CHAPTER 62-610
REUSE OF RECLAIMED WATER AND LAND APLICATION

PART I GENERAL

62-610.100 Purpose, and Applicability.

(1) through (6) No change.

Rulemaking Authority 403.051, 403.061, 403.064, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.064, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.100, Amended 1-9-96, 8-8-99, 11-19-07.

62-610.110 Applicabilty.

Rulemaking Authority 403.061, 403.087 FS. Law Implemented 403.021, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.110, Repealed 1-9-96.

62-610.200 Definitions.

Terms used in this chapter shall have the meaning specified below. The meaning of any term not defined below may ~~shall~~ be taken from definitions in other rules of the Department.

(1) No change.

(2) "Advanced treated water" means water produced from an advanced water treatment process for potable reuse applications.

(3) "Advanced water treatment facility" means the treatment facility where advanced treated water is produced. The specific combination of treatment technologies employed will depend on the quality of the source water, the type of potable reuse (i.e., indirect or direct potable reuse), and the existing treatment in place.

(4) "Appropriate Treatment Technology" means the treatment technology selected by a utility to address emerging constituents and pathogens in reclaimed water as part of a potable reuse project.

(2) through (7) renumbered (5) through (10) No change.

(11) “Constituent” means any physical, chemical, biological, or radiological substance or matter found in water, wastewater, or reclaimed water.

(12) “Critical control point” means a point in water treatment where control can be applied to an individual unit process to reduce, prevent, or eliminate process failure and where monitoring is conducted to confirm that the control point is functioning correctly. The goal is to reduce the risk of pathogen and chemical constituents in the finished water, as defined in Rule 62-550.200, F.A.C.

(13) “De facto potable reuse” means treated wastewater effluent is discharged into ground water or surface water bodies that serve as a drinking water source, without specific plans for augmenting these water supplies with treated wastewater.

(8) renumbered (10) No change. (8) through (10) renumber (14) through (16) No change.

(17) “Direct potable reuse” means the introduction of advanced treated water into a raw water supply immediately upstream of drinking water treatment facility or directly into a potable water supply distribution system.

(11) through (18) renumber (18) through (25) No change.

(26) “Emerging constituent” means natural and synthetic chemicals or compounds not regulated in water, wastewater or reclaimed water.

(19) through (24) renumbered (27) through (32) No change.

(33) “Indicator Compound” means an individual chemical in a municipal wastewater that represents the physical, chemical, and biodegradable characteristics of a specific family of trace organic chemicals; is present in concentrations that provide information relative to the environmental fate and transport of those chemicals; may be used to monitor the efficiency of trace organic compound removal by treatment processes; and provides an indication of treatment process failure.

(25) through (26) renumbered (34) through (35) No change.

(36) “Indirect potable reuse” means the planned delivery or discharge of reclaimed water to ground or surface waters for the development of, or to supplement, potable water supply.~~, for purposes of this chapter, the planned discharge of reclaimed water to surface waters to augment the supply of water available for drinking water and other uses. Indirect potable reuse is contrasted with “direct potable reuse” which involves the discharge of reclaimed water directly into a drinking water treatment facility or into a drinking water distribution system.~~

(27) through (88) renumbered (37) through (38) No change.

(39) “Log reduction” means a reduction in the concentration of a constituent or microorganism by a factor of 10. For example, a 1-log reduction would correspond to a reduction of 90 percent from the original concentration. A 2-log reduction corresponds to a reduction of 99 percent from the original concentration.

(40) “Log reduction credit” means the number of credits assigned to a specific treatment process (e.g., microfiltration, chlorine disinfection, or ultraviolet disinfection), expressed in log units, for the inactivation or removal of a specific microorganism or group of microorganisms. A reduction of 90 percent would correspond to 1-log credit of reduction, whereas a reduction of 99 percent would correspond to 2-log credits of reduction.

(29) through (31) renumbered (41) through (43) No change.

(44) “Nonpotable reuse” means all water reuse applications except those related to potable reuse.

(32) through (39) renumbered (45) through (52) No change.

(53) “Potable reuse” means augmentation of a drinking water supply with advanced treated water from a domestic wastewater treatment facility and consists of direct potable reuse and indirect potable reuse.

(43) through (47) renumbered (54) through (61) No change.

(62) “Redundancy” means the use of multiple treatment barriers to attenuate the same type of constituent so that if one barrier fails, performs inadequately, or is taken offline for maintenance, the overall system still will perform effectively, and risk is reduced.

(48) through (54) renumbered (63) through (69) No change.

(70) “Source control” means the elimination or control of the discharge of constituents into a wastewater collection system that at certain quantities can impact a wastewater facility or an advanced water treatment facility, are difficult to treat, or can impair the final quality of the finished water, as defined in Rule 62-550.200, F.A.C.

(55) through (58) renumbered (71) through (74) No change.

(75) “Surrogate Parameter” means a measurable physical or chemical property that has been demonstrated to provide a direct correlation with the concentration of an indicator compound, can be used to monitor the efficiency of trace organic compounds removal by a treatment process, and/or provides an indication of a treatment process failure.

(59) through (63) renumbered (76) through (80) No change.

(81) “Treatment reliability” means the ability of a treatment process or treatment train to consistently achieve the desired degree of treatment, based on its inherent redundancy, robustness, and resilience.

(82) “Treatment train” means a grouping in series of treatment technologies or processes to achieve a specific treatment or water quality goal or objective.

(64) through (80) renumbered (83) through (99) No change.

Rulemaking Authority 403.051, 403.061, 403.064, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.064, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.200, Amended 1-9-96, 8-8-99, 11-19-07, X-x-xx.

62-610.300 General Technical Guidance, Related Rules, Technical Publications and Forms.

(1) through (3) No change.

Rulemaking Authority 403.051, 403.061, 403.064 FS. Law Implemented 403.051, 403.061(7), (13), 403.064, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.300, Amended 1-9-96, 8-8-99, 3-9-06, 11-19-07.

62-610.310 Engineering Report.

(1) through (2) No change.

(3) The engineering report shall include the following:

(a) through (b) No change.

(c) Hydrogeologic Survey.

1. through 8. No change.

9. For aquifer storage and recovery projects regulated under Rule 62-610.466, F.A.C., and ground water recharge projects involving injection to G-II ground water, the engineering report shall characterize the total dissolved solids (TDS) concentration in ground water contained in the aquifer at the point of injection. See subsection 62-610.800(11), F.A.C. For aquifer storage and recovery projects, this shall include characterization of TDS concentrations within the proposed extended zone of discharge, as described in subsection 62-610.466(16)~~62-610.466(14)~~, F.A.C. For injection projects having a zone of discharge, as described in subsection 62-610.560(3) and Rule 62-610.562, F.A.C., the engineering report shall include characterization of TDS concentrations at the point of injection and within the zone of discharge. The methods used to make the TDS characterization shall be described. For ground water recharge projects, injection fluids shall not exceed the TDS concentration reported in the engineering report for the receiving ground waters at the point of injection. For ASR projects with a ZOD, the injection fluids shall not exceed the TDS concentration reported in the engineering report for the receiving ground waters at the edge of the ZOD.

(d) No change.

(e) Project Evaluation.

1. An evaluation of the overall long-term effect of the proposed project on environmental resources in the area shall be provided. The evaluation shall include aspects such as changes in water table elevations due to natural fluctuations and the reuse or land application project (including ground water mounding that may occur under the site), prediction of the rate and direction of movement of applied reclaimed water or effluent, changes in water quality in the area associated with the project, and similar information. Discharges, though not intended as such, may incidentally contact, comingle with, or recharge a potential source of potable water supply. As such, these discharges shall be considered de facto potable reuse. As part of the evaluation, projects ~~not~~ considered to be de facto potable reuse, shall demonstrate that discharges shall not degrade a USDW.

2. through 8. No change.

9. Technical information and design criteria for potable reuse system:

a. Operations and unit processes operations.

b. Maximum blending ratios of treated reclaimed water with other sources of drinking water.

c. Additional treatment, controls or management of potential chemical peaks (rapid, short-lived increases in concentration) for chemical contaminants that have the potential to pass through advanced treated water facilities.

d. Identified critical control points.

e. Surrogate and operational parameters.

f. Monitoring points.

10.~~9.~~ Operation and control strategies for nonpotable reuse system.

10. renumbered 11.

(f) No change.

(g) The engineering report or abbreviated engineering report shall be certified by a professional engineer registered in the State of Florida. Where required by Chapter 471 or 492, F.S., applicable portions of the report shall be signed and sealed by a professional engineer or professional geologist, as appropriate.

(h) through (j) No change.

(4) The engineering report for projects involving ground water recharge and ~~indirect~~ potable reuse regulated under Part V of this

chapter shall address the following:

(a) The full engineering report requirements of Rule 62-610.310, F.A.C., shall apply.

(b) In addition, the engineering report shall address the following:

1. through 4. No change.

5. An evaluation of anticipated changes in the characteristics of the reclaimed water from the time of discharge to the time of recovery (e.g., anticipated reduction of pathogens from the time of discharge to the time of recovery) if the point of discharge of reclaimed water to ground water for indirect potable reuse is at or within a 5-year travel time of a public water supply well or a potable reuse supply well.

6. A plan for monitoring surrogate and operation parameters and pathogen reductions.

5. through 8. renumbered 7. Through 10.

(5) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.0877, 403.088 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.310, Amended 1-9-96, 8-8-99.

62-610.320 Operation and Maintenance Requirements and Operating Protocols.

(1) through (6) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061(7), 403.062, 403.064, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.320, Amended 1-9-96, 8-8-99, 3-9-06.

62-610.330 Pretreatment Programs.

(1) A pretreatment program shall be developed ~~and implemented~~, in accordance with Chapter 62-625, F.A.C., for nonpotable reuse projects regulated under Part~~s~~ III ~~or V~~ of this chapter or under Rule 62-610.525, F.A.C.~~,~~ I~~i~~f the wastewater facility receives discharges from significant industrial users, as defined in Rule 62-625.200, F.A.C., the pretreatment program shall be fully implemented. For nonpotable reuse projects, P~~p~~retreatment program requirements apply only to public utilities, as defined in Rule 62-625.200, F.A.C.

(2) For potable reuse projects regulated under Part V of this chapter, a comprehensive pretreatment and source control program shall be developed and implemented for regulating the discharge of wastes to the wastewater facility that may adversely affect the potable reuse system's water quality or production. The program standards and requirements in Chapter 62-625, F.A.C., as well as this section apply to the entire potable reuse system (from collection systems to the potable water distribution system), including privately-owned portions of the system.

(a) The comprehensive pretreatment and source control program shall include at a minimum:

1. pretreatment program standards and requirements in Chapter 62-625, F.A.C.;

2. an assessment of the fate of Department-specified toxic chemicals and other contaminants of aquatic life and human health significance through the entire potable reuse system;

3. source investigations and monitoring that focuses on Department-specified toxic chemicals and other contaminants of aquatic life and human health significance;

4. development of local discharge limitations for Department-specified toxic chemicals and other contaminants of aquatic life and human health significance shall be developed using a safety factor on quality, quantity, and source of the data.

5. monitoring and sampling at influent, intermediate, and compliance (treated effluent & biosolids) shall be paired with and monitored at the same frequency as the compliance monitoring;

6. outreach program(s) to industrial, commercial, and residential communities within the portions of the wastewater collection system service area that supplies the potable reuse systems for the purpose of managing and minimizing the discharge of toxic chemicals and other contaminants of aquatic life and human health significance at the source; and

7. a current inventory of toxic chemicals and other contaminants of aquatic life and human health significance identified pursuant to this section, including new toxic chemicals and other contaminants of aquatic life and human health significance resulting from new sources or changes to existing sources, that may be discharged into the wastewater collection system.

8. significant industrial users shall implement a sludge control plan that includes, at a minimum, all elements in subparagraphs 62-625.500(2)(b)6.a. through d., F.A.C. The plan shall be re-evaluated annually and updated as necessary.

9. power-operated equipment associated with controlling and monitoring discharges to the wastewater collection system from industrial and commercial facilities (e.g., alarms, valve actuators, programmable logic controllers, and monitoring devices) shall have a continuous power source at all times in when a discharge can occur. At any time that the power source is interrupted the

facility must inform the control authority, as defined in Rule 62-625.200, F.A.C., immediately. Manual monitoring and sampling shall be required to ensure compliance with control authority-issued permit.

10. an early warning system that has elements of real-time monitoring, event detection, and a hierarchical decision tree or set of rules to classify the alert and determine the appropriate response. A risk assessment shall be conducted to identify wastewater constituents and locations where real-time monitoring should be best applied to detect and alert when a potential adverse event is occurring.

11. a continuous improvement plan for performance and reliability of the early warning system. The plan shall be re-evaluated at least once every two years and revised accordingly. This requirement may be deferred by using other mitigation measures, including additional treatment barriers, blending, effluent monitoring, and diversion.

(b) In addition to the annual control authority report requirements in subparagraph 62-625.600(8), F.A.C., the report shall also include:

1. a summary of all analytical results of influent and effluent and removal efficiencies for those indicator compounds identified during the pilot study. The indicator compounds and the toxic pollutants identified in 62-625.600(8)(f), F.A.C., shall be monitored on a semi-annual basis.

2. whether or not the facility complied with all applicable potable water reuse system requirements, and if not, whether any noncompliance was a result of non-domestic discharges;

3. a summary of all triggers of early warning systems and consequent responses; and

4. a summary of all enhancements to real-time monitoring and early warning systems.

(2) through (3) renumbered (3) through (4)

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.330, Amended 1-9-96, 8-8-99.

PART II SLOW-RATE LAND APLICATION SYSTEMS; RESTRICTED PUBLIC ACCESS

62-610.400 Description of System.

(1) through (4) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.400, Amended 1-9-96.

62-610.410 Waste Treatment and Disinfection.

(1) through (2) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Formerly 17-610.410, Amended 1-9-96.

62-610.412 Monitoring of Reclaimed Water and Ground Water.

(1) through (2) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Formerly 17-610.412, Amended 1-9-96.

62-610.414 Storage Requirements.

(1) through (9) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.414, Amended 1-9-96.

62-610.415 Storage Pond Design and Operation.

Rulemaking Authority 403.061, 403.087 FS. Law Implemented 403.021, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Formerly 17-610.415, Repealed 1-9-96.

62-610.417 Surface Runoff Control and Subsurface Drainage.

(1) through (3) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.417, Amended 1-9-96.

62-610.418 Access Control and Advisory Signs.

(1) through (2) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.418, Amended 1-9-96.

62-610.419 Application/Distribution Systems and Cross-Connection Control.

(1) through (4) No change.

Rulemaking Authority 403.051, 403.061, 403.064, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.064, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Formerly 17-610.419, Amended 1-9-96, 11-19-07.

62-610.420 Potable Water Cross-Connections.

Rulemaking Authority 403.061, 403.087 FS. Law Implemented 403.021, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Formerly 17-610.420, Repealed 1-9-96.

62-610.421 Setback Distances.

(1) through (2) No change.

(3) A 500-foot setback distance shall be provided from the edge of the wetted area to potable water supply wells that are existing or have been approved by the Department or by the Department of Health (but not yet constructed); Class I surface waters; or Class II surface waters. This distance shall be reduced to 200 feet if facility Class I reliability is provided in accordance with subsection 62-610.462(1), F.A.C. This distance shall be reduced to 100 feet if facility Class I reliability is provided in accordance with subsection 62-610.462(1), F.A.C., and if high-level disinfection is provided. Reductions in the 500-foot setback distance to potable water wells, as described in Rule 62-521.200, F.A.C., shall not be allowed. Setback distance requirements apply to all Class II waters, regardless of Department classification (such as open, closed, approved, conditionally approved, restricted, conditionally restricted, prohibited, or unclassified).

(4) through (12) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.421, Amended 1-9-96, 8-8-99, X-x-xx.

62-610.422 Subsurface Drainage.

Rulemaking Authority 403.061, 403.087 FS. Law Implemented 403.021, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.422, Repealed 1-9-96.

62-610.423 Hydraulic Loading Rates.

(1) through (4) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Formerly 17-610.423, Amended 1-9-96.

62-610.424 Monitoring of Ground Water.

Rulemaking Authority 403.061, 403.087 FS. Law Implemented 403.021, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Formerly 17-610.424, Repealed 1-9-96.

62-610.425 Cattle Grazing.

No change.

Rulemaking Authority 403.051,403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Formerly 17-610.425, Amended 8-8-99.

62-610.426 Edible Crops.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Formerly 17-610.426, Amended 1-9-96, Repealed 2-16-12.

PART III SLOW-RATE LAND APLICATION SYSTEMS; PUBLIC ACCESS AREAS, RESIDENTIAL IRIGATION, AND EDIBLE CROPS

62-610.450 Description of System.

(1) through (2) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Formerly 17-610.450, Amended 1-9-96.

62-610.451 Minimum System Size.

(1) through (3) No change.

Rulemaking Authority 403.051, 403.061, 403.064, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.064, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.451, Amended 1-9-96, 11-19-07.

62-610.460 Waste Treatment and Disinfection.

(1) through (4) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.460, Amended 1-9-96, 8-8-99.

62-610.462 Reliability and Operator Staffing.

(1) through (4) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.462, Amended 1-9-96, 8-8-99.

62-610.463 Monitoring and Operating Protocol.

(1) No change.

(2) The treatment facility shall include continuous on-line monitoring for turbidity before application of the disinfectant. Continuous on-line monitoring of total residual chlorine or for residual concentrations of other disinfectants, if used, shall be provided at the compliance monitoring point. Instruments for continuous on-line monitoring of turbidity and disinfectant residuals shall be equipped with an automated data logging or recording device. Continuous on-line monitoring instruments shall be calibrated according to the requirements of Chapters 62-160 and 62-600, F.A.C. Continuous on-line monitoring instruments shall be maintained according to the manufacturer's operation and maintenance instructions. In accordance with Rule 62-610.320, F.A.C., the permittee shall develop, and the Department shall approve, an operating protocol designed to ensure that the high-level disinfection criteria will be met before the reclaimed water is released to the system storage or to the reclaimed water reuse system. The operating protocol shall be reviewed and updated as required in Rule 62-610.320, F.A.C. Reclaimed water produced at the treatment facility that fails to meet the criteria established in the operating protocol (i.e., off-spec reclaimed water), shall not be discharged into system storage or to the reuse system. Off-spec reclaimed water ~~Such substandard reclaimed water (reject water)~~ shall be either stored for subsequent additional treatment or shall be discharged to another permitted reuse system requiring lower levels of preapplication treatment or to a permitted effluent disposal system.

(3) through (4) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.463, Amended 1-9-96, 8-8-99, X-x-xx.

62-610.464 Storage Requirements.

(1) through (2) No change

(3) In addition, a separate, off-line system for storage of off-spec reclaimed ~~reject~~ water shall be provided, unless another permitted reuse system or effluent disposal system is capable of discharging the off-spec reclaimed ~~reject~~ water in accordance with requirements of Chapter 62-600, F.A.C. Off-spec reclaimed ~~reject~~ water storage shall have sufficient capacity to ensure the retention of reclaimed water of unacceptable quality. At a minimum, this capacity shall be the volume equal to one day flow at the average daily design flow of the treatment plant or the average daily permitted flow of the reuse system, whichever is less. Provisions for recirculating this off-spec reclaimed ~~reject~~ water to other parts of the treatment plant for further treatment shall be incorporated into the design.

(4) Requirements for system storage and off-spec reclaimed ~~reject~~ water holding ponds shall be as contained in Rule 62-610.414, F.A.C., except for the following:

(a) through (c) No change.

(5) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.464, Amended 1-9-96, 8-8-99, X-x-xx.

62-610.465 Storage Pond Design and Operation.

Rulemaking Authority 403.061, 403.087 FS. Law Implemented 403.021, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Formerly 17-610.465, Repealed 1-9-96.

62-610.466 uifer Storage and Recovery (ASR).

(1) ASR can be an effective and environmentally sound approach to provision of storage for reclaimed water for reuse systems regulated under this of chapter. ASR by itself does not constitute "reuse." It is only when reclaimed water, which has been stored in an aquifer, is recovered and used for beneficial purposes that the reclaimed water is considered to be "reused." ~~Aquifer storage and recovery~~ ASR systems are considered components of the overall reuse system.

(2) ~~Aquifer storage and recovery~~ ASR of reclaimed water involves the following:

(a) Injection of reclaimed water into a subsurface formation for storage; and,

(b) Recovery of the stored reclaimed water for beneficial purposes at a later date.

(3) Injection of reclaimed water into a subsurface formation meeting the definition for underground source of drinking water in Rule 62-528.200, F.A.C., shall be considered as being an ASR system for indirect potable reuse purposes.

(4) ASR of reclaimed water involves the following:

(a) Injection of reclaimed water into a subsurface formation for storage; and,

(b) Recovery of the stored reclaimed water for either nonpotable or potable reuse at a later date.

1. Nonpotable reuse, stored reclaimed water recovered for reuse as a nonpotable source, is subject to the requirements of Part III of this chapter.

2. Potable reuse, stored reclaimed water recovered for reuse as a potable water source, is subject to the requirements of Part V of this chapter. Injection of reclaimed water into a USDW shall be considered potable reuse.

~~(2) ASR can be an effective and environmentally sound approach to provision of storage for reclaimed water for reuse systems regulated under part III of this chapter ASR by itself does not constitute "reuse." It is only when reclaimed water, which has been stored in an aquifer, is recovered and used for beneficial purposes that the reclaimed water is considered to be "reused." ASR systems are considered components of the overall reuse system.~~

(3) renumbered (5) No change.

(6)~~(3)~~ In the engineering report submitted with the initial application to implement an ASR system, the applicant shall provide an evaluation of the anticipated changes in the characteristics of the reclaimed water during the injection, storage, and recovery phases. In the engineering report, the applicant shall evaluate the need for additional treatment or disinfection upon recovery before introduction of the recovered water into system storage or the reuse system. The engineering report shall include an initial characterization of the ground water at the point of injection. The ground water characterization shall include analyses for all parameters for which ground water quality standards have been established in Chapter 62-520, F.A.C., and for viruses, *Cryptosporidium*, *Giardia*, and total~~fecal~~ coliforms. The characterization of TDS at the point of injection is discussed in subparagraph 62-610.310(3)(c)9. and subsection 62-610.800(11), F.A.C.

(7) The water recovered from the ASR~~aquifer storage and recovery~~ system for nonpotable reuse purposes shall meet the

performance standards for ~~fecal~~ coliforms as specified for high-level disinfection before use in a reuse system regulated under Part III of this chapter. The water recovered from the ASR system for potable reuse purposes shall meet the performance and disinfection standards established for a reuse system regulated under Part V.

(6) through (7) renumbered (8) through (9) No change.

(10)~~(8)~~ Use of Class G-I or F-I ground water.

(a) No change.

(b) Except as provided in subsection 62-610.466(19)~~62-610.466(17)~~, F.A.C., additional treatment or disinfection shall not be required upon recovery of the reclaimed water.

(11)~~(9)~~ Use of Class G-II ground water containing 3000 mg/L or less of total dissolved solids.

(a) No change.

(b) If the applicant provides an affirmative demonstration that the receiving ground water contains between 1,000 and 3,000 mg/L (inclusive) of total dissolved solids, is not currently used as a source of public water supply, and that the receiving ground water is not reasonably expected to be used for public water supply in the future, the preapplication treatment and disinfection requirements shall be as follows:

1. The principal treatment and disinfection requirements in Rule 62-610.563, F.A.C., shall apply, with the following modifications:

a. The parameters listed as primary drinking water standards shall be applied as maximum single sample permit limitations, including total coliforms as required in Rule 62-550.830, F.A.C. The fecal coliform limitations associated with high-level disinfection shall not apply. The primary drinking water standards for asbestos and sodium shall not apply as reclaimed water limitations.

b. The secondary drinking water standards shall not be applied as reclaimed water limitations. As described in paragraph 62-610.466(16)(a)~~62-610.466(14)(a)~~, F.A.C., the ground water standard for sodium shall be met at the edge of the zone of discharge. As described in paragraph 62-610.466(16)(f)~~62-610.466(14)(f)~~, F.A.C., the ground water standards corresponding to the secondary drinking water standards shall be met at the edge of the extended zone of discharge.

c. through d. No change.

(c) The provisions of paragraph 62-610.466(11)(b)~~62-610.466(9)(b)~~, F.A.C., shall only apply to receiving ground waters that are not used for public water supply within the following geographic limits (whichever provides for the largest horizontal distance):

1. through 2. No change.

(d) Except as provided in subparagraph 62-610.466(14)(b)1.~~62-610.466(12)(b)1.~~, and subsection 62-610.466(19)~~62-610.466(17)~~, F.A.C., additional treatment or disinfection shall not be required upon recovery of the reclaimed water.

(12)~~(10)~~ Use of Class G-II ground water containing greater than 3000 mg/L of total dissolved solids.

(a) Wells may be used to inject reclaimed water into Class G-II ground water containing greater than 3000 mg/L of total dissolved solids for ASR if all of the following conditions are met:

1. The principal treatment and disinfection requirements in Rule 62-610.563, F.A.C., shall apply, with the following modifications:

a. through c. No change.

d. The extended zone of discharge shall not extend into zones having TDS concentrations less than 3000 mg/L (based on the initial TDS characterization in the engineering report and subsequent information).

2. Technical and permitting requirements in Chapter 62-528, F.A.C., are met.

(b) No change.

(11) renumbered (13) No change.

(14)~~(12)~~ Monitoring.

(a) No change.

(b) Water recovered from the ASR system.

1. Except as provided in subparagraphs 62-610.466(14)(b)2.~~62-610.466(12)(b)2~~. and 3., F.A.C., the reclaimed water recovered from the ASR system shall be monitored for TSS, and *E. Coli* or Enterococci ~~fecal coliforms~~, as applicable, at the same frequency specified in Chapter 62-600, F.A.C., for the treatment facility providing reclaimed water to the reuse system. CBOD5 shall be monitored monthly. If the reclaimed water withdrawn from an ASR system fails to meet the CBOD5, TSS, *E. Coli* or Enterococci ~~fecal coliforms~~ limits established for a reuse project regulated under Part III of this chapter, the Department shall require that additional treatment or disinfection facilities be provided to ensure compliance with these limits. If the CBOD5 limits are not met, the Department

shall increase the sampling frequency for CBOD5 to the level required in Chapter 62-600, F.A.C.

2. If the reclaimed water injected into the ASR system meets the full treatment and disinfection requirements in Rule 62-610.563, F.A.C., *E. Coli* or Enterococci ~~fecal coliforms~~, as applicable, shall be monitored monthly in the water recovered from the ASR system.

3. No change.

(c) through (d) No change.

(13) renumbered (15) No change.

(16)~~(14)~~ Extended zone of discharge.

(a) through (e) No change.

(f) For aquifer storage and recovery systems involving the levels of preapplication treatment provided in paragraph 62-610.466(11)(b)~~62-610.466(9)(b)~~, or subsection(12)~~(10)~~, F.A.C., all ground water quality criteria shall be met at the edge of the extended zone of discharge. If the natural background ground water quality does not meet the ground water quality criteria, the aquifer storage and recovery system shall meet the natural background quality at the edge of the extended zone of discharge.

(15) through (16) renumbered (17) through (18) No change.

(19)~~(17)~~ The permittee shall assess the performance of the ASR system on a monthly basis.

(a) During operation of the reuse system, if it is shown that water recovered from the aquifer storage and recovery system does not meet the ~~fecal coliform performance criteria associated with high-level disinfection~~ applicable microbiological standards, or if the water recovered adversely affects vegetation or crops grown in the reuse system or adversely affects the infiltration/percolation capability of soils within the reuse system, the permittee shall do the following:

1. through 3. No change.

4. Submit a written report to the Department within 120 days of identification of a potential problem. The report shall address the requirements of subparagraphs 62-610.466(19)(a)1.~~62-610.466(17)(a)1~~. through 3., F.A.C.

(b) No change.

(c) Nothing in subsection 62-610.466(19)~~62-610.466(17)~~, F.A.C., shall preclude the Department from taking enforcement action to compel compliance with the requirements of Rule 62-610.466, F.A.C., the requirements of Part III of this chapter~~,~~ or the ground water standards contained in Chapter 62-520, F.A.C.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 8-8-99, Amended, X-x-xx.

62-610.468 Access Control and Advisory Signs.

(1) through (6) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Formerly 17-610.468, Amended 1-9-96, 8-8-99.

62-610.469 Application/Distribution Systems and Cross-Connection Control.

(1) through (7) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.469, Amended 1-9-96, 8-8-99.

62-610.470 Potable Water Cross-Connections.

Rulemaking Authority 403.061, 403.087 FS. Law Implemented 403.021, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.470, Repealed 1-9-96.

62-610.471 Setback Distances.

(1) through (10) No change.

(11) For ASR projects regulated under Rule 62-610.466, F.A.C., setback distance requirements for injection and recovery wells and for extended zones of discharge are contained in subsections 62-610.466(15) and (16)~~62-610.466(13) and (14)~~, F.A.C.

Rulemaking Authority 403.051, 403.061, 403.064, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.064, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.471, Amended 1-9-96, 8-8-99, 11-19-07, X-x-xx.

62-610.472 Supplemental Water Supplies.

(1) through (3) No change.

(4) Ground water supplies.

(a) Ground water supplies may be used to supplement the reclaimed water supply, if all of the following conditions are met:

1. through 2. No change

3. Monitoring of the ground water supply shall be conducted quarterly for total ~~fecal~~ coliforms as specified in Rule 62-520.830, F.A.C., unless additional monitoring is required by paragraph 62-610.472(4)(b), F.A.C. ~~At the end of the first year of operation, monitoring of the ground water supply shall be reduced if the applicant provides an affirmative demonstration that the ground water supply meets the high level disinfection criteria for fecal coliforms and that public health will be protected.~~

4. No change.

(b) through (c) No change

(5) through (7) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 8-8-99, X-x-xx.

62-610.473 Hydraulic Loading Rates.

No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Formerly 17-610.473.

62-610.474 Monitoring of Ground Water.

Rulemaking Authority 403.061, 403.087 FS. Law Implemented 403.021, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Formerly 17-610.474, Repealed 1-9-96.

62-610.475 Edible Crops at Commercial Agricultural Operations.

(1) through (6) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Amended 9-13-89, Formerly 17-610.475, Amended 1-9-96, 8-8-99.

62-610.476 Toilet Flushing and Fire Protection.

(1) through (2) No change.

Rulemaking Authority 403.051, 403.061, 403.064, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.064, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.476, Amended 1-9-96.

62-610.477 Fire Protection.

Rulemaking Authority 403.061, 403.087 FS. Law Implemented 403.021, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.477, Repealed 1-9-96.

62-610.478 Construction Dust Control.

Rulemaking Authority 403.051, 403.061, 403.064, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Formerly 17-610.478, Repealed 2-16-12.

62-610.479 Aesthetic Purposes.

Rulemaking Authority 403.051, 403.061, 403.064, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Formerly 17-610.479, Amended 1-9-96, Repealed 2-16-12.

62-610.480 Other Reuse Applications.

(1) through (2) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-2-90, Formerly 17-610.480, Amended 1-9-96.

62-610.490 Permitting Concept.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Formerly 17-610.490, Amended 1-9-96, Repealed 2-16-12.

62-610.491 Additional Operation and Maintenance Requirements.

(1) through (2) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.491, Amended 1-9-96.

PART IV RADID-RATE LAND APLICATION SYSTEMS (RAPID INFILTRATION BASINS AND ABSORPTION FIELDS)

62-610.500 Description of System.

(1) through (3) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Formerly 17-610.500, Amended 1-9-96.

62-610.510 Waste Treatment, Disinfection, and Monitoring.

(1) through (3) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.510, Amended 1-9-96, 8-8-99.

62-610.513 Monitoring of Reclaimed Water and Ground Water.

Rulemaking Authority 403.061, 403.087 FS. Law Implemented 403.021, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Formerly 17-610.513, Amended 1-9-96, Repealed 8-8-99.

62-610.514 Storage Requirements.

(1) through (2) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Formerly 17-610.514, Amended 1-9-96.

62-610.515 Storage Pond Design and Operation.

Rulemaking Authority 403.061, 403.087 FS. Law Implemented 403.021, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Formerly 17-610.515, Repealed 1-9-96.

62-610.516 Emergency Discharge.

No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Formerly 17-610.516, Amended 1-9-96.

62-610.517 Surface Runoff Control and Subsurface Drainage.

(1) through (2) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.517, Amended 1-9-96.

62-610.518 Access Control and Advisory Signs.

(1) through (2) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Formerly 17-610.518, Amended 1-9-96.

62-610.521 Setback Distances.

(1) through (11) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.521, Amended 1-9-96, 8-8-99.

62-610.522 Subsurface Drainage.

Rulemaking Authority 403.061, 403.087 FS. Law Implemented 403.021, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.522, Repealed 1-9-96.

62-610.523 Design and Operation Requirements.

(1) through (9) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.523, Amended 1-9-96, 8-8-99.

62-610.524 Monitoriing of Ground Water.

Rulemaking Authority 403.061, 403.087 FS. Law Implemented 403.021, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Formerly 17-610.524, Repealed 1-9-96.

62-610.525 Projects Involving Additional Levels of Preapplication Treatment.

(1) through (13) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.525, Amended 1-9-96, 8-8-99, X-x-xx.

PART V GROUND WATER RECHARGE AND ~~INDIRECT~~ POTABLE REUSE

62-610.550 Description of System.

(1) Ground water recharge.

(a) This type of reuse system involves the planned use of reclaimed water to augment Class F-I, G-I, or G-II ground waters without developing or supplementing the potable water supply. Types of ground water recharge systems include:

1. through 4. No change.

(b) Rule 62-520.410, F.A.C., identifies the designated uses of G-I, F-I, and G-II ground waters as being "potable water use." As a result, it is likely that there may be elements of de facto potable reuse associated with existing and proposed ground water recharge projects.

(c) Prior to applying for a proposed ground water recharge or salinity barrier project, the applicant shall comply with the public notification requirements contained in subsection 62-610.574(4)(d), F.A.C.

(d) Applications proposing ground water recharge or salinity barrier projects shall be submitted to both the Department and the appropriate water management district.

(2) ~~Indirect~~ Ppotable reuse. ~~This type of reuse system~~ Potable reuse involves the planned use of reclaimed water to augment potable water supplies or surface water resources which are used or will be used for public water supplies. ~~Indirect potable reuse systems include:~~

(a) Potable reuse systems include:

1. The introduction of advanced treated reclaimed water to a drinking water treatment facility or potable water supply distribution system.

2.~~(a)~~ Discharges to Class I surface waters, as described in Rule 62-610.554, F.A.C.

3.~~(b)~~ Discharges to ~~other~~ surface waters which are directly or indirectly connected to Class I surface waters, as described in Rule 62-610.554~~62-610.555~~, F.A.C.

4. Discharge to G-I, F-I, or G-II ground waters as described in Rule 62-610.560, F.A.C., by injection of treated reclaimed water, or by rapid-rate land application systems.

(b) Applicants shall conduct a pilot study in accordance with Rule 62-610.564, F.A.C.

(c) All potable reuse projects shall be designed and operated to comply with, at a minimum, the following:

1. system size requirements in Rule 62-610.553, F.A.C.;

2. full treatment and disinfection requirements in subsection 62-610.563(3), F.A.C., prior to the reclaimed water leaving the WWF.

3. overall pathogen reduction requirements in subsection 62-550.817(2)(c), F.A.C., where the finished water is finally introduced into the distribution system of a public water system;

3. reliability and operator staffing requirements in Rule 62-610.567, F.A.C.;

4. monitoring and operating protocol requirements in Rule 62-610.568, F.A.C.; and

5. storage requirements in Rule 62-610.573, F.A.C.

(d) Indirect potable reuse systems that discharge reclaimed water to Class I waters, upstream of Class I waters, or to waters contiguous to or tributary to Class I waters shall meet the requirements in Rule 62-610.554, F.A.C. Potable water intakes within Class I surface waters shall meet the setback distance requirements in subsections 62-610.571(2) and (6), F.A.C.

(e) Indirect potable reuse systems using an ASR system shall meet the requirements for ASR systems in Rule 62-610.466, F.A.C., the setback distances in Rule 62-610.571, F.A.C., and the requirements for hydraulic loading rates in Rule 62-610.575, F.A.C.

(f) Indirect potable reuse systems that discharge reclaimed water to ground waters shall meet the setback distances in Rule 62-610.571, F.A.C., and the requirements for hydraulic loading rates in Rule 62-610.575, F.A.C.

(3) Prior to applying for a proposed indirect potable reuse system, the applicant shall comply with the public notification requirements contained in subsection 62-610.574(4), F.A.C.

(4) Applications proposing indirect potable reuse projects shall be submitted to both the Department and the appropriate water management district.

(5) To ensure protection of public health, safety, and welfare, any construction, modification, or operation of a ground water recharge or potable reuse system or related activity shall be in accordance with sound professional engineering practices; and any supporting documents involving the practice of the profession of geology shall be in accordance with sound professional geological practices. All plans of study, reports and applications for permits shall be certified by a professional engineer registered in the State of Florida except where professional engineering is not required by Chapter 471, F.S. Where required by Chapter 471 or 492, F.S., applicable portions of plans of study, reports, permit applications and supporting documents which are submitted to the Department for public record shall be signed and sealed by a professional engineer or professional geologist, as appropriate.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Formerly 17-610.550, Amended 1-9-96, 8-8-99, X-x-xx.

62-610.552 Effective Date.

Rulemaking Authority 403.061, 403.087 FS. Law Implemented 403.021, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 1-9-96, Repealed 8-8-99.

62-610.553 Minimum System Size.

Reclaimed water from treatment facilities with a design average daily flow of less than 0.1 mgd shall not be used for ground water recharge or ~~indirect~~ potable reuse under the provisions of Part V of this chapter

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088

FS. History–New 1-9-96, Amended, X-x-xx.

62-610.554 Discharge to Class I Surface Waters.

(1) through (2) No change.

(3) Discharges of reclaimed water to Class I waters, or to waters contiguous to or tributary to Class I waters shall be considered as ~~being~~ potable reuse ~~for Indirect potable purposes~~.

(4) For purposes of this rule, discharge to waters contiguous to or tributary to Class I waters shall be defined as a discharge located less than or equal to four hours travel time from the point of discharge to arrival at the boundary of the Class I water. Travel time determinations shall be based upon the expected flow of the receiving water during the wettest month of the year with the discharge activated. The travel time shall be documented in the engineering report.

(5) Discharges of reclaimed water upstream of Class I waters shall be considered potable reuse only if the applicant provides an affirmative demonstration in the engineering report of the following:

a. There is a need to supplement the supply of water in the Class I water for public water supply purposes; and,

b. Discharge of reclaimed water will meet part or all of the identified need to supplement the water supply.

(6) For purposes of this rule, discharge to waters upstream of Class I waters shall be defined as a discharge located greater than 4 hours and less than or equal to 24 hours travel time from the point of discharge to arrival at the boundary of the Class I water. Travel time determinations shall be based upon the expected flow of the receiving water during the wettest month of the year with the discharge activated. The travel time shall be documented in the engineering report. Surface water discharges located greater than 24 hours travel time to Class I waters shall not be considered as potable reuse. Discharges located greater than 24 hours travel time to Class I waters are not subject to regulation under chapter 62-610, F.A.C.

(7)~~(4) The reclaimed water shall meet the full principal treatment and disinfection requirements contained in subsection 62-610.563(3)62-610.563(2), F.A.C. The reclaimed water shall meet the drinking water standards as described in paragraph 62-610.563(3)(b), F.A.C. The disinfection standards in sub-subparagraph 62-610.563(3)(b)1.a., F.A.C., shall govern. The fecal coliform limitations associated with high-level disinfection shall not apply.~~ If the ambient water quality in the receiving Class I water does not meet the drinking water standards, the Department shall establish alternate reclaimed water limits at the level in the receiving water. In no case shall the alternate limits exceed the Class I water standards. Alternative limits will be applied as single sample maxima. ~~Total organic carbon (TOC) shall not exceed 3.0 mg/L as the monthly average limitation. No single sample shall exceed 5.0 mg/L.~~

(8)~~(5)~~ Discharges to surface waters shall meet the requirements in paragraph 62-610.850(1)(b), F.A.C. ~~reclaimed water or effluent limits established by procedures contained in chapter 62-650, F.A.C., and the requirements of the antidegradation policy contained in rules 62-4.242 and 62-302.300, F.A.C.~~

(6) renumbered (9)

~~(10)(7)~~ The reclaimed water shall be sampled and analyzed for TOC and TOX in accord with subsection 62-610.568(4), F.A.C.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 1-9-96, Amended 8-8-99, X-x-xx.

62-610.555 Discharge to Other Surface Waters.

~~(1) Discharge to waters contiguous to or tributary to Class I waters.~~

~~(a) For purposes of this paragraph, discharge to waters contiguous to or tributary to Class I waters shall be defined as a discharge located less than or equal to four hours travel time from the point of discharge to arrival at the boundary of the Class I water. Travel time determinations shall be based upon the expected flow of the receiving water during the wettest month of the year with the discharge activated. The travel time shall be documented in the engineering report.~~

~~(b) The reclaimed water shall meet the principal treatment and disinfection requirements contained in subsection 62-610.563(2), F.A.C. The reclaimed water shall meet the drinking water standards as described in paragraph 62-610.563(3)(b), F.A.C. The disinfection standards in sub-subparagraph 62-610.563(3)(b)1.a., F.A.C., shall govern. The fecal coliform limitations associated with high-level disinfection shall not apply. If the ambient water quality in the receiving Class I water does not meet the drinking water standards, the Department shall establish alternate reclaimed water limits at the level in the receiving water. In no case shall the alternate limits exceed the Class I water standards. Alternate limits will be applied as single sample maxima. Total organic carbon (TOC) shall not exceed 3.0 mg/L as the monthly average limitation. No single sample shall exceed 5.0 mg/L.~~

~~(c) Discharge of reclaimed water or effluent to waters contiguous to or tributary to Class I waters shall be in accordance with~~

~~chapter 62-650, F.A.C. Discharges shall meet the requirements of the antidegradation policy contained in rules 62-4.242 and 62-302.300, F.A.C.~~

~~(d) Discharge of reclaimed water to waters contiguous to or tributary to Class I waters shall be considered as indirect potable reuse.~~

~~(e) Mixing zones shall not extend into Class I waters.~~

~~(f) The reclaimed water shall be sampled and analyzed for TOC in accord with subsection 62-610.568(4), F.A.C.~~

~~(2) Discharge upstream of Class I waters.~~

~~(a) For purposes of this paragraph, discharge to waters upstream of Class I waters shall be defined as a discharge located greater than 4 hours and less than or equal to 24 hours travel time from the point of discharge to arrival at the boundary of the Class I water. Travel time determinations shall be based upon the expected flow of the receiving water during the wettest month of the year with the discharge activated. The travel time shall be documented in the engineering report.~~

~~(b) The reclaimed water shall meet the principal treatment and disinfection requirements contained in subsection 62-610.563(2), F.A.C.~~

~~(c) Discharge of reclaimed water or effluent upstream of Class I waters shall be in accordance with chapter 62-650, F.A.C. Discharges shall meet the requirements of the antidegradation policy contained in rules 62-4.242 and 62-302.300, F.A.C.~~

~~(d) Discharge upstream of Class I waters shall be considered as indirect potable reuse only if the applicant provides an affirmative demonstration in the engineering report of the following:~~

~~1. There is a need to supplement the supply of water in the Class I water for public water supply purposes; and,~~

~~2. Discharge of reclaimed water will meet part or all of the identified need to supplement the water supply.~~

~~(3) Surface water discharges located greater than 24 hours travel time to Class I waters shall not be considered as indirect potable reuse. Discharges located greater than 24 hours travel time to Class I waters are not subject to regulation under chapter 62-610, F.A.C.~~

(1)~~(4)~~ Discharge to other surface waters which are directly connected to Class F-I, G-I, or G-II ground waters.

(a) through (b) No change.

(c) A wetlands or other surface water which may recharge an underlying aquifer through percolation downward through unconsolidated material shall not be considered as being directly connected to ground water for purposes of this paragraph. Discharges to wetlands are subject to the requirements of Chapter 62-611, F.A.C. Discharges to other surface waters are subject to all applicable discharge and permitting requirements contained in Department rules, Florida Statutes and Laws of Florida. ~~the requirements of Chapter 62-650~~, F.A.C. Discharge to a wetlands or other surface water which recharges ground water through vertical percolation also are subject to regulation under the ground water rules in Chapter~~s~~ 62-520~~ and 62-522~~, F.A.C. These surface water discharges are not subject to regulation under Chapter 62-610, F.A.C.

(d) through (e) No change.

(f) Discharges to surface waters shall meet the requirements in paragraph 62-610.850(1)(b), F.A.C.~~reclaimed water or effluent limits established by procedures contained in Chapter 62-650, F.A.C.~~ Discharge limits shall be established to ensure that ground water quality criteria established in Chapter 62-520, F.A.C., will be met at the point or points where the surface water enters the ground water system. ~~These surface water discharges shall meet the requirements of the antidegradation policy contained in Rules 62-4.242 and 62-302.300, F.A.C.~~

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 1-9-96, Amended 8-8-99, X-x-xx.

62-610.556 Land Application.

No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 1-9-96.

62-610.560 Ground Water Recharge by Injection.

(1) Injection of reclaimed water into Class F-I, G-I, or G-II ground water without planned development of or supplementation of the potable water supply shall be considered as ground water recharge.

(2) Reclaimed water injected into Class G-II ground water containing 3000 mg/L or less of TDS ~~total dissolved solids~~ or into Class G-I or F-I ground water shall meet the full treatment and disinfection requirements contained in subsection 62-610.563(3), F.A.C.

(3) Reclaimed water may be injected into Class G-II ground water containing greater than 3000 mg/L of TDS ~~total dissolved solids~~, if the following conditions are met:

are met:

(a) through (d) No change.

(4) through (6) No change.

Rulemaking Authority 403.051, 403.061, 403.087, 403.859 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088, 403.859 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.560, Amended 1-9-96, 8-8-99, X-x-xx.

62-610.562 Salinity Barrier Systems.

(1) through (3) No change.

(4) Salinity barrier systems involving injection to Class G-II ground water containing 1000 to 3000 mg/L of TDS~~total dissolved solids~~. Treatment requirements specified in subsection 62-610.560(3), F.A.C., shall apply to this case, if all of the following conditions are met:

(a) In the engineering report, the applicant provides an affirmative demonstration that the receiving ground water within 3,500~~1,000~~ feet of the salinity barrier injection well is not currently used as a source of public water supply and that the receiving ground water within this area is not reasonably expected to be used for public water supply in the future. Salinity barrier systems operating under a valid permit or permit renewal prior to [insert the effective date of this rule] shall retain the 1,000 feet horizontal setback.

(b) No change.

(c) A setback distance of 3,500~~1,000~~ feet shall be maintained from the injection well to potable water supply wells. Injection wells operating under a valid permit or permit renewal prior to [insert the effective date of this rule] shall retain the 1,000 feet horizontal setback.

(d) through (e) No change.

(5) through (6) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 1-9-96, Amended 8-8-99, X-x-xx.

62-610.563 Waste Treatment and Disinfection.

(1) Rule 62-610.563, F.A.C., defines two levels of treatment and disinfection: "principal treatment and disinfection," and "full treatment and disinfection." These two levels of treatment and disinfection, or specific components of these levels of treatment and disinfection, shall be applied to ground water recharge and ~~indirect~~ potable reuse projects as required by other rules within Part V of this chapter.

(2) Principal treatment and disinfection requirements.

(a) Preapplication waste treatment shall result in a reclaimed water that meets, at a minimum, secondary treatment and high-level disinfection, unless they are less stringent than Florida Statutes or other Department rules. The reclaimed water shall not contain more than 5.0 mg/L of TSS ~~total suspended solids~~ before application of the disinfectant.

(b) No change.

(c) Total nitrogen shall be limited to 10 mg/L as nitrogen as a maximum annual average limitation. Monthly average and single sample permit limitations shall be established using the multipliers in subparagraph 62-600.740(1)(b)2., F.A.C. For surface water discharges, WQBELs established under Chapter 62-650, F.A.C., Total Maximum Daily Loads (TMDLs) established under Chapter 62-304, F.A.C., or Springs Protection Act established under sections 373.801-373.811 F.S., may place additional limitations on nitrogen or other parameters.

(3) Full treatment and disinfection requirements.

(a) The principal treatment shall result in a reclaimed water that meets, at a minimum, advanced waste treatment requirements as defined in Section 403.086, F.S., and high-level disinfection ~~requirements described in subsection 62-610.563(2), F.A.C., shall apply,~~ unless they are less stringent than other Florida Statutes or Department rules ~~the requirements for full treatment and disinfection~~. Filtration requirements described in subparagraph 62-610.563(2)(b), F.A.C., shall apply.

(b) Drinking water standards.

1. Wastewater treatment facilities shall be designed and operated to meet the primary and secondary drinking water standards established in Rules 62-550.310 and 62-550.320, F.A.C.

a. The parameters listed as primary drinking water standards shall be applied as maximum single sample permit limits. The primary drinking water standard for asbestos shall not apply. The primary drinking water standards for ~~bacteriological parameters~~ total coliform shall be applied as the disinfection standard as described in Rule 62-550.830 ~~subsection 62-550.310(3)~~, F.A.C., except that public notification requirements shall not apply. The primary drinking water standard for sodium shall be applied as a maximum annual average permit limitation. The multipliers established in subparagraph 62-600.740(2)(b)~~62-600.740(1)(b)2.~~, F.A.C., shall be used to establish maximum monthly and single sample maximum permit limits for sodium.

b. Except for pH, the parameters listed as secondary drinking water standards shall be applied as maximum annual average permit limits. The multipliers established in subparagraph 62-600.740(2)(b)~~62-600.740(1)(b)2.~~, F.A.C., shall be used to establish maximum monthly and single sample maximum permit limits.

c. All pH observations in the reclaimed water shall fall within the pH range established in the secondary drinking water standards.

2. Potable reuse projects regulated by Part V of this chapter shall be designed and operated to meet the pathogen reduction requirements established in Rule 62-550.817(2)(c), F.A.C. A separate treatment process may be credited with no more than 6-log reduction, with at least two processes each being credited with no less than 1.0-log reduction. A single treatment process may receive log reduction credits for one or more pathogens.

(c) through (e) No change.

(f) The potable reuse system shall include a multi-barrier framework composed of source control and appropriate treatment technology that incorporates resiliency (i.e., ability to adjust to upsets), redundancy, and robustness (i.e., features that simultaneously address multiple constituents)~~treatment processes shall include processes which serve as multiple barriers~~ for control of ~~organic compounds~~ pollutants, which includes emerging constituents and pathogens.

(4) Treatment and disinfection requirements imposed by Rule 62-610.563, F.A.C., are additive to other effluent or reclaimed water limitations imposed by other rules (such as WQBEL limits designed to protect surface water quality, which are imposed by Chapter 62-650, F.A.C., TMDLs established under Chapter 62-304, F.A.C., or Springs criteria established under Sections 373.801-373.811, F.S.).

(5) All ground water recharge and ~~indirect~~ potable reuse projects regulated by Part V of this chapter shall implement pretreatment programs in accordance with Rule 62-610.330, F.A.C.

(6) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Formerly 17-610.563, Amended 1-9-96, 8-8-99, X-x-xx.

62-610.564 Pilot Testing Program.

(1) Pilot testing, which includes pilot-scale or full-scale in pilot mode, is required for all projects that are required to provide full treatment and disinfection, as described in subsection 62-610.563(3), F.A.C.

(2) A wastewater permit revision in accordance with Rule 62-620.325, F.A.C., shall be obtained before the pilot testing program commences. The permit revision shall, at a minimum, describe and establish the monitoring and reporting requirements for the pilot testing program.

(3)~~(2)~~ The pilot testing program shall be designed to demonstrate the ability of the selected ~~treatment processes~~ appropriate treatment technology to ~~meet~~ reliably and consistently achieve, at a minimum:

(a) The maximum contaminant levels (MCLs), maximum residual disinfectant levels (MRDLs) and treatment technique requirements established in Chapter 62-550, F.A.C., for public water systems (PWS);

(b) The pathogens requirements in paragraph 62-550.817(2)(c), F.A.C. consisting of at least two separate treatment processes for each pathogen (i.e., enteric virus, Giardia cyst, or Cryptosporidium oocyst). A separate treatment process may be credited with no more than 6.0-log reduction, with each being credited with no less than 1.0-log reduction. A single treatment process may receive log reduction credits for one or more pathogens.

(c) The requirements of Part V of Chapter 62-610, F.A.C., ~~and~~ to generate a supply of reclaimed water that can be used to evaluate the suitability of the reclaimed water for ground water recharge or ~~indirect~~ potable reuse, and to identify critical control points for improved process control and treatment reliability. Pilot testing shall be ~~done~~ performed using wastewater/reclaimed water.

(4)~~(3)~~ The pilot testing program shall accumulate a minimum 12 months of data for the final treatment design.

(5) The applicant shall provide a detailed plan of study for the Department's review and approval before initiating the pilot testing program. The plan of study shall address subparagraphs (1)-(4) above as well as the following:

(a) Each source of the industrial wastewater with Standard Industrial Code, and the projected rates and volumes from each source;

(b) The chemical, biological, and physical characteristics of the industrial wastewater from each source;

(c) Identify and establish treatment and disinfection processes;

(d) Identify proposed treatment processes to meet reclaimed water limitations;
(e) Identify and evaluate emerging constituents and surrogates in the waste stream and removal from waste streams;
(f) Identify and evaluate reducing target pathogens and surrogates from the treatment processes;
(g) Identify mechanism of pathogen removal by treatment processes;
(h) Evaluate how the treatment processes will achieve primary and secondary drinking water standards;
(i) Identify and evaluate challenges related to treatment processes;
(j) Identify operational monitoring parameters used to measure the performance throughout the treatment processes;
(k) Identify critical control points for improved process control and system reliability; and
(l) Evaluate and estimate cost of the operation and maintenance and conceptual site plan.
(6)~~(4)~~ The pilot testing program shall include the following:
(a) An affirmative demonstration that the treatment and disinfection processes proposed for inclusion in the wastewater treatment facility are capable of meeting the full treatment and disinfection requirements contained in subsection 62-610.563(3), F.A.C., and that the ~~reclaimed~~ resultant water will be of sufficient quality to protect public health and environmental quality.
(b)An evaluation of constituents in the wastewater that may be difficult to remove or are precursors to disinfection byproduct formation. In addition to parameters listed as primary and secondary drinking water standards. constituents evaluated may include those believed present that are listed in 40 CFR Part 122, Appendix D, and the most recent U.S. EPA Contaminant Candidate List.
(c)~~(b)~~ An evaluation of Enterovirus, Cryptosporidium, Giardia, and helminths heterotrophic plate count, bacteria, *Legionella*, and turbidity as referred to by subsection 62-550.817, F.A.C., in order to demonstrate that the wastewater treatment facilities are capable of producing a reclaimed water that is pathogen free (concentrations of pathogens are less than detection).
(d)~~(c)~~ Results of a biological testing procedure approved by the Department to determine the mutagenicity of the reclaimed water.
(e)~~(d)~~ Reclaimed water quality shall be compared to other sources of drinking water currently used in the area. The reclaimed water shall be of a quality that is the same or better than other sources of drinking water currently used in the area.
(7) Advanced treatment of water is the treatment of an oxidized wastewater, as defined in Rule 62-610.200, F.A.C., using a reverse osmosis and an oxidation treatment process that, at a minimum, meets the below.
(a) The applicant shall select for use a reverse osmosis membrane such that:
1. each membrane element used in the project has achieved a minimum rejection of sodium chloride of no less than 99.0 percent (99.0%) and an average (nominal) rejection of sodium chloride of no less than 99.2 percent (99.2%), as demonstrated through Method A of ASTM International's method D4194-03 (2014) using the following substitute test conditions:
a. tests are operated at a recovery of no less than 15 percent (15%);
b. sodium chloride rejection is based on three or more successive measurements, after flushing and following at least 30 minutes of operation having demonstrated that rejection has stabilized;
c. an influent pH no less than 6.5 and no greater than 8.0; and
d. an influent sodium chloride concentration of no greater than 2,000 mg/L, to be verified prior to the start of testing; and
2. the membrane produces a permeate with no more than five percent (5%) of the sample results having TOC concentrations greater than 0.25 mg/L, as verified through monitoring no less frequent than weekly.
(b) For the reverse osmosis treatment process, the applicant shall propose, for Department review and approval, on-going performance monitoring (e.g., conductivity or TOC) that indicates when the integrity of the process has been compromised. The proposal shall include at least one form of continuous monitoring, as well as the associated surrogate and/or operational parameter limits and alarm settings that indicate when the integrity has been compromised.
(c) To demonstrate a sufficient oxidation process has been designed for implementation, the applicant shall:
1. Perform an occurrence study on the reclaimed water to identify indicator compounds and select a total of at least nine indicator compounds, with at least one from each of the functional groups in subparagraphs a. through k. below. The applicant shall submit an occurrence study protocol, as well as the subsequent results and chosen indicator compounds, to the Department for review and approval.
a. Hydroxy Aromatic
b. Amino/Acylamino Aromatic
c. Nonaromatic with carbon double bonds
d. Deprotonated Amine
e. Alkoxy Polyaromatic
f. Alkoxy Aromatic
g. Alkyl Aromatic
h. Perfluoroalkyl with Sulfonate
i. Perfluoroalkyl with Carboxylate
j. Saturated Aliphatic
k. Nitro Aromatic

2. Utilize an oxidation process that achieves optimal removal of the indicator compounds selected in paragraph 1. such that removal is no less than;

a. 0.5-log (69 percent) for each indicator compound representing the functional groups in paragraphs 1.a. through 1.i., and

b. 0.3-log (50 percent) for each indicator compound representing the functional groups in paragraphs 1.j. and 1.k.

3. Establish at least one surrogate or operational parameter that reflects the removal of at least six of the nine indicator compounds selected pursuant to paragraph 1. such that;

a. at least one of the six indicator compounds represents at least one functional group in paragraphs 1.a. through 1.g.,

b. at least one of the six indicator compounds represents at least one functional group in paragraphs 1.h. or 1.i.,

c. at least one of the six indicator compounds represents at least one functional group in paragraphs 1.j. or 1.k,

d. at least one surrogate or operational parameter is capable of being monitored continuously, recorded, and have associated alarms, and

e. a surrogate or operational parameter, including the parameter in subsection (c), is identified that indicates when the process may no longer meet the criteria established in paragraph (c)2 above.

4. Conduct testing that includes confirmation of the findings of the occurrence study in paragraph 1 and provides evidence that the requirements of paragraphs (c)2 and 3 above can be met with a full-scale oxidation process. The testing shall include challenge or spiking tests conducted to determine the removal differential under normal operating conditions utilizing, at minimum, the nine indicator compounds identified in paragraph (c)1 above. The applicant shall submit a testing protocol, as well as the subsequent results, to the Department for review and approval.

(d) In lieu of demonstrating that a sufficient oxidation process has been designed for implementation pursuant to subsection (c), a project sponsor may conduct testing demonstrating that the oxidation process will provide no less than 0.5-log (69 percent) reduction of 1,4-dioxane.

1. The applicant shall submit a testing protocol, as well as the subsequent results, to the Department for review and approval. The testing shall include challenge or spiking tests, using 1,4-dioxane, to demonstrate the proposed oxidation process will achieve the minimum 0.5-log reduction under the proposed oxidation process's normal full-scale operating conditions.

2. The applicant shall establish surrogate and/or operational parameters that reflect whether the minimum 0.5-log 1,4-dioxane reduction design criteria is being met. At least one recorded and have associated alarms that indicate when the process is not operating as designed. Surrogate or operational parameter shall be capable of being monitored continuously.

(8) The applicant may use an alternative treatment requirement in subsection 62-610.564(6), F.A.C., if the applicant:

(a) demonstrates to the Department that the proposed alternative assures at least the same level of protection to the environment and public health; and

(b) receives written approval from the Department prior to implementation of the alternative.

(9) The applicant shall evaluate methods for treating, controlling or managing potential chemical peaks (rapid, short-lived increases in concentration) for chemical contaminants that have the potential to pass through advanced water treatment facilities.

(10)~~(5)~~ The Department shall approve reductions in the duration or scope of the pilot testing program if all of the following conditions are met:

(a) The applicant provides a detailed plan of study for the Department's review and approval before initiating the pilot testing program.

(b) The detailed plan of study shall be signed and sealed by a professional engineer or professional geologist in the registered in the State of Florida, as appropriate.

(c)~~(b)~~ The detailed plan of study provides an affirmative demonstration that a shorter duration study or reduced scope of study will be sufficient to demonstrate the ability of the proposed treatment processes to meet the reclaimed water limitations and to demonstrate the public health and environmental safety of the reclaimed water to be produced. Results of previous pilot testing programs and operating experience at similar water reclamation and reuse projects may be used as part of the demonstration.

(d) The pilot testing reports shall be submitted to the Department.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.564, Amended 1-9-96, 8-8-99, X-x-xx.

62-610.565 Pretreatment Program.

Rulemaking Authority 403.061, 403.087 FS. Law Implemented 403.021, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Formerly 17-610.565, Amended 1-9-96, Repealed 8-8-99.

62-610.567 Reliability and Operator Staffing.

(1) A minimum of Class I reliability, as described in paragraph 62-610.300(1)(a), F.A.C., shall be provided at all domestic wastewater treatment facilities providing reclaimed water for ground water recharge and ~~indirect~~ potable reuse ~~systems~~projects, which

are regulated by ~~Part V~~ this of chapter.

(a) through (b) No change.

(2) through (5) No change.

(6) Prior to placing a potable reuse system into service, each WWF and each PWS participating in the potable reuse system shall submit a joint operations plan to the Department for review and approval. At a minimum, the joint operations plan shall address the elements in paragraphs (a) and (b) below. The joint plan shall be signed by each responsible authority or responsibility to operate the potable reuse system, comply with the requirements of Chapters 62-610, 62-550 and 62-555, F.A.C., and ensure that each WWF and PWS implements the actions designated in the joint plan. In the event of any subsequent change in applicable authority, responsibility, operation, or ownership of a WWF or PWS, including the addition of any WWF or PWS participant in the DPR system, a revised joint plan shall be submitted to the Department for review and approval, and the revised joint plan shall be signed by all participants. A revised joint plan shall also be submitted to reflect any change in the information provided pursuant to paragraphs (a) and (b) below, and to address any Department concerns. A revised joint plan required by this section shall be submitted not less than sixty (60) days prior to the effective date of any change required by this section to be addressed in a revised joint plan.

(a) Corrective actions to be taken in the event that a delivery of treated reclaimed wastewater from the potable reuse system to a PWS distribution system fails to meet the water quality requirements of Chapters 62-610, 62-550 and 62-555, F.A.C.

(b) The procedures a WWF will implement for notifying a PWS, and the Department of:

1. operational changes that may adversely affect the quality of the reclaimed wastewater to be delivered to a PWS, and

2. the events and corresponding corrective actions required to be identified in paragraph (a) above.

(7) Prior to construction and operation of a full-scale potable reuse system, the WWF and PWS participants in the potable reuse system shall demonstrate to the Department that they possess adequate financial, managerial, and technical capacity to assure compliance with Chapters 62-610 and 62-555, F.A.C.

(8) Prior to placing a full-scale potable reuse system into operation, the WWF and PWS participants in the potable reuse system shall demonstrate to the Department that all treatment processes are installed and achieve, as designed, the intended functions and can be operated by the WWF and PWS operators. A protocol describing the actions to be taken to meet this subsection shall be included in the engineering report.

(9) During full-scale operation of the oxidation process designed pursuant to subsection 62-610.564(6)(c) or (d), F.A.C., the applicant shall continuously monitor the surrogate and operational parameters established pursuant to subsection 62-610.564(6)(c)3.c. or (d)2., F.A.C., as applicable. The applicant shall implement, in full-scale operation, the oxidation process as designed pursuant to subsection 62-610.564(6)(c) or (d), F.A.C.

(10) Within 60 days after completing the initial 12-months of monitoring pursuant to Rule 62-610. (9), F.A.C., the applicant shall submit a report to the Department that includes:

(a) the results of the monitoring performed in subsection Rule 62-610.567(9), F.A.C.;

(b) the removal differential of the indicator compounds;

(c) a description of the efficacy of the surrogate and/or operational parameters to reflect the removal differential of the indicator compounds; and

(d) a description of actions taken, or to be taken, if the indicator compound removal did not meet the associated design criteria in Rule 62-610.564(6)(c) or (d), F.A.C., the continuous surrogate and/or operational parameter monitoring in subsection 62-610.564(6)(c)3.c. or (d)2., F.A.C., fails to correspond to the differential indicator compound removal, or the surrogate and/or operational parameter established in subsection 62-610.564(6)(c)3.d. or (d)2, F.A.C., is not met.

(11) Within 60 days after completing the initial 12 months of operation of the reverse osmosis process, a the applicant shall submit a report to the Department describing the effectiveness of the treatment, process failures, and actions taken in the event the on-going monitoring in Rule 62-610.564(6)(b), F.A.C., indicated that process integrity was compromised.

(12) Each quarter, the applicant shall calculate what percent of results of the quarter's monitoring, conducted pursuant to subsection 62-610.564(6)(b) and Rule 62-610.567(9), F.A.C., did not meet the surrogate and operational parameter limits established to assure proper on-going performance of the reverse osmosis and oxidation processes. If the percent is greater than ten, within 45 days after the end of the quarter the applicant shall:

(a) submit a report to the Department describing the corrective actions planned or taken to reduce the percent to ten percent (10%) or less; and

(b) consult with the Department and, if required, comply with an alternative monitoring plan approved by the Department.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.567, Amended 1-9-96, 8-8-99, X-x-xx.

62-610.568 Monitoring and Operating Protocol.

(1) through (6) No change.

(7) In accordance with Rule 62-610.320, F.A.C., the permittee shall develop, and the Department shall approve, an operating protocol designed to ensure that the reclaimed water limitations will be met before the reclaimed water is released to the reuse system. For treatment facilities required to provide full treatment and disinfection, the operating protocol shall include monitoring and control of key treatment processes for removal of organic compounds required by subsection 62-610.563(3), F.A.C., and shall incorporate the fail safe "lock-out" provisions of subsection 62-610.567(2), F.A.C. In the engineering report, the applicant shall describe and justify the operational controls on the key treatment processes for removal of organic compounds. Reclaimed water produced at the treatment facility that fails to meet the criteria established in the operating protocol shall not be released to the system storage or reuse system. Such substandard reclaimed water (~~reject water~~ off-spec reclaimed water) shall be either stored for subsequent additional treatment or shall be discharged to another permitted reuse system requiring lower levels of preapplication treatment or to a permitted effluent disposal system. The operating protocol shall be reviewed and updated by the permittee as required by Rule 62-610.320, F.A.C. The permittee shall submit the current operating protocol to the Department for review with any application to renew or modify the permit.

(8) through (11) No change.

Rulemaking Authority 403.051, 403.061, 403.064, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.064, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.568, Amended 1-9-96, 8-8-99, 11-19-07, X-x-xx.

62-610.571 Setback Distances.

(1) through (2) No change.

(3) Where zones of discharge are allowed by this part and by Rule 62-520.465, F.A.C., the zone of discharge shall not extend closer than 500 feet to a potable water supply well.

(4) A 3,500~~1,000~~ foot setback distance from the injection well to potable water supply wells shall be required for injection wells used for salinity barrier control, which are subject to the requirements of subsection 62-610.562(4), F.A.C.

(5) through (6) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.571, Amended 1-9-96, 8-8-99, X-x-xx.

62-610.573 Storage Requirements.

(1) through (2) No change.

(2) If system storage is provided, the requirements for system storage ponds shall be as contained in Rule 62-610.464, F.A.C.

(3) A separate, off-line system shall be provided for storage of ~~reject water~~ off-spec reclaimed water~~.~~ ~~Reject water~~ Off-spec reclaimed water storage shall have sufficient capacity to ensure retention of reclaimed water of unacceptable quality. At a minimum, for treatment facilities required to provide full treatment and disinfection, this capacity shall be the volume equal to three days flow at the average daily permitted flow of the treatment plant, or the average daily permitted flow of the reuse system, whichever is less. If full treatment and disinfection is not required, the capacity requirement shall be reduced to one day's flow. Provisions for recirculating this ~~reject water~~ off-spec reclaimed water to other parts of the treatment plant for further treatment shall be incorporated into the design. ~~Reject~~ Off-spec reclaimed water storage shall not be required if another ~~permitted~~ reuse system requiring lower levels of preapplication treatment or effluent disposal system is permitted ~~capable of discharging the reject water~~ off-spec reclaimed water ~~in accordance with the requirements of chapter 62-620, F.A.C.~~ ~~Reject storage~~ Off-spec reclaimed ponds shall be lined or sealed to prevent measurable seepage, as described in Rule 62-610.414, F.A.C.

(4) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.573, Amended 1-9-96, 8-8-99, X-x-xx.

62-610.574 Access Control, Advisory Signs, and Public Notification.

(1) through (2) No change.

(3) Permittees developing ground water recharge or ~~indirect~~ potable reuse projects that will be regulated under Part V this of chapter shall implement public education and public participation programs during the planning stages of the reuse program. The public education and public participation programs shall be described in detail in the engineering report.

(4) Applicants shall provide written notice to affected public water supply utilities within the area to be affected by the proposed project. For projects involving discharges to Class I waters, affected utilities shall include public water supply utilities drawing source water from the Class I water. For aquifer storage and recovery projects and injection projects regulated by rules 62-610.466, 62-610.560, or 62-610.562, F.A.C., affected utilities shall include public water supply utilities withdrawing ground water for public water supply within two miles of the proposed injection well, or within the area of review established in accordance with rule 62-528.300(4), F.A.C., whichever is larger. For projects involving discharges to surface waters that are directly connected to ground water, which serve as ground water recharge, as described in subsection 62-610.555(1) ~~62-610.555(4)~~, F.A.C., affected utilities shall include public water supply utilities withdrawing ground water for public water supply within two miles of the point of discharge and within two miles of the point or points where the surface water enters the ground water. Written notice also shall be provided to the appropriate county health department. These written notifications shall be accomplished before the submittal of the initial permit application. Documentation of this notification procedure shall be included in the engineering report. These notices to affected utilities and to the county health department are required for the following types of projects:

(a) No change.

(b) Discharge to waters contiguous to or tributary to Class I surface waters, as described in subsection 62-610.554(1), ~~62-610.555(1),~~ F.A.C.

(c) Discharge to waters upstream of Class I surface waters, as described in subsection 62-610.554(1), F.A.C.

(d)~~(c)~~ Injection projects used for ground water recharge or salinity barrier control, as described in rule 62-610.560 or 62-610.562, F.A.C.

(e)~~(d)~~ Discharges to surface waters that are directly connected to ground water, which serve as ground water recharge, as described in subsection 62-610.555(4), F.A.C.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Formerly 17-610.574, Amended 1-9-96, 8-8-99, X-x-xx.

62-610.575 Hydraulic Loading Rates.

(1) through (2) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Formerly 17-610.575, Amended 1-9-96.

PART VI OVERLAND FLOW SYSTEMS

62-610.600 Description of System.

No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Formerly 17-610.600.

62-610.610 Waste Treatment and Disinfection.

(1) through (2) No change.

Rulemaking Authority 403.061, 403.087 FS. Law Implemented 403.021, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.610, Amended 1-9-96.

62-610.613 Monitoring of Effluent and Ground Water.

(1) through (3) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Formerly 17-610.613, Amended 1-9-96.

62-610.614 Storage Requirements.

(1) through (4) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Formerly 17-610.614, Amended 1-9-96.

62-610.615 Storage Pond Design and Operation.

Rulemaking Authority 403.061, 403.087 FS. Law Implemented 403.021, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Formerly 17-610.615, Repealed 1-9-96.

62-610.617 Surface Runoff Control.

No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Formerly 17-610.617.

62-610.618 Access Control and Advisory Signs.

No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.618, Amended 1-9-96.

62-610.621 Setback Distances.

(1) through (6) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.621, Amended 1-9-96, 8-8-99.

62-610.623 Hydraulic Loading Rates and Cycles.

Rulemaking Authority 403.061, 403.087 FS. Law Implemented 403.021, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Formerly 17-610.623, Repealed 1-9-96.

62-610.624 Monitoring of Ground Water.

Rulemaking Authority 403.061, 403.087 FS. Law Implemented 403.021, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Formerly 17-610.624, Repealed 1-9-96.

62-610.625 Design Influences.

(1) through (4) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Formerly 17-610.625, Amended 1-9-96.

PART VII INDUSTRIAL USES OF RECLAIMED WATER

62-610.650 Description of System.

(1) through (4) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.650, Amended 1-9-96.

62-610.651 Effective Date.

Rulemaking Authority 403.061, 403.087 FS. Law Implemented 403.021, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 1-1-96, Repealed 8-8-99.

62-610.652 Waste Treatment, Disinfection, and Monitoring.

(1) through (6) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 1-9-96, Amended 8-8-99.

62-610.654 Monitoring.

Rulemaking Authority 403.061, 403.087 FS. Law Implemented 403.021, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 1-9-96, Repealed 8-8-99.

62-610.656 Storage Requirements.

(1) through (3) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 1-9-96, Amended 8-8-99.

62-610.658 Access Control and Advisory Signs.

(1) through (2) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 1-9-96.

62-610.660 Cross-Connection Control and Protection of the Reclaimed Water Supply.

(1) through (3) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Amended 4-2-90, Formerly 17-610.660, Amended 1-9-96.

62-610.662 Setback Distances.

(1) through (5) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 1-9-96, Amended 8-8-99.

62-610.668 Cooling Water Applications.

(1) through (2) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 1-9-96, Amended 8-8-99.

62-610.669 Use of Reclaimed Water at Wastewater Treatment Plants.

(1) through (6) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 1-9-96.

62-610.670 Industrial Discharge Limitations.

(1) through (2) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-4-89, Formerly 17-610.670, Amended 1-9-96.

PART VIII PERMITTING

62-610.800 Permitting Requirements.

(1) through (13) No change.

Rulemaking Authority 403.051, 403.061, 403.064, 403.087, 403.0881 FS. Law Implemented 403.021, 403.051, 403.061, 403.064, 403.087, 403.088, 403.0881 FS. History–New 4-2-90, Formerly 17-610.800, Amended 1-9-96, 8-8-99, 11-19-07.

62-610.810 Classification of Projects as "Reuse" or "Disposal."

(1) through (5) No change.

Rulemaking Authority 403.051, 403.061, 403.087, 403.0881 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088, 403.0881 FS. History–New 4-2-90, Formerly 17-610.810, Amended 1-9-96, 8-8-99.

62-610.820 Reuse Feasibility Studies.

(1) through (9) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.064, 403.085, 403.086, 403.087, 403.0877, 403.088 FS. History–New 4-2-90, Formerly 17-610.820, Amended 1-9-96.

62-610.830 Storage Lakes and Ponds.

(1) through (6) No change.

Rulemaking Authority 403.051, 403.061, 403.087, 403.0881 FS. Law Implemented 403.021, 403.051, 403.061, 403.087, 403.088, 403.0881 FS. History–New 4-2-90, Formerly 17-610.830, Amended 1-9-96, 8-8-99.

62-610.840 Placing a Facility in Operation.

Rulemaking Authority 403.061, 403.087, 403.0881 FS. Law Implemented 403.021, 403.061, 403.087, 403.088, 403.0881 FS. History–New 4-2-90, Formerly 17-610.840, Repealed 1-9-96.

62-610.850 Protection of Surface Water and Ground Water Quality.

(1) through (2) No change.

Rulemaking Authority 403.051, 403.061, 403.087, 403.0881 FS. Law Implemented 403.021, 403.051, 403.061, 403.087, 403.088, 403.0881 FS. History–New 4-2-90, Formerly 17-610.850, Amended 1-9-96.

62-610.860 Limited Wet Weather Discharge.

(1) through (15) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 4-2-90, Formerly 17-610.860, Amended 1-9-96.

62-610.865 Blending of Demineralization Concentrate with Reclaimed Water.

(1) through (13) No change.

Rulemaking Authority 403.051, 403.061, 403.087 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088 FS. History–New 8-8-99.

62-610.870 Reporting and Enforcement.

(1) through (3) No change.

Rulemaking Authority 403.051, 403.061, 403.064, 403.087, 403.0881 FS. Law Implemented 403.021, 403.051, 403.061, 403.062, 403.064, 403.085, 403.086, 403.087, 403.088, 403.0881 FS. History–New 4-2-90, Formerly 17-610.870, Amended 1-9-96, 8-8-99, 11-19-07.

62-610.880 Abnormal Events.

Rulemaking Authority 403.061, 403.087 FS. Law Implemented 403.021, 403.061, 403.062, 403.087, 403.088, 403.182 FS. History–New 4-2-90, Formerly 17-610.880, Repealed 1-9-96.

62-610.890 General Permit for Adding New Major Users to a Part III Reuse System.

(1) through (2) No change.

Rulemaking Authority 403.814(1) FS. Law Implemented 403.061, 403.087, 403.088, 403.814 FS. History–New 4-2-90, Formerly 17-610.890, Amended 1-9-96, 8-8-99.

PART IX FORMS AND INSTRUCTIONS

62-610.900 General.

Rulemaking Authority 120.53(1), 403.061 FS. Law Implemented 120.53(1), 120.55, 403.061 FS. History–New 4-2-90, Formerly 17-610.900, Repealed 1-9-96.

62-610.910 Forms and Instructions.

Rulemaking Authority 120.53(1), 403.061 FS. Law Implemented 120.53(1), 120.55, 403.061 FS. History–New 4-2-90, Formerly 17-610.910, Repealed 1-9-96.