 62-555.330, F.A.C.

10. The project site information in sub-subparagraphs a. through f. below.

a. A site plan showing the approximate location of new or altered public water system wells; new or altered structures used to treat, store, or handle drinking water, drinking water treatment chemicals, or drinking water treatment residuals; structures housing new or altered drinking water pumping or treatment facilities, including chemical application facilities and residuals handling facilities; and new or altered water mains, including treatment plant process piping, conveying either raw, partially treated, or finished drinking water. The site plan shall indicate sizes of new or altered water mains and approximate locations of meters, valves, hydrants, blow-offs, and backflow preventers; approximate locations of new or altered interconnections between public water systems; approximate dimensions and elevations of structures; and both the 100-year and the 10- to 25-year flood elevation and wave-action elevation.

b. If applicable, discussion of how the permit applicant is avoiding locating a new public water system, or an expansion of an existing public water system, at any site subject to significant risk from contamination or significant risk from floods, fires, or other disasters. Refer to subsection 62-555.310(2), F.A.C.

c. Discussion of how community water system structures, and electrical or mechanical equipment, used to treat, pump, or store drinking water, apply drinking water treatment chemicals, or handle drinking water treatment residuals will be protected from physical damage by the 100-year flood and the 100-year wave action and will remain fully operational and accessible during the 25-year flood and the 25-year wave action. The Department shall allow use of less than the 25-year flood or wave action, but not less than the 10-year flood or wave action, only if justification is provided in accordance with subsection 62-555.320(4), F.A.C.

d. Discussion of approximate ground water elevations in relation to subsurface structures.

e. A description of security features for new or altered drinking water wells and new or altered drinking water treatment, pumping, or storage facilities.

f. A description of areas where new or altered water mains, including treatment plant process piping, conveying either raw, partially treated, or finished drinking water will be installed above or under surface water, in aggressive soil, or in areas contaminated by low-molecular-weight petroleum products or organic solvents.

11. A description of materials that will be used for new or altered public water system components and documentation that the materials and components will comply with the following standards, regulations, or requirements:

a. The American Water Works Association standards as incorporated into Rule 62-555.330, F.A.C., if applicable. The Department shall allow use of pipe and appurtenances that do not conform to these standards only if documentation is provided in accordance with paragraph 62-555.320(21)(c), F.A.C.

b. NSF International Standard 61 as adopted in Rule 62-555.335, F.A.C., or other standards, regulations, or requirements referenced under paragraph 62-555.320(3)(b), F.A.C., if applicable. The Department shall allow exceptions to conformance with these standards, regulations, or requirements only if documentation and assurance are provided in accordance with paragraph 62-555.320(3)(d), F.A.C.

c. The lead use prohibition in Rule 62-555.322, F.A.C., if applicable.

12. Discussion of color coding of new or altered, aboveground piping at drinking water treatment plants.

13. A description of electrical systems and provisions for standby power at new or altered drinking water treatment or pumping facilities. Refer to subsection 62-555.320(14), F.A.C.

14. A description of operation and control strategies and instrumentation and control systems, including monitoring or alarm systems, at new or altered drinking water treatment, pumping, or storage facilities. Refer to subparagraph 62-555.320(8)(a)3., F.A.C.; subsection 62-555.320(11), F.A.C.; subparagraph 62-555.320(13)(a)9., F.A.C.; sub-subparagraph 62-555.320(13)(a)10.c., F.A.C.; subparagraph 62-555.320(13)(b)12., F.A.C.; and paragraph 62-555.320(14)(f), F.A.C., for required alarm systems.

15. A description of provisions for metering and sampling finished drinking water at new or altered drinking water treatment plants. Refer to subsections 62-555.320(16) and (17), F.A.C.

16. A schematic diagram of the entire finished-water supply (i.e., plumbing) system at new or altered drinking water treatment plants and pumping stations. The diagram shall show proper air gaps or mechanical backflow preventers where appropriate.

17. Discussion of procedures for disinfecting, and conducting bacteriological surveys or evaluations of, new or altered public water system (PWS) wells; new or altered drinking water treatment or storage facilities; and new or altered water mains conveying either raw, partially treated, or finished drinking water, including treatment plant process piping, fire hydrant leads, and service lines that are under the control of the PWS and that have an inside diameter of three inches or greater. Refer to subsection 62-555.315(6), F.A.C., and Rule 62-555.340, F.A.C.

18. Discussion of procedures for keeping existing public water system components in operation, or for minimizing interruptions in the operation of the existing components, during construction of the project.

19. A description of drinking water additives and treatment chemicals that will be used or obtained under the construction project and documentation that the additives and chemicals will conform to NSF International Standard 60 as adopted in Rule 62-555.335, F.A.C., or other standards referenced under paragraph 62-555.320(3)(a), F.A.C.

(b) Drawings, Specifications, and Design Data. Drawings, specifications, and design data prepared under the responsible charge of one or more Florida-licensed professional engineers in accordance with subsection (3) above shall be signed, sealed, and dated by the professional engineer(s) in responsible charge. Drawings and specifications shall be sufficiently complete and detailed to allow the Department to determine whether the design of a project provides assurance of compliance with Chapter 62-550, F.A.C., if applicable, and complies with this chapter. Drawings shall be at least 18 inches by 24 inches and not larger than 36 inches by 42 inches, but photographically reproduced drawings with a reduced size as small as 11 inches by 17 inches are acceptable if the original drawings are drawn to a scale that will permit all necessary information to be plainly seen on the reduced-size reproductions. Design data shall include pertinent information described in subparagraphs 62-555.520(4)(a)1. through 19., F.A.C., if such information is not provided on the drawings or in the specifications.

(5) Each application for a specific permit to construct a new public water system subject to the jurisdiction of the Florida Public Service Commission (FPSC) shall be accompanied by one copy of the FPSC certificate authorizing the permit applicant to provide water service.

(6) Each construction permit application or notice shall be accompanied by the proper processing fee made payable to the Department of Environmental Protection or the appropriate Approved County Health Department. Processing fees for specific permits are listed in paragraph 62-4.050(4)(n), F.A.C. In cases where these fees vary depending upon drinking water treatment plant capacity, the capacity to be used in determining the proper fee is the design maximum-day capacity of the entire new or altered plant after construction. Processing fees for general permits are listed in paragraph 62-4.050(4)(p), F.A.C.

(7) If required by the Department, permit applicants shall publish a notice of permit application and furnish proof of publication in accordance with subsections 62-110.106(5), (6), and (9), F.A.C.

Specific Authority 403.087(2), 403.814(1), 403.861(2), (6), (9) FS. Law Implemented 367.031, 403.087(6)(a), 403.0877, 403.815, 403.861(2), (6), (7), 403.8615, 471.003 FS. History–New 11-19-87, Formerly 17-22.720, Amended 1-18-89, Formerly 17-555.520, Amended 12-10-96, 9-22-99, 8-28-03.

62-555.525 Capacity Development Provisions of Public Water System Permitting.

(1) This section applies to the following types of systems only. These are defined as "new systems" for the purposes of capacity development and referred to as "new systems" in this section.

(a) Entirely new community or non-transient non-community water systems constructed, or commencing operations, on or after October 1, 1999.

(b) Water systems that previously did not meet the definition of a community water system (CWS) or the definition of a non-transient non-community water system (NTNCWS) but that grow to become a CWS or NTNCWS through an infrastructure expansion constructed, or placed into operation, on or after October 1, 1999. Water systems that previously did not meet the definition of a CWS or the definition of an NTNCWS but that grow to become a CWS or NTNCWS by adding users without expanding their infrastructure are not considered "new systems" for the purposes of capacity development.

(2) Construction permit applications for infrastructure creating a "new system" as described in subsection (1) above shall include a demonstration that the "new system" will have financial, managerial, and technical capacity to function in compliance with Chapters 62-550, 62-555, 62-560, and 62-699, F.A.C. Construction permit applicants who fail to demonstrate that a "new system" will have financial, managerial, and technical capacity to function in compliance with Chapters 62-550, 62-555, 62-560, and 62-699, F.A.C., shall not receive a construction permit.

(3) Demonstrations of financial, managerial, and technical capacity for "new systems" shall contain the following:

(a) Documentation that the owner of the "new system" holds, or will hold, an operator license sufficient to fulfill the staffing requirements in Chapter 62-699, F.A.C., or that the "new system" employs, or will employ, licensed operators to fulfill the staffing requirements in Chapter 62-699, F.A.C.

(b) A demonstration that the "new system" has, or will have, the capability to conduct the monitoring and reporting required under Chapter 62-550, F.A.C., and the capability to maintain the records required under Chapter 62-550, F.A.C.

(c) A demonstration that the "new system" has, or will have, the capability to meet the operation and maintenance requirements in this chapter.

(d) A demonstration of financial and managerial capacity as described in subparagraph 1. or 2. below.

1. "New systems" that will not be regulated by the Florida Public Service Commission shall demonstrate financial and managerial capacity using Form 62-555.900(20), New Water System Capacity Development Financial and Managerial Operations Plan, as incorporated into Rule 62-555.357, F.A.C. The completed Form 62-555.900(20) shall be sent to the appropriate Department of Environmental Protection District Office or Approved County Health Department.

2. "New systems" that will be regulated by the Florida Public Service Commission shall demonstrate financial and managerial capacity using Form 62-555.900(20), New Water System Capacity Development Financial and Managerial Operations Plan, as incorporated into Rule 62-555.357, F.A.C., except that such systems need not complete Parts II and III of the form (financial capacity). "New systems" in counties under the jurisdiction of the Florida Public Service Commission but not subject to its regulations are not exempt from completing Parts II and III of the form. The completed Form 62-555.900(20) shall be sent to the appropriate Department of Environmental Protection District Office or Approved County Health Department.

Specific Authority 403.861(9), 403.8615 FS. Law Implemented 403.8615 FS. History–New 9-22-99, Amended 8-28-03.

62-555.528 Applying for Reratings of Public Water System Treatment Plants.

This section addresses procedures for obtaining a rerating (i.e., increase) of the permitted operating capacity of a drinking water treatment plant when no construction is necessary for the rerating.

(1) A construction permit is required to document any rerating of the permitted operating capacity of any water treatment plant.

(2) Suppliers of water seeking to have the permitted operating capacity of a water treatment plant rerated shall submit to the appropriate Department of Environmental Protection District Office or Approved County Health Department a construction permit application using Form 62-555.900(1), Application for a Specific Permit to Construct PWS Components, as incorporated into subsection 62-555.520(2), F.A.C.

(3) Each construction permit application shall be accompanied by one copy of a rerating report as described in this subsection. Additional information may be required by the Department to clarify any construction permit application; to clarify any rerating report; or to demonstrate that any rerated water treatment plant will provide drinking water meeting all applicable standards in Chapter 62-550, F.A.C. The rerating report shall be prepared under the responsible charge of one or more professional engineers licensed in Florida and shall be signed, sealed, and dated by the professional engineer(s) in responsible charge, and the rerating report shall contain the following information:

(a) A brief description of the water treatment plant for which a rerating of the permitted operating capacity is being sought. The description of the plant shall include the information in subparagraphs 1. and 2. below.

1. The name/location of water sources for the plant and the number and capacity of wells and raw surface water pumps supplying water to the plant.

2. The name/location of the plant, the existing permitted operating capacity of the plant, the type of treatment provided at the plant, and the number and capacity of finished-water pumps.

(b) The proposed new design capacity of the water treatment plant's source water facilities and the plant's treatment facilities. Refer to subsection 62-555.320(6), F.A.C.

(c) The daily operating period for the water treatment plant's source water and treatment facilities.

(d) Water quality data assessing applicable microbiological, physical, chemical, and radiological characteristics of raw water from all water sources for the plant.

(e) Discussion of applicable primary or secondary drinking water standards, including treatment technique requirements, in Part III of Chapter 62-550, F.A.C.; applicable sulfide treatment requirements in subsection 62-555.315(5), F.A.C.; and applicable disinfection requirements in subsection 62-555.320(12), F.A.C.

(f) A flow diagram showing all water treatment operations and processes (including residuals handling operations), chemical application points, water pumping facilities, bypass arrangements, and recycle flows at the water treatment plant.

(g) An evaluation of the hydraulic capacity of the water treatment plant, including all water pumping facilities, showing that the plant will be hydraulically capable of operating at the proposed new design capacity. The evaluation shall include a hydraulic profile establishing operating water elevations through the plant.

(h) An evaluation of the quantities and characteristics of residuals generated when the water treatment facilities are operating at the proposed new design capacity.

(i) An evaluation of all water treatment facilities (including chemical application facilities and residuals handling facilities), water pumping facilities, and ancillary equipment at the drinking water treatment plant showing one of the following:

1. The facilities and equipment will meet pertinent design requirements in Part III of this chapter, including pertinent design requirements in the engineering references listed in Rule 62-555.330, F.A.C., when operating at the proposed new design capacity and, given the quality of raw water from all water sources for the plant, the facilities and equipment will meet applicable primary or secondary drinking water standards, sulfide treatment requirements, and disinfection requirements when operating at the proposed new design capacity; or

2. Based upon data from at least one full-scale or pilot-plant installation treating water of comparable quality during comparable seasonal fluctuations or based upon data from demonstration testing of the facilities and equipment, the facilities and equipment will meet applicable primary or secondary drinking water standards, sulfide treatment requirements, and disinfection requirements under all anticipated water quality conditions when operating at the proposed new design capacity.

(j) Assurance of compliance with the odor control requirements referenced under subsection 62-555.320(9), F.A.C., when the water treatment plant is operating at the proposed new design capacity.

(4) Each construction permit application shall be accompanied by the proper processing fee made payable to the Department of Environmental Protection or the appropriate Approved County Health Department. The proper processing fee for any rerating of the permitted operating capacity of a drinking water treatment plant shall be determined using the fee schedule in subparagraph 62-4.050(4)(n)1., 2., or 3., F.A.C., as applicable, and using the proposed new design maximum-day capacity of the plant.

Specific Authority 403.861(9) FS. Law Implemented 403.0877, 403.815, 403.861(2), (6), (7) FS. History–New 8-28-03.

62-555.530 Processing Applications or Notices for, and Issuing or Denying, Public Water System Construction Permits.

(1) Specific Construction Permits.

(a) The Department shall process each application for a specific permit in accordance with Rule 62-4.055, F.A.C.

(b) The Department shall review each specific permit application, including the preliminary design report or drawings, specifications, and design data accompanying the application, for the following:

1. Assurance of compliance with applicable primary or secondary drinking water standards, including treatment technique requirements, in Part III of Chapter 62-550, F.A.C. The construction permit applicant shall have the raw water from each new or altered drinking water source sampled and analyzed for applicable contaminants in accordance with Rule 62-550.550, F.A.C.

2. Assurance of compliance with subsection 62-524.650(2), F.A.C., if applicable. The construction permit applicant shall have the raw water from each new or altered drinking water source in a delineated area sampled and analyzed in accordance with Rule 62-524.600, F.A.C.

3. Compliance with applicable design and construction requirements in Part III of this chapter. The construction permit applicant shall have the raw water from new or altered public water system wells sampled and analyzed in accordance with subsection 62-555.315(5), F.A.C., if applicable, and paragraph 62-555.315(6)(b), F.A.C.

4. Compliance with applicable permitting requirements, including capacity development requirements, in Part V of this chapter.

(c) If the Department determines that a construction permit applicant has complied, or provided assurance of compliance, with applicable rules, the Department shall give the applicant a notice of permit issuance or a notice of intent to issue a permit in accordance with subsection 62-110.106(7), F.A.C. If the Department determines that a construction permit applicant has not complied, or provided assurance of compliance, with applicable rules, the Department shall give the applicant a notice of permit denial in accordance with subsection 62-110.106(7), F.A.C. All notices of permit denial shall contain the reasons for the denial.

(d) Under the circumstances described in paragraph 62-110.106(7)(a), F.A.C., the Department shall require the construction permit applicant to publish a notice of the Department's proposed action on an application for a specific permit and furnish proof of publication in accordance with subsections 62-110.106(5) and (9), F.A.C.

(2) General Construction Permits.

(a) The Department shall review each general permit notice for the following:

1. Assurance of compliance with applicable primary or secondary drinking water standards, including treatment technique requirements, in Part III of Chapter 62-550, F.A.C.

2. Compliance with applicable design and construction requirements in Part III of this chapter.

3. Compliance with applicable permitting requirements in Parts IV and V of this chapter.

(b) If the Department determines that a project qualifies for use of the noticed general permit, the Department need not take any action on the notice, and the permittee may use the general permit 30 days after giving notice to the Department. If the Department determines that a project does not qualify for use of the noticed general permit, the Department shall deny use of the general permit by notifying the proposed permittee in accordance with subsection 62-110.106(7), F.A.C. All notices denying use of a general permit shall contain the reasons for the denial.

(3) Whenever a project is designed under the responsible charge of one or more professional engineers licensed in Florida and is permitted by the Department under this chapter, construction of the project shall be inspected, for the purpose of determining in general if the construction proceeds in compliance with the Department permit and approved preliminary design report or drawings and specifications, under the responsible charge of a professional engineer licensed in Florida. The professional engineer in responsible charge of inspecting construction of a project shall certify on the certification of construction completion required under Rule 62-555.345, F.A.C., that construction of the project has been completed in accordance with the Department permit, including the approved preliminary design report or drawings and specifications, or in substantial conformance with Chapter 62-550, F.A.C., if applicable, and this chapter.

(4) Whenever a project is permitted by the Department under this chapter, complete record drawings shall be prepared for the project.

Specific Authority 403.861(9) FS. Law Implemented 373.309, 403.0877, 403.815, 403.861(7), (10) FS. History–New 11-19-87, Formerly 17-22.725, Amended 1-18-89, 1-1-93, Formerly 17-555.530, Amended 8-28-03.

62-555.533 Conditions for Specific Construction Permits for Public Water Systems.

(1) Each specific construction permit issued by the Department shall include the general conditions listed in Rule 62-4.160, F.A.C.

(2) Each specific construction permit issued by the Department shall contain the following specific conditions as applicable:

(a) Each permit shall specify the effective date of the permit and the expiration date of the permit. No permit shall be issued for a term of more than five years.

(b) Each permit for a project involving new or altered source water or treatment facilities for a drinking water treatment plant shall specify the permitted maximum-day operating capacity of the plant and, if applicable, the permitted peak operating capacity of the plant in accordance with subsection 62-555.320(6), F.A.C.

(c) Each permit for a project designed under the responsible charge of one or more professional engineers licensed in Florida shall contain a specific condition requiring the permittee to retain a Florida-licensed professional engineer in accordance with subsection 62-555.530(3), F.A.C., to take responsible charge of inspecting construction of the project for the purpose of determining in general if the construction proceeds are in compliance with the permit, including the approved preliminary design report or drawings and specifications, for the project.

(d) Each permit shall contain a specific condition requiring the permittee to have complete record drawings produced for the project in accordance with subsection 62-555.530(4), F.A.C.

(e) Each permit for a project involving new or altered drinking water treatment facilities shall contain a specific condition requiring the permittee to provide an operation and maintenance manual for the new or altered treatment facilities to fulfill the requirements under subsection 62-555.350(13), F.A.C.

(f) Each permit shall contain a specific condition requiring the permittee to submit a certification of construction completion to the Department and obtain approval, or clearance, from the Department per Rule 62-555.345, F.A.C., before placing any public water system components constructed or altered under the permit into operation for any purpose other than disinfection, testing for leaks, or testing equipment operation. This specific condition shall not prohibit the permittee from cutting into existing water mains and returning the water mains to operation in accordance with subsection 62-555.340(5), F.A.C., without the Department's approval. Additionally, the Department shall allow exceptions to this specific condition if construction permit applicants provide in the preliminary design report or drawings, specifications, and design data accompanying their permit application justification for each exception and assurance of public health protection.

(g) Each permit shall contain other specific conditions, including schedules for completing construction, to ensure that Department rules are met.

Specific Authority 403.861(9) FS. Law Implemented 403.087(4), 403.0877, 403.861(7), (10) FS. History–New 8-28-03.

62-555.536 Modification, Transfer, or Revocation of Public Water System Construction Permits.

(1) Except as noted in paragraphs (a) and (b) below, a construction permit modification is required for changes to a permitted project, including any project noticed for use of a general construction permit.

(a) No construction permit modification is required for the types of project changes listed in subparagraphs 1. through 5. below. However, permittees shall submit written notification to the Department before making such changes. Each notification shall be submitted to the appropriate Department of Environmental Protection District Office or Approved County Health Department and shall include the following: a description of the scope, purpose, and location of the change; and assurance that the change will comply with applicable requirements in Part III of this chapter, including applicable requirements in the engineering

references listed in Rule 62-555.330, F.A.C. Permittees may begin such changes seven days after providing notification to the Department unless they are advised by the Department that the notification is incomplete or that a construction permit modification is required because the changes are not of a type listed under this paragraph.

1. Addition of, or changes to, work or alterations of the type described in paragraph 62-555.520(1)(c), F.A.C.

2. Addition of up to five percent more water main or 100 linear feet more water main, whichever is greater, at new locations within the same rights-of-way, easements, or sites, provided the additional water main will not pass through any conflict manholes, will not be installed in areas contaminated by low-molecular-weight petroleum products or organic solvents, will not connect previously separate public water systems or create a "new system" as described under subsection 62-555.525(1), F.A.C., and will not remain dry following completion of construction.

3. Addition of, or changes to, alternative construction features in accordance with subsection 62-555.314(5), F.A.C., due to unforeseen situations where it is not practicable to comply with the utility separation requirements in subsections 62-555.314(1) and (2), F.A.C.

4. Relocation of public water system components within the width of the same right-of-way or easement or within the same site. (Permittees may realign water mains to maintain required separation distances between the water mains and other utilities without submitting written notification to the Department.)

5. Changes in materials that will come into contact with drinking water or drinking water treatment chemicals and addition of, or changes in, drinking water additives or treatment chemicals that will be used or obtained under a construction project.

(b) No construction permit modification is required for the types of project changes listed in subparagraphs 1. through 4. below. However, permittees are responsible for ensuring that such changes comply with applicable requirements in Part III of this chapter, including applicable requirements in the engineering references listed in Rule 62-555.330, F.A.C.

1. Addition of, or changes to, work or alterations of the type described in paragraph 62-555.520(1)(d), F.A.C.

2. Realignment of water mains within the width of the same right-of-way or easement, or within the same site, to maintain required separation distances between the water mains and other utilities.

3. Changes in materials that will not come into contact with drinking water or drinking water treatment chemicals.

4. Changes in the construction method for water mains (e.g., changes from open-trench construction to tunneling and vice versa).

(2) Before commencing work on project changes for which a construction permit modification is required per subsection (1) above, the permittee shall submit to the appropriate Department of Environmental Protection District Office or Approved County Health Department a written request for a permit modification. Each such request shall be accompanied by one copy of a revised construction permit application or notice as described in subsection 62-555.520(2), F.A.C., if appropriate, and each request for modification of a specific construction permit shall be accompanied by one copy of either a revised preliminary design report or revised drawings, specifications, and design data as described in subsection 62-555.520(4), F.A.C., if appropriate. Additionally, each such request also shall be accompanied by the proper processing fee made payable to the Department of Environmental Protection or the appropriate Approved County Health Department. Processing fees for construction permit modifications involving substantial project changes (i.e., changes altering capacity, adding new treatment, causing additional or different drinking water standards to apply, or causing significantly greater or different environmental impacts) shall be the same as fees for a new construction permit (refer to subsection 62-555.520(6), F.A.C.). Processing fees for construction permit modifications involving other project changes, both major and minor, are listed in subparagraphs 62-4.050(4)(n)6. and 7., F.A.C., and paragraph 62-4.050(4)(s), F.A.C.

(3) Each request for a construction permit modification involving project changes shall be processed in accordance with Rule 62-555.530, F.A.C.

(4) Each request for extension of a specific construction permit shall be made and processed in accordance with subsection 62-4.080(3), F.A.C. Each such request shall be accompanied by the proper processing fee made payable to the Department of Environmental Protection or the appropriate Approved County Health Department. The processing fee for a construction permit extension is listed in subsection 62-4.050(4)(s), F.A.C. No specific construction permit shall be extended so as to remain in effect longer than five years.

(5) Each request for transfer of a specific construction permit and each request for transfer of a permittee's use of a general construction permit shall be made and processed in accordance with Rule 62-4.120, F.A.C., except that the current permittee and the proposed permittee shall jointly submit Form 62-555.900(8), Application for Transfer of a PWS Construction Permit, hereby adopted and incorporated by reference, effective August 28, 2003. Copies of this form are available from the Department of Environmental Protection, Drinking Water Section, M.S. 3520, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Each application for transfer of a construction permit shall be accompanied by the proper processing fee made payable to the Department of Environmental Protection or the appropriate Approved County Health Department. The processing fee for transfer of a construction permit is listed in paragraph 62-4.050(4)(s), F.A.C.

(6) Each suspension or revocation of a specific construction permit and each suspension or revocation of a permittee's use of a general construction permit shall be rendered in accordance with Rule 62-4.100, F.A.C.

Specific Authority 403.861(9) FS. Law Implemented 403.087(6)(a), 403.815, 403.861(7) FS. History–New 8-28-03

PART IX FORMS AND INSTRUCTIONS

62-555.900 Forms and Instructions.

The forms used by the Department in the Public Water System Supervision Program are listed below by form number and name. Each form has been incorporated into the rule that references it. Copies of these forms may be obtained by writing to the Department of Environmental Protection, Drinking Water Section, M.S. 3520, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. In addition, these forms are available at the Department of Environmental Protection's District offices, at the Approved County Health Departments, and on the Department of Environmental Protection's web site at www.dep.state.fl.us. Persons and public water systems shall report to the Department using the forms listed below or using computer-generated versions of the forms listed below provided such versions are identical to the forms listed below in every respect other than font type and style, font size, and character spacing.

(1) Application for a Specific Permit to Construct PWS Components, effective August 28, 2003.

(2) Monthly Operation Report for Subpart H Systems, effective October 14, 2004.

(3) Monthly Operation Report for PWSs Treating Raw Ground Water or Purchased Finished Water, effective August 28, 2003.

(4) Monthly Operation Report for Consecutive Systems that Do Not Treat Water, effective August 28, 2003.

(5) Monthly Operation Report for PWSs Fluoridating Water, effective August 28, 2003.

(6) Monthly Operation Report for Consecutive Systems that Receive Purchased Finished Water from a Subpart H System, effective April 3, 2003.

(7) Notice of Intent to Use the General Permit for Construction of Water Main Extensions for PWSs, effective August 28, 2003.

(8) Application for Transfer of a PWS Construction Permit, effective August 28, 2003.

(9) Certification of Construction Completion and Request for Clearance to Place Permitted PWS Components into Operation, effective August 28, 2003.

(10) Asbestos-Free Certification or Asbestos Sampling Plan for PWSs, effective August 28, 2003.

(11) Monthly Operation Report for Summation of Finished-Water Production by CWSs that Have Multiple Treatment Plants, effective August 28, 2003.

(12) PWS Sampling Plan for Lead and Copper Tap Samples and Water Quality Parameters, effective August 28, 2003.

(13) Deleted.

(14) Deleted.

(15) Deleted.

(16) PWS Certification of Notification of Lead and Copper Tap Sample Results, effective August 28, 2003.

(17) Lead Public Education Program Report for PWSs, effective August 28, 2003.

(18) Notice of Intent to Use the General Permit for Construction of Lead or Copper Corrosion Control, or Iron or Manganese Sequestration, Treatment Facilities for Small or Medium PWSs, effective August 28, 2003.

(19) Form number 62-555.900(19), Certification of Delivery of Consumer Confidence Report, effective April 10, 2003.

(20) New Water System Capacity Development Financial and Managerial Operations Plan, effective August 28, 2003.

(21) Form number 62-555.900(21), Certification of Delivery of Consumer Confidence Information to Supplied Systems, effective April 10, 2003.

(22) Form number 62-555.900(22), Certification of Delivery of Public Notice, effective 1-17-05.

Specific Authority 403.861, 403.861(9) FS. Law Implemented 367.031, 403.0877, 403.861, 403.8615 FS. History–New 1-18-89, Amended 1-3-91, Formerly 17-555.900, Amended 12-10-96, 9-22-99, 4-3-03, 4-10-03, 8-28-03, 10-14-04, 1-17-05.

CHAPTER 62-524

NEW POTABLE WATER WELL PERMITTING IN DELINEATED AREAS

EXHIBIT 6

62-524.200 Definitions for New Potable Water Well Permitting in Delineated Areas.

(1) "Available Potable Water System" means, for the purpose of this chapter, a public water system, as defined in Rule 62-550.200, F.A.C., which has sufficient capacity and is legally able to serve specific additional connections.

(2) "Delineated Area" means a surface area identified pursuant to Rule 62-524.420, F.A.C., within which ground water contamination is known to exist or which encompasses vulnerable areas or areas in which the Department provides a subsidy for restoration or replacement of contaminated drinking water supplies.

(3) "Ground Water Contamination" means, for the purpose of this chapter, the presence outside an applicable zone of discharge in Class F-I, G-I, or G-II ground water of one or more substances in quantities which exceed a primary drinking water maximum contaminant level as set forth in Chapter 62-550, F.A.C., present an imminent hazard pursuant to Section 403.855, F.S., or for which the State Health Officer in the Department of Health, based upon a written request from the Department, has advised the Department in writing is present in deleterious amounts. The determination, under this section, of the existence of ground water contamination based upon the presence of deleterious amounts shall not constitute the establishment of a standard under either Chapter 62-520 or 62-550, F.A.C. If the concentration of any primary drinking water standard in the natural background quality of the ground water is greater than the stated maximum contaminant level, the representative background value shall be the prevailing standard.

(4) "New Potable Water Well" means any excavation that is drilled or bored, or converted from non-potable water use, after delineation in an area delineated pursuant to Rule 62-524.400, F.A.C., when the intended use of such excavation is for the location and acquisition of ground water which supplies water for human consumption. This does not include repair of an existing potable water well.

(5) "Vulnerable area" is an area in which research or monitoring data indicate that ground water is vulnerable to nitrate contamination because of the presence of potential sources of nitrate contamination, and because of land surface and subsurface characteristics.

Specific Authority 373.309, 403.061, 403.062 FS. Law Implemented 373.309, 376.307 FS. History–New 5-16-89, Amended 3-3-92, Formerly 17-524.200, Amended 2-7-95.

62-524.420 Procedures for Delineation of Areas for Application of New Potable Water Well Permitting.

(1) Based upon available data, the Department shall identify and locate, for the purpose of application of the requirements of this chapter, areas within which ground water contamination is known to exist or which encompasses vulnerable areas or areas in which the Department provides a subsidy for restoration or replacement of contaminated drinking water supplies.

(2) The Department shall rely on data from samples collected and analyzed using Department approved quality assurance/quality control procedures. Where quality assurance/quality control procedures are not documented the Department shall evaluate the data for completeness and accuracy in order to determine acceptability for use in delineation under this chapter.

(3) Sources of ground water data to be used for delineation of areas under this chapter shall include:

(a) Local, state, and federal agencies.

(b) Water management districts.

(c) Department programs.

(4) For wells, sites, or sources with known ground water contamination, where insufficient site specific ground water data exist for determination of contaminant plume boundaries, a delineated area shall be established in the following manner:

(a) A 1000-foot setback from the well, site or source boundary.

(b) Where data from the distribution or movement of ground water contamination indicate that a 1000-foot setback is insufficient the Department shall establish an alternate setback based on such data.

(5) For sites with a history of application of ethylene dibromide where insufficient site specific ground water data exist for determination of contaminant plume boundaries, the Department shall delineate an area which encompasses the area of application and a setback, based on data on the distribution of ethylene dibromide contamination, or a 1000-foot setback, whichever is larger.

(6) For sites where a hydrogeologic investigation of ground water has been conducted and the nature and extent of a contaminant plume is documented and sufficient data exist for predictive ground water modelling, the Department shall delineate an area which encompasses the ground water contamination and its predicted movement for the next two years.

(7) Where the source or site which resulted in an area being delineated is the subject of remediation for ground water clean-up, the effect of this remediation shall be considered by the Department in subsequent delineation updates.

(8) For areas in which the Department provides a subsidy for restoration or replacement of contaminated drinking water supplies through extending existing water lines or developing new water supply systems under Sections 376.307(4)(b)3. and (c), F.S., the Department shall delineate an area which encompasses such extended water lines or water lines constructed as part of a new water system and a 1000-foot setback.

(9) For areas in which the Department determines that ground water is vulnerable to contamination with nitrate, the Department shall delineate such vulnerable areas. The Department shall determine where vulnerable areas exist by using the following information when available:

(a) Physical properties of soils;

(b) Vadose zone media;

(c) Hydrogeologic characteristics of aquifer systems;

(d) Depth to ground water;

(e) Recharge;

(f) Karst features;

(g) Topography;

(h) Presence of Class G-II ground water or other potable ground water with less than 10,000 mg/L total dissolved solids;

(i) Water quality data; and

(j) Nitrogen application or loading rates for potential sources of nitrate contamination.

(10) In delineating areas under this rule, the Department shall coordinate with other affected agencies, particularly those receiving delegation under Rule 62-524.800, F.A.C., in the technical aspects of delineation.

(11) The Department shall present delineated areas to the Environmental Regulation Commission for approval at rulemaking public hearings duly noticed as required by Section 120.54, F.S.

(a) At such public hearings the Commission, when approving delineated areas, shall consider the known ground water contamination and its projected movement until the next delineation update.

(b) If requested by the Commission, the Department shall present the data, predictive ground water modelling, and mapping procedure used to delineate each area presented to the Commission.

(c) The Commission shall consider any other competent evidence regarding delineated areas.

(d) Approval by the Commission of a delineated area shall result in that area being included on maps or other means of location and description prepared by the Department as described in subsections (12) and (13). Each approved map or other means of location and description shall contain an effective date and shall be made available as provided in subsections (12) and (13).

(12) To facilitate the permitting process, the Department shall provide maps which indicate all sections which contain any portion of a delineated area. Prior to construction of a new potable water well within a mapped section, the potential applicant should contact the appropriate permitting authority which shall determine if the proposed well is within a delineated area. Such maps or other information shall be made available by the Department to interested persons upon written request and upon payment of appropriate costs.

(13) Following each update, the Department shall make available to water management districts, regional planning councils, the Department of Health, and county building and zoning departments, maps or other information on areas for application of the requirements of this chapter.

(a) Where maps are provided, they shall be of an appropriate scale as determined by the Department based on the accuracy and precision of the data.

(b) For each delineated area the Department shall provide a list of those contaminants to be tested pursuant to Rule 62-524.600, F.A.C., and shall specify any casing or solvent bond restrictions.

(14) Maps or other information on areas for application of the requirements of this chapter shall be periodically updated by the Department. Additional areas, or revision to existing areas, for application of the requirements of this chapter may be delineated at any time as technical information becomes available.

Specific Authority 373.309, 403.061, 403.062 FS. Law Implemented 373.309, 376.307 FS. History–New 5-16-89, Amended 3-25-90, 7-4-91, 5-6-93, Formerly 17-524.420, Amended 2-7-95, 12-9-96.

62-524.430 Maps Containing Delineated Areas.

The following maps, which are incorporated herein by reference, show surface areas, delineated pursuant to Rule 62-524.420, F.A.C. Each map listed contains a month and year which corresponds to the date the Department prepared the most recent map showing any portion of a delineated area. Copies of these maps may be examined at the Department of Environmental Protection, Bureau of Information Systems, or copies may be obtained, upon receipt of reproduction and other appropriate costs, from the Department of Environmental Protection, Bureau of Information Systems, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

(1)	ALACHUA COUNTY:	
	Archer	11/94
	Gainesville East	11/94
	High Springs	11/94
	High Springs SW	11/94
	Micanopy	11/94
	Monteocha	11/94
	Newberry	11/94
	Orange Heights	11/94
	Waters Lake	11/94
(2)	BREVARD COUNTY:	
	Melbourne East	11/94
(3)	BROWARD COUNTY:	
	Cooper City	11/94
	Fort Lauderdale North	11/94
	Fort Lauderdale South	11/94
	North Miami	11/94
	Port Everglades	11/94
(4)	CITRUS:	
	Crystal River	11/94
	Homosassa	11/94
(5)	COLUMBIA:	
	Columbia	11/94
	Fort White	11/94
	Lake City West	11/94
	Mikesville	11/94
(6)	DADE COUNTY:	
	Hialeah	11/94
	North Miami	11/94
	South Miami	11/94
(7)	DESOTO:	
	Arcadia	11/94
(8)	DUVAL COUNTY:	
	Baldwin	11/94
	Jacksonville	11/94
	Jacksonville Heights	11/94
	Marietta	11/94
(9)	ESCAMBIA COUNTY:	
	Cantonment	11/94
	Pensacola	11/94
	Seminole (AL)	11/94
	West Pensacola	11/94
(10)	GILCHRIST:	

	High Springs SW	11/94
	Waters Lake	11/94
(11)	GLADES COUNTY:	
	Moore Haven	11/94
(12)	HAMILTON:	
	Ellaville	11/94
	Fort Union	11/94
(13)	HARDEE:	
	Griffins Corner	11/94
(14)	HERNANDO:	
	Masaryktown	11/94
	Port Richey NE	11/94
	Weekiwachee Springs	11/94
(15)	HIGHLANDS COUNTY:	
	Avon Park	11/94
	Child	11/94
	Crewsville	11/94
	Frostproof	11/94
	Lake Arbuckle	11/94
	Lake Arbuckle SW	11/94
	Lake June In Winter	11/94
	Lake Placid	11/94
	Sebring	11/94
	Venus SW	11/94
(16)	HILLSBOROUGH COUNTY:	
	Brandon	11/94
	Citrus Park	11/94
	Dover	11/94
	Ft. Lonesome	11/94
	Lithia	11/94
	Lutz	11/94
	Plant City West	11/94
	Sulphur Springs	11/94
	Tampa	11/94
	Thonotosassa	11/94
	Wimauma	11/94
(17)	INDIAN RIVER:	
	Vero Beach	11/94
(18)	JACKSON COUNTY:	
	Alford	11/94
	Bascom	11/94
	Campbellton	11/94
	Cottondale East	11/94
	Cottondale West	11/94
	Cypress	11/94
	Dellwood	11/94
	Fairchild (GA)	11/94
	Graceville	11/94

	Kynesville	11/94
	Malone	11/94
	Marianna	11/94
	Oakdale	11/94
	Grangeburg (AL)	11/94
	Saffold (AL)	11/94
	Sills	11/94
	Sneads	11/94
	Steam Mill (GA)	11/94
(19)	LAKE COUNTY:	
	Astatula	11/94
	Center Hill	11/94
	Clermont East	11/94
	Clermont West	11/94
	Eustis	11/94
	Howey In The Hills	11/94
	Lake Louisa	11/94
	Lake Louisa SW	11/94
	Lake Nellie	11/94
	Leesburg East	11/94
	Mascotte	11/94
	Sorrento	11/94
	Umatilla	11/94
(20)	LEON COUNTY:	
	Tallahassee	11/94
(21)	LEVY:	
	Morriston	11/94
(22)	MADISON:	
	Cherry Lake	11/94
	Madison	11/94
	Nankin (GA)	11/94
	Pinetta	11/94
(23)	MANATEE:	
	Ft. Lonesome	11/94
	Wimauma	11/94
(24)	MARION COUNTY:	
	Belleview	11/94
	Lady Lake	11/94
	Lake Weir	11/94
	Ocala East	11/94
	Ocala West	11/94
	Oxford	11/94
(25)	MARTIN COUNTY:	
	Indiantown	11/94
	Okeechobee 4 SE	11/94
(26)	ORANGE COUNTY:	
	Apopka	11/94
	Astatula	11/94
	Clermont East	11/94

	Eustis	11/94
	Forest City	11/94
	Lake Jessamine	11/94
	Lake Louisa	11/94
	Orlando East	11/94
	Orlando West	11/94
	Sorrento	11/94
	Windermere	11/94
	Winter Garden	11/94
(27)	OSCEOLA:	
	Ashton	11/94
	Intercession City	11/94
	Lake Louisa SW	11/94
	Narcoossee	11/94
(28)	PASCO:	
	Lutz	11/94
(29)	PINELLAS:	
	Elfers	11/94
(30)	POLK COUNTY:	
	Alturas	11/94
	Auburndale	11/94
	Babson Park	11/94
	Bartow	11/94
	Bereah	11/94
	Davenport	11/94
	Dundee	11/94
	Eloise	11/94
	Frostproof	11/94
	Gum Lake	11/94
	Hesperides	11/94
	Homeland	11/94
	Intercession City	11/94
	Lake Arbuckle	11/94
	Lake Louisa SW	11/94
	Lake Wales	11/94
	Lake Weohyakapka	11/94
	Lakeland	11/94
	Mulberry	11/94
	Nichols	11/94
	Plant City East	11/94
	Polk City	11/94
	Providence	11/94
	Socrum	11/94
	Winter Haven	11/94
(31)	PUTNAM:	
	Baywood	11/94
(32)	SANTA ROSA:	
	Milton South	11/94
	Pace	11/94

(33)	SEMINOLE COUNTY:	
	Aurantia	11/94
	Bithlo	11/94
	Casselberry	11/94
	Forest City	11/94
	Geneva	11/94
	Sanford	11/94
	Titusville SW	11/94
(34)	ST. JOHNS COUNTY:	
	Picolata	5/00
(35)	ST. LUCIE:	
	Fort Pierce NW	11/94
	Okeechobee 1 NE	11/94
(36)	SUMTER:	
	Bushnell	11/94
	Webster	11/94
(37)	SUWANNEE:	
	Dowling Park	11/94
	Fort Union	11/94
	Hildreth	11/94
	Hillcoat	11/94
	Live Oak East	11/94
	O'Brien	11/94
(38)	VOLUSIA COUNTY:	
	Aurantia	11/94
	De Land	11/94
	Geneva	11/94
	Orange City	11/94
	Titusville SW	11/94

Specific Authority 373.309, 403.061 FS. Law Implemented 373.309 FS. History–New 3-25-90, Amended 10-4-90, 7-4-91, Formerly 17-524.430, Amended 2-7-95, 6-27-00.

62-524.550 Well Construction Requirements for New Potable Water Well Permitting in Delineated Areas.

(1) New potable water wells shall comply with the minimum construction standards contained in Rule 62-532.500, F.A.C. Additional requirements may be assigned by the permitting authority relative to depth restrictions, location of screened or open hole interval, and length of casing where warranted by local specific information.

(2) Methods for constructing new potable water wells shall be limited to rotary drilling, boring, or other method specifically approved by the permitting authority pursuant to subsection 62-524.700(1), F.A.C., which meets the water well construction criteria in Rule 62-532.500, F.A.C., except as required below.

(a) Well casing and liner pipe shall be new, free of breaks, corrosion and dents, straight and true, and not out of round. Welded or seamless black or galvanized steel pipe or casing, or stainless steel pipe or casing, or approved types of nonmetallic pipe shall be used for well casing or liner pipe.

(b) Solvent-bonded couplings shall be prohibited in areas with known ground water contamination which includes solvent components.

(c) To prevent the interchange of water and loss of artesian pressure, contaminated, unconfined ground water intervals shall be sealed off prior to drilling through the underlying confining interval. Uncontaminated, unconfined ground water intervals shall be sealed off or otherwise protected prior to drilling into deeper, contaminated ground waters.

(d) For any well casing installed in a bore hole, the annular space shall be filled from bottom to top with not less than a nominal two inch thickness of neat cement grout.

(e) A concrete pad measuring three feet by three feet by four inches shall be constructed around the elevated portion of the casing so that the casing is centered in the pad to prevent soil erosion and seepage of surface contamination into the annular space.

(f) A minimum elevation of one foot of casing above land surface shall be required.

(g) A raw water tap shall be provided to allow sampling of the well before exposure to storage or treatment.

(h) The well casing shall be visibly and permanently marked above the land surface with the latitude and longitude and the permit number issued by the permitting authority for that well.

(i) To the extent practical, potable water wells shall be located outside an area delineated under Rule 62-524.420, F.A.C.

(j) Where the source of contamination and the direction of ground water flow are known, in an area delineated under Rule 62-524.420, F.A.C., to the extent practical, potable water wells shall be located upgradient of the source.

(k) New potable water wells shall be located on ground least subject to inundation.

(l) Any new potable water well constructed within a delineated area that does not meet the construction standards of this section shall be abandoned and plugged in accordance with Rule 62-532.500, F.A.C., and applicable water management district rules.

Specific Authority 373.309, 403.061, 403.062 FS. Law Implemented 373.309 FS. History–New 5-16-89, Amended 3-25-90, 3-3-92, Formerly 17-524.550, Amended 12-9-96.

62-524.600 Water Quality Testing for New Potable Water Well Delineated Areas.

(1) New potable water wells shall be tested using methods as specified in Rule 62-524.420, F.A.C., for the presence in the untreated water of the ground water contamination which resulted in the delineation.

(2) The Department shall accept only test results obtained from water samples collected and analyzed by the Department of Health. The well construction permit applicant shall be responsible for the cost of sample collection, shipping, and analysis.

Specific Authority 373.309, 403.061, 403.062 FS. Law Implemented 373.309 FS. History–New 5-16-89, Amended 3-3-92, 5-6-93, Formerly 17-524.600.

62-524.650 Clearing for Use of New Potable Water Wells in Delineated Areas.

(1) If no ground water contamination is found upon testing of a new potable water well in a delineated area pursuant to Rule 62-524.600, F.A.C., the Department of Health shall be responsible for issuance of a letter of clearance to the well construction permit applicant.

(2) If ground water contamination is found upon testing pursuant to Rule 62-524.600, F.A.C., or other ground water contamination is found, a well shall not be cleared for use without a demonstration, through water quality testing, that a filter or other permanent remedy prevents the users of the well from being exposed through ingestion, inhalation, or dermal absorption, as appropriate for a contaminant, to ground water contamination.

Specific Authority 373.309, 403.061, 403.062 FS. Law Implemented 373.309 FS. History–New 3-3-92, Formerly 17-524.650, Amended 12-9-96.

62-524.700 Permit Requirements for New Potable Water Wells in Delineated Areas.

(1) A construction permit shall be obtained from the appropriate water management district pursuant to Rule 62-524.800, F.A.C., for all new potable water wells prior to installation or conversion. Applicants shall submit a proposed well design with the completed application, and the permit fee, to the permitting authority. Permit application shall be made under existing well construction permitting programs pursuant to Chapter 62-532, F.A.C., using forms adopted by the permitting authority for this purpose. In addition to the general requirements of this chapter, the permit shall address the following requirements through special conditions:

(a) Well construction including method of construction, depth, location of cased and screened intervals, casing material and grouting.

(b) Any special cleaning requirements for casing or drilling equipment.

(c) Water quality testing.

(d) Unique well identifiers where needed.

(2) Permitting and construction of new potable water wells, except for a well to be used for a public water system as defined in Rule 62-550.200, F.A.C., are prohibited in delineated areas where a distribution line of an available potable water system is within 500 feet of the boundary of the property for which a well construction permit is being sought. Such prohibition applies unless the property owner or applicant obtains documentation from the public water system or the Department's Water Supply Restoration and Replacement Program, and submits such documentation to the permitting entity, which demonstrates either of the following:

(a) That economic factors caused by physical or legal impediments to construction to a distribution line prevent the property owner or permit applicant from obtaining potable water through connection to the distribution line; or

(b) That necessary water distribution line extensions (excluding plumbing and meters) cannot be completed within 30 days of application to the Department for water supply restoration or replacement.

Specific Authority 373.309, 403.061, 403.062 FS. Law Implemented 373.309 FS. History–New 5-16-89, Amended 3-3-92, Formerly 17-524.700, Amended 12-9-96.

62-524.710 Exemption from New Potable Water Well Permitting in Delineated Areas.

Exemption from the requirements of Rule 62-524.700, F.A.C., shall be granted to an applicant by the Department or the permitting authority upon demonstration using hydrogeological, water quality, and other pertinent information that the exemption will not result in the impairment of the intent and purpose of this chapter. Detailed requirements for each exemption shall be negotiated between the permit applicant and the permitting authority on a case by case basis.

Specific Authority 373.309, 403.061, 403.062 FS. Law Implemented 373.309, 373.326 FS. History–New 5-16-89, Formerly 17-524.710.

62-524.720 Fees for New Potable Water Wells in Delineated Areas.

(1) Well construction permit fees for new potable water wells shall be established by rule by each water management district in an amount to recover all their actual costs, but may not exceed $500.

(2) The clearance fee for new potable water wells shall be $50.

(3) All fees collected pursuant to this rule shall be deposited in the delegated entity's appropriate operating account.

Specific Authority 373.309, 403.061, 403.062 FS. Law Implemented 373.309 FS. History–New 5-16-89, Amended 3-3-92, Formerly 17-524.720.

62-524.730 Inspections of New Potable Water Wells in Delineated Areas.

During the construction, repair, conversion from non-potable use, or abandonment of any well subject to permit under this chapter, the Department or the permitting authority may conduct inspections to ensure conformity with the requirements in this chapter. Duly authorized representatives of the Department or the permitting authority may, at any reasonable time, enter property on which a well subject to permit under this chapter is located and inspect said well.

Specific Authority 373.309, 403.061, 403.062 FS. Law Implemented 373.309, 373.319 FS. History–New 5-16-89, Formerly 17-524.730.

62-524.740 Violations and Penalties for New Potable Water Wells in Delineated Areas.

(1) Prohibited Acts.

(a) It shall be a violation of Section 373.309, F.S., and this chapter to construct, convert from non-potable use, or abandon any potable water well, or use for human consumption any well subject to permit under this chapter without having obtained a permit pursuant to Rule 62-524.700, F.A.C. This prohibition shall apply to both the water well contractor and the well owner.

(b) It shall be a violation of Section 373.309, F.S., and this chapter to use for human consumption, after delineation, any water well subject to permit under this chapter without having performed water quality testing pursuant to Rule 62-524.600, F.A.C.

(c) It shall be a violation of Section 373.309, F.S., and this chapter to use for human consumption, after delineation, any water well subject to permit under this chapter in which contaminants have been found without a demonstration through water quality

testing that a filter or other means of preventing the users of such a well from being exposed to ground water contamination is effective.

(2) Penalties.

(a) Any person who violates any provision of this chapter, order, or permit issued under the authority of this chapter shall, upon conviction, be guilty of a misdemeanor of the second degree, punishable as provided in Sections 775.082 and 775.083, F.S. Continuing violation after an order or conviction shall constitute a separate violation for each day the violation occurs.

(b) Any water well contractor who is in violation of paragraph (1)(a) shall, in addition to paragraph (2)(a), also be subject to the penalty provisions in Chapter 62-531, F.A.C., including the license suspension and revocation provisions contained therein.

Specific Authority 373.309, 403.061, 403.062 FS. Law Implemented 373.309, 373.323, 373.336 FS. History–New 5-16-89, Amended 3-25-90, Formerly 17-524.740.

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GROUND WATER
REGULATORY SECTION

INTERAGENCY AGREEMENT BETWEEN THE DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT AND THE DEPARTMENT OF HEALTH

The purpose of this document is to set forth an agreement between the State of Florida Department of Environmental Protection (Department), the South Florida Water Management District (District), and the State of Florida Department of Health (DOH), including the county health departments (CHD), to delegate the permitting and water quality analysis of new potable water wells in delineated areas pursuant to section 373.309, Florida Statutes (F.S.), and Chapter 62-524, Florida Administrative Code (F.A.C.). The parties agree that:

I. District Implementation of Potable Water Well Construction Permitting Program in Delineated Areas ("Program"):

A. Delegation of Authority to District:

The Department delegates the permitting and enforcement responsibilities of potable water wells in delineated areas pursuant to Section 373.309(1)(e)5., F.S., and Chapter 62-524, F.A.C., to the District. The District or its delegate, in conjunction with the DOH as set forth herein, shall administer the permitting process. Permit applications shall be made under the District's existing well construction permit program, Chapter 40E-3, F.A.C., pursuant to Chapter 62-532, F.A.C., using existing or new forms adopted by the District for this purpose.

B. District Program Implementation:

1. District Program Implementation Date:

The District will implement the delegated program pursuant to the aforementioned authority to the extent and within those areas of the District that the program is sub delegated to an appropriate political subdivision. However, on March 15, 2005, the District will implement the delegated program throughout its jurisdiction, regardless of whether or not the program has been sub-delegated, unless an extension of time has been negotiated by the parties.

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2. **District Rulemaking:**

a. The District shall amend all existing rules regarding water well construction as related to the intent and purpose of Chapter 62-524, F.A.C.

b. The District shall amend its rules to require applicants to provide the information required in this agreement.

c. The District shall adopt, through rulemaking, the requirement for prohibition of permitting and construction of new potable water wells in delineated areas where an available public water system exist as provided for in Chapter 62-524, F.A.C. The rules shall provide that prior to issuing a permit for a new potable water well in a delineated area, the District or its delegate shall determine, through contact with county health departments approved for implementation of the Florida Safe Drinking Water Act, the District Department Office, or local water supply officials, whether a public water supply system is available, as provided for in Chapter 62-524, F.A.C.

d. The District shall develop specific permit construction requirements for potable water wells in delineated areas. These requirements shall be based on site-specific geology, hydrogeology, the nature and extent of contamination, and other information available to the District or its delegate, which is related to delineated areas.

e. The District shall adopt, through rulemaking, criteria for the construction of a public water supply well located outside of a delineated area, but where the cone of influence intersects an area identified pursuant to Chapter 62-524, F.A.C., the District or its delegate shall consider whether the withdrawal of water from the proposed public water system well, as defined in Chapter 62-550, F.A.C., will draw ground water contamination into the proposed well. The District may apply additional permit requirements as appropriate pursuant to Rule 62-524, F.A.C.

3. **District Required Permit Application Information:**

a. The permit application shall include the delineated area zone identification number, the section, township, and range and the quadrangle map name and number where a proposed potable water well is to be located.

b. The permit application shall include the correct location(s) of proposed potable water wells for the purpose of determining whether each well is subject to the requirements of Chapter 62-524, F.A.C. At a minimum, the District or its delegate shall require that applicants provide the correct proposed locations of all new potable water wells located within a quarter-quarter section which

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contains any portion of a delineated area on a U.S.G.S. 7.5 minute quadrangle map or other map approved by the Department.

4. **Specific District Program Implementation Requirements:**

a. **District Determination of Program Applicability:** Based on the information submitted by the applicant, the District or its delegate shall determine whether a proposed new potable water well is located within a delineated area, and thereby will require permitting pursuant to Chapter 62-524, F.A.C.

b. **District Inspections:** The District or its delegate shall conduct inspections for each new permitted potable water well located in a delineated area to ensure conformity with the well construction requirements of Chapter 62-524, F.A.C.

c. **District Notice to the Property Owner:** When issuing a permit for the construction of a new potable water well in a delineated area, the District or its delegate shall provide written notice to the property owner or his agent that the proposed potable water well is located in an area where ground water contamination is known to exist and that the well is subject to the requirements of Chapter 62-524, F.A.C. The District or its delegate shall provide written notification to the property owner and/or his agent that sampling and analysis of the well must be conducted according to procedures specified in Chapter 62-524, F.A.C., as a prerequisite for well use. The notification shall state that the well owner and/or his agent is responsible for contacting the DOH within 60 days of well completion to coordinate sampling and analyses of required water quality testing. Such notification shall inform the property owner and/or his agent that a determination will be made by the DOH as to whether the testing and water quality analysis requirements of Chapter 62-524, F.A.C., have been met.

d. **District Notice to the DOH:**

i. **New Well:** When a new potable water well located in a delineated area is properly constructed, the District or its delegate, within 7 working days of final inspection and approval of the well, shall provide written notification to the DOH that the 60 day timeframe for well water sampling has commenced.

ii. **Permit Application and Completion Report Information:** Within 30 days of receipt of such data, the District or its delegate shall provide the DOH with copies of the permit application and the completion report including the delineated area zone identification number, quadrangle map name and number, and the GPS locational data for all permitted potable water

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wells located in delineated areas. Reporting shall be conducted on forms adopted by the Department or by other methods which are agreed to by the District or its delegate and the Department.

e. **Required Well Abandonment:** If the DOH determines that testing or water quality requirements and remedial measures, as set forth in Chapter 62-524, F.A.C., have not been met, or the water well is not suitable for its intended potable use, the DOH shall notify the District or its delegate of such determination. The District or its delegate shall disapprove the well and require its abandonment pursuant to Chapter 40E-3, F.A.C. If the District or its delegate determines that construction requirements as set forth in Chapter 62-524, F.A.C., or the conditions or stipulations of a permit have not been met, the District shall disapprove the well and require its abandonment pursuant to Chapter 40E-3, F.A.C.

f. **GPS Well Location:** The District or its delegate shall locate all new permitted potable water wells located in delineated areas using global positioning system (GPS) technology that meets the Department's Division of Water Resource Management accuracy standard of 5 meters.

5. **District Sub-Delegation Requirements:**

a. **Consistency with Chapter 62-524, F.A.C., and Agreement:** Sub-delegation by the District through any cooperative agreement, whereby the DOH or other political subdivision performs any or all of the permitting activities required under Chapter 62-524, F.A.C., and this Agreement, shall be consistent with the intent and requirements of Chapter 62-524, F.A.C., and this Agreement.

b. **Notice of Pending Delegation:** The District shall notify the Department and DOH within 30 days prior to the execution of a delegation agreement to a political subdivision in order for the DOH to comply with its obligations under this agreement.

c. **Conditions of District Delegation:** Delegation by the District to the DOH or other political subdivisions shall be allowed provided the following conditions are met:

i. **Rules:** The DOH or each political subdivision shall adopt the appropriate provisions of the District's rule(s) regarding permitting of new potable water wells in delineated areas.

ii. **Fees:** The statutory fee caps set forth in Section 373.309 (1)7, F.S., shall apply.

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days of receipt of preliminary delineation maps, the District and the DOH shall provide written comments on proposed delineations to the Department.

2. **Provision of Information to District and DOH:**

a. **Location Information**: The Department shall provide the District or its delegate and DOH with information on adopted delineated areas and quarter-quarter section maps (index maps) which indicate all sections that contain any portion of a delineated area. These maps must be suitable for District use in administering the permitting process. The Department shall also provide hard copy maps, map overlays, or alternative formats of delineated areas at a 7.5 minute quadrangle map scale.

b. **Contaminant Information:** For each delineated area, the Department shall provide the District or its delegate with a list of those contaminants to be tested pursuant to Rule 62-524.600, F.A.C. The methods of analysis, units to be reported, and any casing or solvent bond restrictions shall be specified for each contaminant.

c. **Notice of Updating Areas**: The Department shall notify the District or its delegate and the DOH 60 days prior to updating or revising delineated areas in counties which are located within or contiguous to the District's jurisdictional boundary.

III. **DOH Responsibilities:**

A. **Rulemaking:**

The DOH shall amend all existing rules regarding water well testing to be consistent with the intent and purpose of Chapter 62-524, F.A.C.

B. **Sampling Period and Noticing Requirements:**

The DOH may extend the 60-day sampling period and shall make written notification to the District of any extension. In the event the well water is found not to be suitable for potable use, the DOH shall notify the property owner and/or his agent, with copies to the District or its delegate and the Department, that the use of the well is prohibited pursuant to Section 373.309, F.S., and Chapter 62-524 F.A.C., until remedies are implemented by the Department or the owner brings the well into compliance with Chapter 62-524, F.A.C.

C. **DOH Inspections**

The DOH shall conduct site visits of each permitted potable water well in a delineated area to ensure that the sampling and water quality requirements as set forth in Chapter 62-524, F.A.C., are met.

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D. **Technical Cooperation:**

The Department and the DOH agree to cooperate on technical issues related to the water quality testing requirements of Chapter 62-524, F.A.C., including required sampling methodologies and analytical methods for water quality testing of permitted wells.

E. **Administrative Procedures:**

The DOH shall establish administrative procedures to implement the water quality testing requirements of Chapter 62-524, F.A.C., for new potable water wells located in delineated areas.

1. **DOH Sample QA/QC:**

The DOH shall coordinate and provide quality assurance/quality control of all collected well water samples.

2. **Clearance Letter:**

If no contamination is found in the water well, the DOH shall issue a letter of clearance to the property owner and/or his agent within 7 working days of the receipt of the sample analytical results. If the well water meets the water quality testing requirements of Chapter 62-524, F.A.C., the DOH shall state in the clearance letter that the water quality testing requirements for Chapter 62-524, F.A.C., have been met.

3. **Contaminant Present Notification Procedures:**

If contamination is found, the DOH shall notify the property owner and/or his agent, with copies to the District or its delegate and the Department, that the well water is not suitable for its intended potable use, and that use of the well is prohibited pursuant to Section 373.309, F.S., and Chapter 62- 524, F.A.C., until remedies are implemented by the Department or the owner that bring the well into compliance with Chapter 62-524, F.A.C.

4. **Lack of Owner Contact to DOH:**

If the DOH receives notification from the District or its delegate that the construction of a potable water well in a delineated area has been properly constructed, but DOH has not been contacted by the owner within 60 days of the date of the notification by the District or its delegate that the well is ready for testing, or within the time extension granted by the DOH, the DOH shall notify the

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District or its delegate that the water quality testing requirements of Chapter 62-524, F.A.C., have not been met.

5. **DOH Notice to Department and District:**
For all permitted potable water wells located in delineated areas, the DOH shall report analytical results to the Department and the District or its delegate on the laboratory analysis report form (with "delineated area" written in the comments section) within 60 days of receipt of such, along with copies of the clearance/denial letters. Additionally, the DOH shall provide the Department with copies of the permit applications and well completion reports including the delineated area zone identification numbers, quadrangle map names and numbers, and GPS locational data.

IV. Miscellaneous Provisions:

A. **Unresolved Disputes:** In the event of an unresolved dispute between the Department, the District or its delegate, or the DOH, the dispute shall be referred, as necessary, to the Secretary of the Department, the Executive Director of the District or the Secretary of the DOH.

B. **Termination Clause:** This agreement may be terminated by any party after written notice of not less than 90 days is given to all parties.

C. **Agency Representatives:** Each party shall appoint a project representative to which correspondence and other communications shall be directed.

D. **Effective Date:** This Agreement shall be effective on the date of the last signature.

E. **Representatives:**

The Department representative shall be:

Well Construction Program Coordinator
Bureau of Water Facilities Regulation
Florida Department of Environmental Protection
2600 Blair Stone Road, MS#3580
Tallahassee, FL 32399-2400

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The District Representative shall be:

Director
Water Supply Department
South Florida Water Management District
3900 Gun Club Road
West Palm Beach, FL 33401

The DOH Representative shall be:

Director
Division of Environmental Health
Florida Department of Health
4052 Bald Cypress Way
Tallahassee, FL 32399

DONE AND AGREED this 27th day of August, 2004

Colleen M. Castille

Colleen M. Castille, Secretary
Department of Environmental Protection
The Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

Governing Board Chairman
South Florida Water Management District
3301 Gun Club Road
West Palm Beach, FL 33401

Secretary
Florida Department of Health
4052 Bald Cypress Way, Bin C22
Tallahassee, Florida 32399-1742

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STATE OF FLORIDA PERMIT APPLICATION TO CONSTRUCT, REPAIR, MODIFY, OR ABANDON A WELL

☐ Southwest
☐ Northwest
☐ St. Johns River
☐ South Florida
☐ Suwannee River

CHECK BOX FOR APPROPRIATE DISTRICT. ADDRESS ON BACK OF PERMIT FORM.

THIS FORM *MUST* BE FILLED OUT COMPLETELY.

The water well contractor is responsible for completing this form and forwarding the permit to the appropriate delegated county where applicable.

Permit No. _____
Florida Unique I.D. _____
Permit Stipulations Required (See attached)
62-524 well ☐
CUP/WUP Application No. _____

ABOVE THIS LINE FOR OFFICIAL USE ONLY

Fold at this line in order that address is visible through envelope window

1. _____
Owner, Legal Name of Entity if Corporation | Address | City | Zip | Telephone Number

2. _____
Well Location — Address, Road Name or Number, City

3. _____
Well Drilling Contractor | License No. | Telephone No.

_____
Address

_____
City | State | Zip

4. _____ 1/4 of _____ 1/4 of Section _____
(smallest) (biggest)
(Indicate Well on Chart)

5. Township _____ Range _____

NW NE SW SE

6. _____ | _____ | _____ | _____ | _____
County | Subdivision Name | Lot | Block | Unit

7. **Number of proposed wells** _____ **Check the use of well:** (See back of permit for additional choices) _____ Domestic Monitor (type) _____

_____ Irrigation (type) (See Back) Public Water Supply (type) _____ (See Back) List Other _____

Distance from septic system _____ ft. **Description of facility** _____ **Estimated start of construction date** _____

8. **Application for:** _____ New Construction _____ Repair/Modify _____ Abandonment _____
(Reason for Abandonment)

Date Stamp

9. **Estimated:** Well Depth _____ Casing Depth _____ Screen Interval from _____ to _____
Casing Material: Blk-Steel / Gal / PVC Casing Diameter _____ Seal Material _____

10. **If applicable: Proposed Grouting Interval** From _____ to _____ Seal Material _____
From _____ to _____ Seal Material _____
From _____ to _____ Seal Material _____

Draw a map of well location and indicate well site with an "X". Identify known roads and landmarks; provide distances between well and landmarks.

North
West East
South

11. **Telescope Casing** _____ **or Liner** _____ (check one) Diameter _____
Blk-Steel / Galvanized / PVC Other (specify: _____

12. **Method of Construction:** _____ Rotary _____ Cable Tool _____ Combination
_____ Auger _____ Other (specify:) _____)

13. **Indicate total No. of wells on site** _____. **List number of unused wells on site** _____.

14. **Is this well or any other well or water withdrawal on the owner's contiguous property covered under a Consumptive/Water Use Permit (CUP/WUP) or CUP/WUP Application?** ___No ___Yes
(If yes, complete the following) CUP/WUP No. _____
District well I.D. No. _____
Latitude _____ Longitude _____
Data obtained from GPS ____ or map ____ or survey ____ (*map datum NAD 27*____ *NAD 83*____)

15. I hereby certify that I will comply with the applicable rules of Title 40, Florida Administrative Code, and that a water use permit or artificial recharge permit, if needed, has been or will be obtained prior to commencement of well construction. I further certify that all information provided on this application is accurate and that I will obtain necessary approval from other federal, state, or local governments, if applicable. I agree to provide a well completion report to the District within 30 days after drilling or the permit expiration, whichever occurs first.

I certify that I am the owner of the property, that the information provided is accurate, and that I am aware of my responsibilities under Chapter 373, Florida Statutes, to maintain or properly abandon this well; or, I certify that I am the agent for the owner, that the information provided is accurate, and that I have informed the owner of his responsibilities as stated above. Owner consents to personnel of the WMD or a representative access to the well site.

_____ _____
Signature of Contractor | License No. | Owner's or Agent's Signature | Date

DO NOT WRITE BELOW THIS LINE — FOR OFFICIAL USE ONLY

Approval Granted By: _____ Issue Date: _____ Hydrologist Approval _____ Initials

Owner Number: _____ Fee Received: $ _____ Receipt No.: _____ Check No.: _____

Enter numerical month, day and full, four-digit year.

THIS PERMIT NOT VALID UNTIL PROPERLY SIGNED BY AN AUTHORIZED OFFICER OR REPRESENTATIVE OF THE WMD. IT SHALL BE AVAILABLE AT THE WELL SITE DURING ALL DRILLING OPERATIONS. ***This permit is valid for 90 days from date of issue.***

Form 0123 Rev. 4/95

EXHIBIT 8

Southwest Florida Water Management District
2379 Broad Street, Brooksville, FL 34604-6899 Ph: (352) 796-7211 or 800-423-1476

Environmental Management Department
P.O. Box 1000
Bradenton, FL 34206-1000

Sarasota County Health Department
P.O. Box 2658
Sarasota, FL 34233-2658

Northwest Florida Water Management District
81 Water Management Drive, Havana, FL 32333-4712
(U.S. Highway 90, 10 miles west of Tallahassee) Ph: (904) 539-5999 1-800-785-3001

St. Johns Water Management District
P.O. Box 1429, Palatka, FL 32078-1429 PH: (407) 897-4349 1-800-226-4181

South Florida Water Management District
P.O. Box 24680 3301 Gun Club Road
West Palm Beach, FL 33416-4680 Ph: (407) 686-8800 1-800-432-2045

Suwannee River Water Management District
9225 C.R. 49, Live Oak, FL 32060 Ph: (904) 362-1001 or 800-226-1066

USE OF WELL – ADDITIONAL CHOICES:

Recovery (R)	Landscape Irrigation (LI)	Recreation Area Irrigation (RAI) (ball fields, playgrounds)	Aquaculture (A) (fish ponds)
Public Water Supply (DEP) Community (PWS-C) Non-Community (PWS-N-C)	Agricultural Irrigation (AI) (crops, sod, orchards, nursery stock)	Golf Course Irrigation (GCI)	Class I Injection Well (C-1-I) Class V Injection (C-5-I)
Limited Use Public Supply (HRS) (LUPS)	Nursery Irrigation (NI) (retail outlets only)	Heat Pump (AC Supply) (HP-Sply)	Test (temporary) (T-WUP) WUP
NOTE--HRS is now Dept. of Health (DOH)			
Livestock (L)	Pesticide (PM&L) Mixing & Loading	Heat Pump (AC Return) (HP-Ret)	Industrial (I)

MONITOR Choices--Fuel (F); Class I Monitor (C-1-M); Class 5 Monitor (C-5-M).

OTHER Choices--Fuel Monitor (FM); Geo Thermal (GT); Recharge (R); Sealing Water (SW); Augmentation (A); Piezometer (P).

WELL SETBACK DISTANCES:

25 ft.	From a treated building slab.
75 ft.	Domestic – From on site septic system.
100 ft.	Public Supply and Limited Public Supply less than 2000 GPD Sewage Flow.
200 ft.	Public Supply and Limited Public Supply greater than 2000 GPD Sewage Flow.

These are common setback distances. ***However they are not all-inclusive.*** Refer to other applicable rules for additional setbacks.

WELL COMPLETION REPORT
FORM 0124
Rev 11 90

WELL PERMIT NO. _____
SFWMD WATER USE PERMIT NO. _____

Owner | Address | City | State | Zip

Contractor's Signature | License No. | Completion Date | Casing Depth | Total Depth | Well #

TYPE OF WORK: Construct ( ) Repair ( ) Abandon ( )
WELL USE: Domestic Well ( ) Public ( ) Monitor ( ) Test ( )
Irrigation ( ) Fire Well ( ) Other _____
METHOD: Rotary with MUD ( ) or Air ( ), Cable Tool ( ), Jet ( )
Casing Driven ( ), Other _____
STATIC WATER LEVEL _____ Ft. below top of casing
PUMPING WATER LEVEL _____ Ft. after _____ Hrs. at _____ GPM
PUMP SIZE _____ H.P. CAPACITY _____ GPM
PUMP TYPE _____ INTAKE DEPTH _____
From top of ground

LOCATION
Located Near _____
County _____
¼ ¼ Section Township Range
Latitude-Longitude

LOCATE IN SECTION

Cuttings sent to District? ( ) Yes
( ) No

Note: PWS Wells attach a site map if well location is different from site location on permit application.

Grout	Casing & Screen		Depth (ft)		DRILL CUTTINGS LOG Examine cuttings every 20 ft. or at formation changes Give color, grain size, and type of material Note cavities, depth to producing zones.
Thickness & Depth	Diameter & Depth		From	To	
Number of bags					

Casing: Black Steel ( ) Galv. ( ) PVC ( )Fiberglass ( )
Screen: Type _____ Slot size _____
Screened from _____ (ft.) to _____ (ft.)
Type of grout with % additives _____
Water: Clear ( ) Colored ( ) Sulphur ( ) Salty ( ) Iron ( )
Conductivity _____ Chlorides _____ mg/l