Potable Reuse Chapter 62-610 F.A.C. and Framework for the Implementation of Potable Reuse in Florida Crosswalk

Regulatory Changes the Potable Reuse Commission Recommends to Promote Potable Reuse While Protecting Public Health and the Environment

Framework Section 10.1 Proposed Structure for Potable Reuse Regulations

Framework Recommendation Table 1.

Implementation Recommendation	Framework Page	DEP Chapters/Rules Affected	Corresponding Rule Language/Reasoning	Summary of Rule Language/Reasoning
To implement this recommendation, the Florida Legislature would enact legislation directing and authorizing FDEP to adopt new rules for potable reuse patterned after the above recommendation.	104	62-610 62-550 62-555	Upon review of Chapter 62-610 F.A.C. and the existing indirect potable reuse (IPR), groundwater and aquifer storage language, the Department felt the wastewater rule was a more appropriate home for IPR language, and regulation of the water until it is injected into the aquifer, and out of the treatment process associated with the wastewater treatment plant, and no longer considered wastewater or reuse water. Once the water is piped back up from the aquifer is will fall under the purview of drinking water rule. Chapters 62-550 and 62-555 F.A.C. shall include previsions which account for direct potable reuse (DPR) to be considered as a source of raw water, akin in requirements to that of surface water sources. IPR shall remained covered under the existing regulations	Upon review of Chapter 62-610 F.A.C. and the existing indirect potable reuse (IPR), groundwater and aquifer storage language, the Department felt the wastewater rule was a more appropriate home for IPR language, and regulation of the water until it is injected into the aquifer, and out of the treatment process associated with the wastewater treatment plant, and no longer considered wastewater or reuse water. Once the water is piped back up from the aquifer is will fall under the purview of drinking water rule. Chapters 62-550 and 62-555 F.A.C. shall include previsions which account for direct potable reuse (DPR) to be considered as a source of raw water, akin in requirements to that of surface water sources. IPR shall remained covered under the existing regulations

			of raw groundwater sources already present in the chapters.	of raw groundwater sources already present in the chapters.

Framework Section 10.2 Subsections 4.2 & 7.2 Revise Existing Florida Drinking Water Regulations to Address Pathogens in Reclaimed Water Used for Potable Reuse

Framework Recommendation Table 2.

Implementation Recommendation	Framework Page	DEP Chapters/Rules Affected	Corresponding Rule Language/Reasoning	Summary of Rule Language/Reasoning
To implement this recommendation, the Florida Legislature would enact legislation directing and authorizing FDEP to adopt new rules for pathogen treatment in potable reuse patterned after the recommendation put forth by the Potable Reuse Commission in section 10.2 of the Framework.	104 (25-28, 52-53)	62-610.563(3)(b)2	62-610.563(3)(b)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-log reduction. A single treatment process may receive log reduction credits for one or more pathogens.	In accordance with the Framework and the methodology proposed by California, IPR and DPR systems will be required to meet a 12 (viruses), 10, (cryptosporidium), 10 (Giardia) log removal level for pathogens. This can be spread across the wastewater treatment and advanced waste treatment, and drinking water treatment levels but it must meet the 12, 10, 10 before it enters the distribution system.
To implement this recommendation, the Florida Legislature would enact legislation directing and authorizing FDEP to adopt new rules for pathogen treatment in potable reuse patterned after the recommendation put forth by the Potable Reuse Commission in section 10.2 of the Framework.	104 (25-28, 52-53)	62-550.817(2)	(c) Treatment Techniques for Public Water Systems using Direct Potable Reuse. 1. The treatment technique requirements consist of installing and properly operating filtration and disinfection water treatment processes that reliably achieve: a. At least a 10-log removal or inactivation of Giardia lamblia in combination of the advanced	IPR and DPR systems will be required to meet a 12 (viruses), 10, (cryptosporidium), 10 (Giardia) log removal level for pathogens. This can be spread across the wastewater treatment and advanced waste treatment, and drinking water treatment levels but it must meet the 12, 10, 10 before it enters the distribution system.

			wastewater treatment facility and the drinking water facility with at least 50% removal or inactivation achieved between a point where the raw water is not subject to recontamination at a point downstream, before or at taps providing water for human consumption; and b. At least a 10-log removal or inactivation of Cryptosporidium oocysts in combination of the advanced wastewater treatment facility and the drinking water facility with at least 50% removal or inactivation achieved between a point where the raw water is not subject to recontamination at a point downstream, before or at taps providing water for human consumption; and c. At least a 12-log removal or inactivation of viruses in combination of the advanced wastewater treatment facility and the drinking water facility with at least 50% removal or inactivation achieved between a point where the raw water is not subject to recontamination, exposed during treatment to the open atmosphere and a point downstream, before or at taps providing water for human consumption. For the purposes of subsection 62-550.817(2), F.A.C., aerators and other facilities that are protected against contamination from birds, insects, wind borne debris, rainfall, and drainage are not considered to be exposing water to the	

			open atmosphere and possible viral contamination. 2. Log-removal credit through filtration. The Department shall determine if a system is well-operated based on monthly operation report records, sanitary survey and compliance inspection results, CPE results, and any other relevant information. 3. Systems with significant deficiencies related to the treatment process as noted in one or more of the reports listed in subparagraph 62-550.817(2)(b)2., F.A.C., shall not receive the log-removal credits shown in subparagraph 62-550.817(2)b.2., F.A.C., without Department approval. The Department will notify such systems in writing of any Department-assigned log-removal credits which are lower than the credits shown in subparagraph 62-550.817(2)(b)2., F.A.C. The Department will assign reductions in log-removal credits according to the criteria in the "Compliance Manual for Subpart H systems", June 2004 edition, incorporated herein by reference. 4. Systems shall be deemed to meet the requirements of subparagraph 62-550.817(2)(b)4., F.A.C., by a. Determining CTcalc, b. Estimating log-inactivation for the CTcalc for Giardia lamblia and viruses, and c. Showing that 95% of the daily measurements taken each month meet or exceed the minimum log-inactivation disinfection requirements. Estimates of	

			log-inactivation levels shall be rounded to two significant figures. d. A violation of the requirement set forth in III above is a treatment technique violation. e. If, in any daily measurement, log-inactivation levels are insufficient to meet the requirements the operator shall take immediate steps to increase disinfection levels.	
To implement this recommendation, the Florida Legislature would enact legislation directing and authorizing FDEP to adopt new rules for pathogen treatment in potable reuse patterned after the recommendation put forth by the Potable Reuse Commission in section 10.2 of the Framework.	104 (25-28, 52-53)	62-610.564(6)(a)2	(6) The pilot testing program shall include the following: 2. 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).	All pilot testing programs for potable reuse projects must do an evaluation of the reclaimed water to demonstrate the treatments can produce water that is pathogen free and therefore safe to use for potable reuse.
To implement this recommendation, the Florida Legislature would enact legislation directing and authorizing FDEP to adopt new rules for pathogen treatment in potable reuse patterned after the recommendation put forth by the Potable Reuse Commission in section 10.2 of the Framework.	104 (25-28, 52-53)	62-610.567(8)	(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.	Once the system is past the pilot testing phase and ready to implement their full-scale system the permittee will need to demonstrate that all treatment processes are installed and achieve, as designed, the intended treatment levels and can be operated by their staff.
To implement this recommendation, the Florida Legislature would enact legislation directing and authorizing	104 (25-28, 52-53)	62-555.320(12)	Suppliers of water using reclaimed water that has undergone advanced wastewater treatment as part of a	Reclaimed water used as source water for direct potable reuse will have to undergo advanced wastewater

FDEP to adopt new rules for pathogen treatment in potable reuse patterned after the recommendation put forth by the Potable Reuse Commission in section 10.2 of the Framework.			direct potable reuse program shall provide treatment that reliably achieves at least 128-log (99.9999999999 percent) inactivation or removal of viruses, 105.5-log (99.999999995 percent) inactivation or removal of Cryptosporidium, and 106-log (99.99999999 percent) inactivation or removal of Giardia lamblia before or at the first customer at all flow rates. For the purpose of meeting the requirements of this paragraph, Log removal credits for every point of barrier from both the advanced wastewater treatment facility (AWTF) as well as the drinking water treatment facility may be included in calculation of the total Log removal credits required for each of viruses, Cryptosporidium, and Giardia lamblia.	treatment to achieve inactivation or removal of viruses, cryptosporidium, and giardia before it reaches the distribution system. Log removal credits will be given at multiple barriers both in the advanced wastewater treatment facility as well as the drinking water treatment facility.

Framework Section 10.3 Addressing Emerging Constituents with Appropriate Treatment Technology

Framework Recommendation Table 3.

Implementation Recommendation	Framework Page	DEP Chapters/Rules Affected	Corresponding Rule Language/Reasoning	Summary of Rule Language/Reasoning
To implement this recommendation, the Florida Legislature would need to enact legislation providing authority and direction to FDEP to revise existing rules or adopt new rules specifying the process described above for addressing emerging constituents.	105 (28, 54)	62-610.563(b)(1)	(b) Drinking water standards. 62-610.563(b)(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.	Under 62-610 F.A.C. All reclaimed water being used for potable reuse must meet drinking water standards before leaving the wastewater treatment plant.

Continued from the section above: recommendations for addressing emerging constituents.	105 (28, 54)	62-610.564(5)	(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 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 pathogen and surrogate 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;	All proposed potable reuse facilities will need to submit an initial plan of study for approval, after which they will need to commit to a pilot study which will consist of a pilot level test program, as well as a full-scale test program, both of which will need to run for at least 12 months with their final design. Facilities will need to meet primary and secondary drinking water standards, as well as treat for pathogens (12, 10, 10 log removal levels) as well as employ advanced treatment techniques to treat for emerging constituents (ECs) in their source water after identifying and evaluating the ECs and surrogate compounds found in their source water. The applicant will also have to evaluate how the system will treat the water to meet drinking water standards, identify any challenges they face in this treatment process, identify monitoring parameters to measure the performance of the system, identify critical control points to ensure the systems reliability and performance, and evaluate the cost of the operation.

			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.	
Continued from the section above: recommendations for addressing emerging constituents.	105 (28, 54)	62-610.563(2)(f)	62-610.563(2)(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) of pollutants, which includes emerging constituents and pathogens.	The potable reuse system shall use a multi-barrier approach to treating water (utilizing multiple treatment methods, including but not limited to reverse osmosis, and oxidation, or other equivalent treatment techniques).
Continued from the section above: recommendations for addressing emerging constituents.	105 (28, 54)	62-610.330(2)	(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 potable water distribution system), including privately-owned portions of the system.	All systems with a potable reuse must also adopt an enhanced pretreatment program with enhanced source control.
Continued from the section above: recommendations for addressing emerging constituents.	105 (28, 54)	62-610.563(2)(b)2	2. Potable reuse projects regulated by Part V of this chapter shall be designed and operated to meet the pathogen	All potable reuse projects will be designed to meet the pathogen requirements set forth by the drinking

			reduction requirements established in 62-550.817(2), 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.	water rule (62-550 F.A.C.) (12, 10, 10 log removal). The system will need to employ a multibarrier approach and one treatment (barrier) will only be allowed to credit up to 6-log reduction credits.
Continued from the section above: recommendations for addressing emerging constituents.	105 (28, 54)	62-610.564(3)	(3) The pilot testing program shall be designed to demonstrate the ability of the selected appropriate treatment technology to 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-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	The pilot test must be performed used wastewater/reclaimed water and ensure the treatment technology is reliable and consistent in reaching the required standards for potable water, as well as the established pathogen reduction levels (with at least two separate treatment processes for pathogens) suitable for potable water and ground water recharge. It also must identify critical control points and that the treatment is reliable.

			recharge or potable reuse, and to identify critical control points for improved process control and treatment reliability. Pilot testing shall be performed using wastewater/reclaimed water.	
Continued from the section above: recommendations for addressing emerging constituents.	105 (28, 54)	62-550.521(2)	(2) Systems supplying reclaimed water that has undergone advanced wastewater treatment as part of a potable reuse program shall maintain an emerging constituent monitoring protocol pursuant to Rule 62-610.564, F.A.C.	Drinking Water Rule (62-550 F.A.C.) states potable reuse systems must maintain a monitoring protocol for emerging constituents as stated in the Reuse Rule (62-610 F.A.C.).
Continued from the section above: recommendations for addressing emerging constituents.	105 (28, 54)	62-610.567(8)	(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.	Once the system is past the pilot testing phase and ready to implement their full-scale system the permittee will need to demonstrate that all treatment processes are installed and achieve, as designed, the intended treatment levels and can be operated by their staff.

Framework Section 10.3.1 Subsections 4.3 & 7.3 Appropriate Treatment Technology (ATT) to Remove Emerging Constituents

Framework Recommendation Table 4.

Implementation Recommendation	Framework Page	DEP Chapters/Rules Affected	Corresponding Rule Language/Reasoning	Summary of Rule Language/Reasoning

Continued from the section above: recommendations for addressing emerging constituents.	105 (28, 54)	62-610.564(8)	(8) 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.	For pilot studies, the potable reuse system shall use a multi-barrier approach to treating water for emerging constituents (utilizing multiple treatment methods, including but not limited to reverse osmosis (RO), and oxidation or other equivalent treatment techniques). The applicant/system shall have to propose/submit for approval a plan that includes (but is not limited to) on-going performance monitoring and at least one form of continuous monitoring for the proposed RO system. RO and oxidation treatment systems must meet the certain criteria laid out in Chapter 62-610 F.A.C and must have ongoing monitoring protocols for the system which would indicate if the integrity of the treatment system has been compromised. This will include testing for certain surrogate compounds and operational parameter limits which would reflect the presence of emerging contaminants in the system.

			(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.	
Continued from the section above: recommendations for addressing emerging constituents.	105 (28, 54)	62-610.564(9)	(9) 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.	The system/applicant may propose alternative treatment techniques to RO and UV as long as they demonstrate the same level of treatment and protection of the environment and public health. The will have to submit the alternative treatment proposal to and receive written approval from the Department.
Continued from the section above: recommendations for addressing emerging constituents.	105 (28, 54)	62-610.567	(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	Once the system is past the pilot testing phase and ready to implement their full-scale system the permittee will need to demonstrate that all treatment processes are installed and achieve, as designed, the intended treatment levels. They will have to continuously monitor for surrogate compounds and the operational parameters. They will also need to submit a report to the Department detailing the results of the monitoring, information about the indicator compounds they are testing for, a description of the efficacy of 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	surrogate compounds, and a description of what corrective actions they took if the required levels of treatment were not met.

			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	
None	105 (28, 54)	62-550.521(2)	Same addition as for Framework 10.3 (reference to 62-610.564)	Please see the above statements referencing 62-610.564

Framework Section 10.3.2 Monitoring as Part of ATT Proposal

Framework Recommendation Table 5.

Implementation Recommendation	Framework Page	DEP Chapters/Rules Affected	Corresponding Rule Language/Reasoning	Summary of Rule Language/Reasoning
None	106	62-550.521(2)	Same addition as for Framework 10.3 (reference to 62-610.564)	Please see the above statements referencing 62-610.564

Framework Section 10.3.3 Approaches for Employing ATT

- **Approach 1** (DPR)- For this scenario, the PRC recommends including reclaimed water as part of a DWTF's source water characterization and, if that source water characterization indicates the presence of emerging constituents at levels of public health interest, then employing ATT to address those emerging constituents.

  The PRC recommends the source water characterization consider the nature and level of emerging constituents in the reclaimed water supply. The source water characterization would also consider whether and the extent to which ground or surface water is mixed into the direct potable reuse

supply reducing the concentration of these emerging constituents. Based on these considerations and others, the source water characterization would determine the types of treatment needed to address emerging constituents and the corresponding surrogate monitoring, for the emerging constituents. This level of treatment and surrogate monitoring for the emerging constituents would then direct the extent and nature of ATT(s) to employ. (It should be noted that pathogen reduction goals will also play a role in determining the nature and extent of ATTs to employ.)

Framework Recommendation Table 6.

Implementation Recommendation	Framework Page	DEP Chapters/Rules Affected	Corresponding Rule Language/Reasoning	Summary of Rule Language/Reasoning
To implement this recommendation, the Florida Legislature would need to enact legislation providing authority and direction to FDEP to revise existing rules or adopt new rules specifying the process described above for addressing emerging constituents.	106-107	None	Approach 1: DPR Any direct potable reuse programs which supplements drinking water supply through the use of advanced treated reclaimed water shall meet all the requirements of Part V of Chapter 62-610, F.A.C. Requirements for treatment of advanced waste treated water to be used as a source or supplementation of a potable water system are specified in Rule 62-550.817, F.A.C.62-610.550, F.A.C. For purposes of Part V of this chapter (62-550 F.A.C.), subpart H systems also include systems using a combination of surface water (or ground water under the direct influence of surface water), and ground water not under the direct influence of surface water and Direct Potable Reuse systems. Systems supplying reclaimed water that has undergone advanced wastewater treatment as part of a potable reuse program shall maintain an emerging constituent monitoring protocol pursuant to Rule 62-610.564, F.A.C.	Approach 1: DPR Any direct potable reuse programs which supplements drinking water supply through the use of advanced treated reclaimed water shall meet all the requirements of Part V of Chapter 62-610, F.A.C. Requirements for treatment of advanced waste treated water to be used as a source or supplementation of a potable water system are specified in Rule 62-550.817, F.A.C.62-610.550, F.A.C. For purposes of Part V of this chapter (62-550 F.A.C.), subpart H systems also include systems using a combination of surface water (or ground water under the direct influence of surface water), and ground water not under the direct influence of surface water and Direct Potable Reuse systems. Systems supplying reclaimed water that has undergone advanced wastewater treatment as part of a potable reuse program shall maintain an emerging constituent monitoring protocol pursuant to Rule 62-610.564, F.A.C.

			If the system supplies advanced treated reclaimed water as part of a Direct Potable Reuse program, the system shall be required to give a detailed description of the pilot program or study used in the years of operation to demonstrate the ability of the AWTF to provide a water source the same quality or better than other sources used in the area. Requirements for content of the pilot study or program to be recorded and reported are defined in Rule 62-610.564, F.A.C. Systems which supply advanced treated reclaimed water as part of a Direct Potable Reuse Program shall include a general description of the major water treatment process performed on that water at the AWTF in addition to that which is performed at the drinking water facility. For example, a statement may be worded in the following way: Our water is obtained from reclaimed sources. In addition to being chlorinated for disinfection purposes, the water undergoes reverse osmosis at an advanced wastewater treatment facility before joining our distribution system.	If the system supplies advanced treated reclaimed water as part of a Direct Potable Reuse program, the system shall be required to give a detailed description of the pilot program or study used in the years of operation to demonstrate the ability of the AWTF to provide a water source the same quality or better than other sources used in the area. Requirements for content of the pilot study or program to be recorded and reported are defined in Rule 62-610.564, F.A.C. Systems which supply advanced treated reclaimed water as part of a Direct Potable Reuse Program shall include a general description of the major water treatment process performed on that water at the AWTF in addition to that which is performed at the drinking water facility. For example, a statement may be worded in the following way: Our water is obtained from reclaimed sources. In addition to being chlorinated for disinfection purposes, the water undergoes reverse osmosis at an advanced wastewater treatment facility before joining our distribution system.

- **Approach 2** (For IPR)- For IPR, where reclaimed water is released or discharged into groundwater or surface waters, emerging constituents may need to be considered due to existing regulatory requirements such as antidegradation and discharge standards. In addition, the emerging constituents may be treated, attenuated or diluted by the groundwater or surface water. How these issues are presented will vary from one potable reuse project to another given hydrological differences and, in the case of groundwater, geological differences.

Framework Recommendation Table 7.

Implementation Recommendation	Framework Page	DEP Chapters/Rules Affected	Corresponding Rule Language/Reasoning	Summary of Rule Language/Reasoning
To implement this recommendation, the Florida Legislature would need to enact legislation providing authority and direction to FDEP to revise existing rules or adopt new rules specifying the process described above for addressing emerging constituents.	106-107	None	Approach 2: IPR All reclaimed water for IPR must go through Advanced Waste Treatment and high-level disinfection before being discharged into either a surface water source or groundwater to be used as potable reuse. Once the water is then recovered it will be subject to Advanced Treatment as required under drinking water rule (62-550 F.A.C.) as well as the standard drinking water treatment. (62-610.564(8)(c)(1)	Approach 2: IPR All reclaimed water for IPR must go through Advanced Waste Treatment and high-level disinfection before being discharged into either a surface water source or groundwater to be used as potable reuse. Once the water is then recovered it will be subject to Advanced Treatment as required under drinking water rule (62-550 F.A.C.) as well as the standard drinking water treatment. (62-610.564(8)(c)(1)

Framework Section 10.4 Subsection 5.8 Other Regulatory Changes Specific to Particular Potable Reuse Project Scenarios

- Industrial waste pretreatment and source control program

Framework Recommendation Table 8.

Implementation Recommendation	Framework Page	DEP Chapters/Rules Affected	Corresponding Rule Language/Reasoning	Summary of Rule Language/Reasoning
To implement this recommendation, FDEP would	108 (39)	62-610.330(2)	(2) For potable reuse projects regulated under Part V of this chapter, a comprehensive pretreatment and	For potable reuse projects regulated under Part V of this chapter, a comprehensive pretreatment and

adopt new regulations or modify existing regulations to specify that the existing industrial pretreatment requirements would be imposed when reclaimed water is used for potable reuse. In addition, FDEP regulations should require a wastewater utility involved in one of these potable reuse projects to implement a source control program for sources the wastewater utility identifies as needing to be addressed.			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. 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	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 potable water distribution system), including privately-owned portions of the system. The enhanced pretreatment and source control program will, at minimum, be required to include (but not limited to the following) the following: - the currently established pretreatment requirements - an assessment of the pollutants/toxicants entering the treatment system - establish local limits - enhanced monitoring - an outreach/public education program to help reduce pharmaceuticals and other pollutants being added to the wastewater system from residences.

			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. 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. 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 contaminants of emerging concern listed in the domestic wastewater facility permit. The contaminants of emerging concern 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.	

Framework Section 10.4 Subsection 7.8.5 Other Regulatory Changes Specific to Particular Potable Reuse Project Scenarios

- Management of "off-spec" reclaimed water

Framework Recommendation Table 9.

Implementation Recommendation	Framework Page	DEP Chapters/Rules Affected	Corresponding Rule Language/Reasoning	Summary of Rule Language/Reasoning
To implement this recommendation, FDEP would adopt new regulations providing "off-spec" reclaimed water requirements for potable reuse projects to require temporary storage, disposal, alternative nonpotable reuse, or retreatment of "off-spec" reclaimed water based upon	109 (85)	62-610.463(2)	(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.	

operating protocols established by the utility and approved by FDEP. These new "off-spec" reclaimed water requirements should be patterned after the provisions in existing rule 62-610.464, F.A.C., for addressing reject water.			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 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.	
To implement this recommendation, FDEP would adopt new regulations	109 (85)	62-610.464(3)	(3) In addition, a separate, off-line system for storage of off-spec	

providing “off-spec” reclaimed water requirements for potable reuse projects to require temporary storage, disposal, alternative nonpotable reuse, or retreatment of “off-spec” reclaimed water based upon operating protocols established by the utility and approved by FDEP. These new “off-spec” reclaimed water requirements should be patterned after the provisions in existing rule 62-610.464, F.A.C., for addressing reject water.			reclaimed water shall be provided, unless another permitted reuse system or effluent disposal system is capable of discharging the off-spec reclaimed water in accordance with requirements of Chapter 62-600, F.A.C. Off-spec reclaimed 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 water to other parts of the treatment plant for further treatment shall be incorporated into the design.	
To implement this recommendation, FDEP would adopt new regulations providing “off-spec” reclaimed water requirements for potable reuse projects to require temporary storage, disposal, alternative nonpotable reuse, or retreatment of “off-spec” reclaimed water based upon operating protocols established by the utility and approved by FDEP. These new “off-spec” reclaimed water requirements should be patterned after the provisions in existing rule 62-610.464, F.A.C., for addressing reject water.	109 (85)	62-610.573(3)	(3) A separate, off-line system shall be provided for storage of off-spec reclaimed 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 off-spec reclaimed water to other parts of the	Any water that does not meet the established limits/standards will be required to be diverted and either be stored for further treatment, recycled and retreated, or used for non-potable reuse.

			treatment plant for further treatment shall be incorporated into the design. Off-spec reclaimed water storage shall not be required if another reuse system requiring lower levels of preapplication treatment or effluent disposal system is permitted off-spec reclaimed water. Off-spec reclaimed ponds shall be lined or sealed to prevent measurable seepage, as described in Rule 62-610.414, F.A.C.	

Framework Section 10.4 Other Regulatory Changes Specific to Particular Potable Reuse Project Scenarios

- Point of compliance with drinking water standards

Framework Recommendation Table 10.

Implementation Recommendation	Framework Page	DEP Chapters/Rules Affected	Corresponding Rule Language/Reasoning	Summary of Rule Language/Reasoning
To implement this recommendation, the Florida Legislature would need to enact legislation specifying that, when reclaimed water is used for potable reuse, the point of compliance with drinking water standards is the final discharge point for finished water from the DWTF. After enactment of this legislation, FDEP would adopt rules as appropriate to carry out the legislation.	109	62-550.300	The ultimate concern of the public water system supervision program is the quality of water for human consumption when the water reaches the consumers. The following rules establish maximum contaminant levels (MCLs) and maximum residual disinfectant levels (MRDLs) for water within public water systems. Additionally, these rules establish treatment technique requirements in lieu of, or in addition to, MCLs for certain contaminants. Public water systems shall comply with the MCLs, MRDLs, and treatment technique requirements established herein unless	

			granted a variance or exemption pursuant to Rule 62-560.510 or 62-560.520, F.A.C., or unless identified as excluded from the MCLs, MRDLs, or treatment technique requirements by this chapter. Public water systems shall take necessary corrective action approved by the Department to meet all applicable MCLs, MRDLs, and treatment technique requirements. Unless otherwise noted, Public Water Systems include Public Water Systems that use Direct Potable Reuse as a source of potable water.	

Framework Section 10.4 Other Regulatory Changes Specific to Particular Potable Reuse Project Scenarios

- No need for CUP or WUP for DPR

Framework Recommendation Table 11.

Implementation Recommendation	Framework Page	DEP Chapters/Rules Affected	Corresponding Rule Language/Reasoning	Summary of Rule Language/Reasoning
To implement this recommendation, the Florida Legislature, FDEP and water management districts would need to ensure that the existing Florida Statutes exempting the use of reclaimed water from CUP or WUP regulation are not changed when developing this potable reuse regulatory framework.	109-110	None	DWRM is currently working with OEAT, and the Office of Waster Policy to meet this recommendation and 'to ensure that the existing Florida Statutes exempting the use of reclaimed water from CUP or WUP regulation are not changed when developing this potable reuse regulatory framework.’	DWRM is currently working with OEAT, and the Office of Waster Policy to meet this recommendation and 'to ensure that the existing Florida Statutes exempting the use of reclaimed water from CUP or WUP regulation are not changed when developing this potable reuse regulatory framework.'

Framework Section 10.4 Other Regulatory Changes Specific to Particular Potable Reuse Project Scenarios

- Clarify compliance with existing spring discharge surface water quality standards

Framework Recommendation Table 12.

Implementation Recommendation	Framework Page	DEP Chapters/Rules Affected	Corresponding Rule Language/Reasoning	Summary of Rule Language/Reasoning
To implement this recommendation, FDEP would revise rule 62-610.850, F.A.C., as necessary to ensure the existing surface water quality protections of this rule relating to spring discharge remain in effect after implementation of the other potable reuse recommendations in this report.	110	62-610.563(4)	(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.).	Rule 62-610.563(4) has been revised to extend certain provisions for surface water to specify protection of springs as well.
To implement this recommendation, FDEP would revise rule 62-610.850, F.A.C., as necessary to ensure the existing surface water quality protections of this rule relating to spring discharge remain in effect after implementation of the other potable reuse recommendations in this report.	110	62-610.563(2)(c)	(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.	Springs language has been added to 62-610.563(2) to extend the limitations for total nitrogen to springs as well.
To implement this recommendation, FDEP would revise rule 62-610.850, F.A.C., as necessary to ensure the existing surface water quality protections of this rule relating to	110	62-610.850(1)	(1) Protection of surface water quality, including springs.	62-610.850 has been updates to extend provisions for the protection of surface water quality to specify protections for springs as well.

spring discharge remain in effect after implementation of the other potable reuse recommendations in this report.				
To implement this recommendation, FDEP would revise rule 62-610.850, F.A.C., as necessary to ensure the existing surface water quality protections of this rule relating to spring discharge remain in effect after implementation of the other potable reuse recommendations in this report.	110	62-610.850(1)(a)	(a) Reuse and land application projects shall not cause or contribute to violations of water quality standards in surface waters and springs.	No reuse or reclaimed water projects shall cause or contribute to degradation of the water quality of springs.
To implement this recommendation, FDEP would revise rule 62-610.850, F.A.C., as necessary to ensure the existing surface water quality protections of this rule relating to spring discharge remain in effect after implementation of the other potable reuse recommendations in this report.	110	62-610.850(1)(b)8(b)	(b) Ground water discharges from reuse or land application projects which flow by interflow and affect water quality in surface waters shall not cause or contribute to violations of water quality standards in surface waters and springs.	No ground water discharges from reuse or land application projects shall cause or contribute to the degradation of water quality of springs.

Framework Section 10.4 Other Regulatory Changes Specific to Particular Potable Reuse Project Scenarios

- Review existing regulations to identify outdated requirements

Framework Recommendation Table 13.

Implementation Recommendation	Framework Page	DEP Chapters/Rules Affected	Corresponding Rule Language/Reasoning	Summary of Rule Language/Reasoning
To implement this recommendation, FDEP would review in detail the various regulations applicable to potable reuse to look for inconsistencies or other revisions needed to revise these rules to match current practices. Once these inconsistencies and other revisions are identified, FDEP would need to amend	110	None	Please see the coded version of Phase I of the 62-610 F.A.C. revisions. Outdated rule references have bene updated and links to out dated documents and reference material has been removed from 62-610. Including but not limited to 62-610.100, and	Outdated rule references have bene updated and links to out dated documents and reference material has been removed from 62-610. Including but not limited to 62-610.100, and moving pathogens monitoring requirements from the form to be placed in the rule for clarification and

these rules to eliminate the inconsistencies and implement the identified revisions.			moving pathogens monitoring requirements from the form to be placed in the rule for clarification and ease of access. Also, in accordance with the Revised Coliform Rule (62-550.830) coliform language in 62-610 and 62-600 has been updated. Furthermore, electronic reporting language has for the Annual Reuse Report has been added to 62-610.870.	ease of access. Also, in accordance with the Revised Coliform Rule (62-550.830) coliform language in 62-610 and 62-600 has been updated. Furthermore, electronic reporting language has for the Annual Reuse Report has been added to 62-610.870.

Framework Section 10.4 Other Regulatory Changes Specific to Particular Potable Reuse Project Scenarios

- Update existing regulations to reflect current and future potable reuse practices

Framework Recommendation Table 14.

Implementation Recommendation	Framework Page	DEP Chapters/Rules Affected	Corresponding Rule Language/Reasoning	Summary of Rule Language/Reasoning
To implement this recommendation, FDEP would review in detail the various regulations applicable to potable reuse to look for inconsistencies or other revisions needed to revise these rules to match current practices. Once these inconsistencies and other revisions are identified, FDEP would need to amend these rules to eliminate the inconsistencies and implement the identified revisions.	110	None	Please see the coded version of Phase II of the 62-610 F.A.C. revisions. Updates have been made to Chapter 62-610 F.A.C. to reflect changes to definitions, requirements for engineering reports, aquifer storage and recovery, groundwater recharge, operator staffing, monitoring requirements, pretreatment and source control, pilot testing requirements, potable reuse language, and requirements for off-spec water.	Updates have been made to Chapter 62-610 F.A.C. to reflect changes to definitions, requirements for engineering reports, aquifer storage and recovery, groundwater recharge, operator staffing, monitoring requirements, pretreatment and source control, pilot testing requirements, potable reuse language, and requirements for off-spec water.

Framework Section 10.4 Other Regulatory Changes Specific to Particular Potable Reuse Project Scenarios

- Expand FDEP existing definition of IPR to include groundwater recharge to augment the supply of water available for drinking water

Framework Recommendation Table 15.

Implementation Recommendation	Framework Page	DEP Chapters/Rules Affected	Corresponding Rule Language/Reasoning	Summary of Rule Language/Reasoning
To implement this recommendation, the PRC recommends FDEP develop rule revisions to incorporate this language and make other changes as needed to accommodate the consistency of this definition	110	62-610.550(1)(a)	62-610.550(1)(a) reworded to define ground water recharge to "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."	Updates were made to 62-610.550 to clearly define the difference between ground water recharge and indirect potable reuse. This included updating the definition of ground water recharge to the planned use of reclaimed water to augment ground waters without development or supplementing the potable water supply.
To implement this recommendation, the PRC recommends FDEP develop rule revisions to incorporate this language and make other changes as needed to accommodate the consistency of this definition	110	62-610.550(2)(a)4	62-610.550(2)(a)4 added: "Discharge to G-I, F-I, or G-II ground waters as described in rule 62-610.555 560, F.A.C., by injection of treated reclaimed water, or by rapid-rate land application systems." as a definition for potable reuse.	An additional definition for potable reuse was also added, to say that discharge to a potable water quality level aquifer by injection of related reclaimed water or rapid-rate land application system would be considered potable reuse and therefore would have to meet potable reuse requirements.

Framework Section 10.4 Other Regulatory Changes Specific to Particular Potable Reuse Project Scenarios

- FDEP and the water management districts should enter into a memorandum of agreement to coordinate permitting for IPR projects

Framework Recommendation Table 16.

Implementation Recommendation	Framework Page	DEP Chapters/Rules Affected	Corresponding Rule Language/Reasoning	Summary of Rule Language/Reasoning
To implement this recommendation, FDEP and the water management districts would enter into a	111	62-610.550(1)(d)	Applications proposing ground water recharge or salinity barrier projects shall be submitted to both the	DWRM is currently coordinating with OEAT and the Office of Water Policy to set up coordination with the water

memorandum of agreement that would state, upon the request of an applicant, the agencies would coordinate the review of one or more permits needed for an IPR project. The memorandum of agreement would set forth the procedural requirements for this coordinated review.			Department and the appropriate water management district.	management districts. Also, updates to 62-610 F.A.C. added provisions that all applications for indirect potable reuse systems and an proposed ground water recharge or salinity barrier projects must be submitted to the water management district as well as the Department.
To implement this recommendation, FDEP and the water management districts would enter into a memorandum of agreement that would state, upon the request of an applicant, the agencies would coordinate the review of one or more permits needed for an IPR project. The memorandum of agreement would set forth the procedural requirements for this coordinated review.	111	62-610.550(4)	Applications proposing indirect potable reuse projects shall be submitted to both the Department and the appropriate water management district.	Applications proposing indirect potable reuse projects shall be submitted to both the Department and the appropriate water management district.

Framework Section 10.5 Review Current Reclaimed Water Aquifer Recharge Regulations

Framework Recommendation Table 17.

Implementation Recommendation	Framework Page	DEP Chapters/Rules Affected	Corresponding Rule Language/Reasoning	Summary of Rule Language/Reasoning
To implement this recommendation, FDEP would review Chapter 62-610, F.A.C., to ensure continued protection of the environment and public health.	111	62-610.466	To see the full extent of the updates please refer to the coded version Rule 62-610.466 F.A.C. for Phase II. (1) ASR can be an effective and environmentally sound approach to provision of storage for reclaimed water for reuse systems regulated under this chapter. ASR by itself does not constitute “reuse.” It is only when	Aquifer storage and recovery (ASR) was updated to clearly define was is considered ASR and the requirements a system will need to meet if they are using ASR of reclaimed water for nonpotable reuse or for potable reuse. To see the full extent of the updates please refer to Rule 62-60.466 of the coded version of Chapter 62-610 F.A.C. for Phase II.

			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. (2) Aquifer storage and recovery 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 nonpotable and 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 62-610, F.A.C. 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.	

Framework Section 10.6 Implementing PRC Regulatory Recommendations Collectively and Through Technical Advisory Committees

Framework Recommendation Table 18.

Implementation Recommendation	Framework Page	DEP Chapters/Rules Affected	Corresponding Rule Language/Reasoning	Summary of Rule Language/Reasoning
Hold a Technical Advisory Committee (TAC)	112	None	A Technical Advisory Committee (TAC) for emerging constituents and pathogens has been requested.	A Technical Advisory Committee (TAC) for emerging constituents and pathogens has been requested.

Framework Section 10.7 Convene a Working Group to Determine if any Changes to existing CUP and WUP Statutes and Rules are Needed to Incentivize and Protect Public Investments in Potable Reuse Projects

Framework Recommendation Table 19.

Implementation Recommendation	Framework Page	DEP Chapters/Rules Affected	Corresponding Rule Language/Reasoning	Summary of Rule Language/Reasoning
To implement this recommendation, the PRC, in coordination with FDEP and the water management districts, would facilitate the creation of a working group to examine current CUP and WUP statutes and rules in the context of incentivizing and protecting investments in potable reuse projects. The working group should consist of diverse stakeholders,	112	None	DWRM is currently working with the Office of Water Policy on the formation of this proposed workgroup.	DWRM is currently working with the Office of Water Policy on the formation of this proposed workgroup.

including but not limited to, PRC members and representatives from the water management districts, FDEP, water and wastewater utilities, agricultural organizations, environmental organizations, and other interested parties. The working group meetings should be noticed and open to the public and efforts should be taken to encourage public participation. At a minimum, a goal of the working group will be to develop consensus regarding the above-referenced recommendations as well as develop a plan regarding the implementation of any such recommendations. If the working group reaches consensus on any changes, the working group would recommend such changes to the Florida Legislature or FDEP and the water management districts as appropriate.				