Chapter 62-565

Potable Reuse

# 62-565.100 General

# 62-565.200 Definitions

# 62-565.300 Forms and References

# 62-565.400 Signatories to Permit Applications and Reports

# 62-565.500 Requirements for Potable Reuse Systems

# 62-565.505 Industrial Pretreatment Requirements for Potable Reuse Systems

# 62-565.510 Aquifer Storage and Recovery (ASR) Systems associated with Potable Reuse Systems

# 62-565.520 Off-spec Storage Requirements for Advanced Treatment Water Facilities

# 62-565.530 Pathogen Requirements for Potable Reuse Systems

# 62-565.540 Monitoring Requirements for Advanced Treatment Water Facilities and Potable Reuse Systems

# 62-565.550 Reporting Requirements for Advanced Treatment Water Facilities

# 62-565.560 Pilot Testing Program

# 62-565.570 Engineering Report

# 62-565.580 Design and Construction

# 62-565.590 Operation and Maintenance

# 62-565.600 Procedure to Obtain Permits

# 62-565.605 Standards for Issuing or Denying Permits

# 62-565.610 Revisions to Permit Conditions

# 62-565.615 Renewals

# 62-565.620 Transfer of Permit

# 62-565.625 Suspension and Revocation

# 62-565.630 Recordkeeping

# 62-565.635 Application Processing

# 62-565.640 Public Notice

# 62-565.645 Public Comments and Requests for Public Meetings

# 62-565.650 General Conditions for All Permits

# 62-565.655 Guidelines for Establishing Specific Permit Conditions

# 62-565.700 Compliance for Advanced Treatment Water Facilities and Potable Reuse Systems

## 62-565.100 General.

(1) Scope. This chapter sets forth the requirements for potable reuse systems, including direct and indirect potable reuse, as well as the permitting and compliance of Advanced Treatment Water Facilities (ATWFs).

(a) Direct potable reuse is the delivery of advanced treated water from an ATWF to a drinking water treatment facility or directly into a potable water supply distribution system. This type of potable reuse does not include an environmental buffer. Direct potable reuse projects are subject to the technical and permitting requirements established in this chapter.

(b) Indirect potable reuse is the planned delivery or discharge of reclaimed water, prior to treatment at an ATWF, or advanced treated water leaving the ATWF, to ground or surface waters for the development of, or to supplement or replace, potable water sources in accordance with projects identified in subsections 62-565.100(1)(c) and (d), F.A.C. Indirect potable reuse projects are subject to the technical and permitting requirements established in this chapter.

(c) Discharges of reclaimed water or advanced treated water to surface waters may be permitted as an indirect potable reuse project if an ATWF permit applicant provides an affirmative demonstration of the following:

1. There is a need to supplement or replace the public water supply;

2. The discharge will meet part or all of the identified need to supplement or replace the water supply; and

3. A hydrologic connection between the point of discharge and the potable water supply intake.

(d) Discharges of reclaimed water or advanced treated water to ground waters may be considered as indirect potable reuse if the following conditions are met:

1. The discharge is to F-I, G-I, G-II, or G-III ground waters as described in Rule 62-610.560, F.A.C., or by rapid-rate land application systems where the requirements of Rule 62-610.525, F.A.C., apply; and

2. The planned supply wells are located within the applicable setback distances in Chapter 62-610, F.A.C.

(2) Applicability.

(a) Where there may be a conflict with another rule of the Department, the rules in this chapter shall apply.

(b) In addition to the requirements set forth in this chapter, ATWFs serving as a public water system, discharging directly to a distribution system shall also comply with the requirements set forth in Chapters 62-550, and 62-555, F.A.C.

(3) General Prohibitions.

(a) No person shall operate an ATWF without an ATWF permit from the Department.

(b) An ATWF permit shall be obtained from the Department before commencement of construction or modification of the ATWF.

(c) The ATWF permit does not authorize discharge of waste, as defined in s. 403.031(12), F.S., to the waters of the State. Any person intending to discharge to the waters of the State shall apply to the Department for the appropriate permit required by Chapter 403, F.S., and Department rules.

(4) General Provisions.

(a) An ATWF permit may be revised, renewed, revoked and reissued, or terminated in accordance with this chapter.

(b) To the extent that this chapter imposes duties for the construction, operation, maintenance, or monitoring of a an ATWF, for reporting potable reuse system operations, or for securing permits from the Department, responsibility lies with the permittee and the owner of the facility.

(c) Consultation. An applicant is encouraged to consult with the Department before submitting an application, or at any other time concerning the operation, construction, or modification of an ATWF.

(5) Confidentiality of Information. In accordance with Chapter 119, F.S., information and documents submitted to the Department with an application may be considered to be public records.

*Rulemaking Authority 403.861(9), 403.064(18), F.S., Law Implemented 403.852(12), 403.861(7), 403.853(6), 403.861(17), 403.064(18), F.S., History – New xx-xx-xx.*

## 62-565.200 Definitions.

The following words and phrases when used in this chapter have the following meanings except when defined and instructed differently to a specific rule:

(1) “Advanced treated water” means water produced from an advanced treatment water facility for potable reuse applications. Advanced treated water can be from more than one advanced treatment water facilities.

(2) “Advanced Treatment Water Facility (ATWF)” means the facility where advanced treated water is produced. The specific combination of treatment technologies employed will depend on the quality of the reclaimed water and the type of potable reuse.

(3) “Annual average discharge limitation” means the maximum annual average pollutant value allowed by the permit and calculated as the arithmetic mean of the 12 monthly average reclaimed water or advanced treated water samples collected during any consecutive 12-month period.

(4) “Approved County Health Department” shall be as defined in Rule 62-550.200, F.A.C.

(5) “Arithmetic mean” means the value computed by dividing the sum of a set of terms by the number of terms.

(6) “Aquifer Storage and Recovery (ASR)” shall be as defined in subsection 62-610.466(1), F.A.C.

(7) “Average daily flow” means the total volume of wastewater flowing into a wastewater facility during some defined period of time, divided by the number of days in that period of time, expressed in units of millon gallons a day.

(8) “Bypass” means the intentional delivery of reclaimed water, not meeting the standards for advanced treated water, from any portion of an Advanced Treatment Water Facility to a potable water system or potable water distribution system.

(9) “Capacity Development” means the process of an ATWF acquiring and maintaining adequate technical, managerial, and financial capabilities to enable them to consistently provide safe advanced treated water.

(10) “CFR” means the Code of Federal Regulations.

(11) “Challenge Test” means a study comparing a pathogen, surrogate parameter, or indicator compound concentration between the influent and effluent of a treatment process to determine the removal capacity of the treatment process. The influent concentration must be high enough to ensure that a measurable concentration is detected in the effluent.

(12) “Commencement of Construction” means the beginning of the construction of an ATWF.

(13) “Composite sample” means a single sample that is a combination of individual sub-samples of reclaimed water or advanced treated water taken at selected intervals, usually based on time or flow volumes, to minimize the effect of the variability of the individual sub-samples.

(14) “Co-permittee” means a permittee to an advanced treatment water facility permit that is only responsible for permit conditions relating to the potable reuse system for which it is the operator.

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

(16) “Contaminant” shall be as defined in Rule 62-550.200, F.A.C.

(17) “Continuous Monitoring” means the automated collection and analysis of a parameter in a water sample.

(18) “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.

(19) “Cross-Connection” shall be as defined in Rule 62-550.200, F.A.C.

(20) “*Cryptosporidium*” means waterborne microsopic parasite that causes the diarrheal disease cryptosporidiosis.

(21) “CT” or “CTcalc” means the product of ‘‘residual disinfectant concentration’’ (C) in mg/L determined before or at the first customer, and the corresponding ‘‘disinfectant contact time’’ (T) in minutes, i.e., ‘‘C’’ x ‘‘T’’. If a potable reuse system applies disinfectants at more than one point prior to distribution, it must determine the CT of each disinfectant sequence before or at the first customer to determine the total percent inactivation or ‘‘total inactivation ratio.’’ In determining the total inactivation ratio, the potable reuse system must determine the residual disinfectant concentration of each disinfection sequence and corresponding contact time before any subsequent disinfection application point(s).

(22) “Department” means the Department of Environmental Protection (DEP).

(23) “Designated representative” means a person for whom authorization has been given to sign reports and permit applications on behalf of the responsible official, as defined in subsection (79) of this rule. A person can only be a designated representative if:

(a) The authorization is made in writing by a person described in subsection (51) of this rule;

(b) The authorization specifies either an individual or a position having overall responsibility for the operation of the regulated facility or activity, including the position of plant manager, superintendent, certified chief operator, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company; and,

(c) The written authorization is submitted to the Department.

(24) “Design capacity” means the average daily flow projected for the design year which serves as the basis for the sizing and design of the domestic wastewater facilities, advanced treated water facilities, or public water system. The design capacity is established by the permit applicant. The time frame associated with the design capacity (e.g., annual average daily flow, monthly average daily flow, three-month average daily flow) shall be specified by the permit applicant.

(25) “Direct Potable Reuse (DPR)” means the delivery of advanced treated water from an advanced treatment water facility to a drinking water treatment facility or directly into a potable water supply distribution system without an environmental buffer.

(26) “Disinfectant” shall be as defined in Rule 62-550.200, F.A.C.

(27) “Disinfectant Contact Time” (“T” in CT calculations) shall be as defined in Rule 62-550.200, F.A.C.

(28) “Disinfection” shall be as defined in Rule 62-550.200, F.A.C.

(29) “Domestic wastewater” shall be as defined in Rule 62-600.200, F.A.C.

(30) “Draft permit” means a document prepared under Rule 62-565.635, F.A.C., indicating the tentative decision of the Department to issue or deny, revise, revoke and reissue, terminate, or reissue a permit. Notices of intent to terminate a permit and to deny a permit are types of “draft permits.” A denial of a request for revision, revocation and reissuance, or termination is not a “draft permit.” A “proposed permit” is not a “draft permit.”

(31) “Drinking water” means water that is supplied for potable uses (including drinking, cooking, bathing, and other household uses) that meets standards prescribed by Rules 62-550.310 and .320, F.A.C.

(32) “Drinking water treatment facility (DWTF)” for purposes of Chapters 62-550, 62-555, 62-565 and 62-610, F.A.C., means a treatment component of a public water system. This could be a treatment component of an advanced treatment water facility providing water for potable reuse.

(33)“Emerging constituents” means natural and synthetic chemicals or compounds not regulated in water, wastewater or reclaimed water that may cause adverse ecological or human health impacts.

(34) “Environmental buffer” means a natural treatment barrier.

(35) “EPA” means the U.S. Environmental Protection Agency.

(36) “Filtration” means a process for removing particulate matter from water by passage through porous media.

(37) “Finished Drinking Water” means water that is introduced into the distribution system of a public water system and is intended for distribution and consumption without further treatment, except treatment as necessary to maintain water quality in the distribution system (e.g., booster disinfection or addition of corrosion control chemicals).

(38) “Flow” means the flow values obtained from recording flow meters and totalizers, calibrated at least once every 12 months or in accordance with manufacturer’s instructions, whichever is lesser.

(39) “*Giardia lamblia* (*Giardia*)” means the waterborne protozoan parasites which occur in a trophozoite and an oval-shaped cyst form.

(40) “Grab sample” means a single sample of reclaimed water or advanced treated water.

(41) “Human Consumption” shall be as defined in Rule 62-550.200, F.A.C.

(42) “Indicator Compound” means an individual chemical in recliamed water that represents the physical, chemical, and biodegradable characteristics of a specific family of trace constituents; 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 performance.

(43) “Indirect potable reuse (IPR)” means the planned delivery or discharge of reclaimed water or advanced treated water to ground or surface waters for the development of, or to supplement, potable water supply in accordance with projects identified in subsections 62-565.100(1)(c) and (d), F.A.C.

(44) “Internal Outfall” means the internal sampling location between two separate treatment processes within an ATWF.

(45) “Interference” means for purposes of this chapter a discharge from a non-domestic wastewater source which alone or in conjunction with a discharge or discharges from other sources that inhibits or disrupts the treatment processes or operations that has a significant potential to have serious adverse effects on public health or to cause an exceedance either of a treatment requirement or of a Maximum Contaminant Level for finished drinking water.

(46) “Log reduction” means a reduction in the concentration of a constituent or microorganism by a factor of 10.

(47) “Log reduction value 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

(48) “Maximum Contaminant Level (MCL)” shall be as defined in Rule 62-550.200, F.A.C.

(49) “Maximum Residual Disinfectant Level (MRDL)” shall be as defined in Rule 62-550.200, F.A.C.

(50) “Membrane Filtration” shall be as defined in Rule 62-550.200, F.A.C.

(51) “Method Reporting Limit” means the lowest concentration that can be reliably measured within specified limits of precision and accuracy during routine laboratory oprerations.

(52) “Minor modification” means a modification to the facility or activity which is not expected to lead to a substantially different environmental impact or which will not involve a substantially different type of reclaimed water or advanced treated water. A minor modification does not substantially change the characteristics of the reclaimed water or advanced treated water, nor does it change the permitted capacity of the facility. This includes construction to replace a unit operation or process structure, and construction to a unit operation or mechanical equipment which is not associated with routine facility maintenance.

(53) “Minor revision” means a change to the permit conditions, which may include changes in staffing requirements or monitoring frequencies, correction of minor errors or typographical mistakes, transfer of a permit to a new owner, extension of compliance dates or construction schedules, or authorization of a minor modification to a facility or activity.

(54) “Modification” means the alteration, expansion, upgrade, extension, replacement of, or addition to an existing advanced treatment water facility. “Modification” does not include, and no permit revision is required for:

(a) Structural changes to an existing advanced treatment water facility or activity, site or plant, that do not change the quality, nature, or quantity of the reclaimed water or advanced treated water or that do not cause water pollution, or

(b) Construction, replacement, or repair of components of an advanced treatment water facility which does not change the permitted treatment works or the terms and conditions of the potable reuse system permit.

(55) “Monthly average discharge limitation” means the maximum monthly average pollutant value allowed by the permit and calculated as the arithmetic mean of each reclaimed water or ad sample collected on a separate day during a period of 30 consecutive days.

(56) “New System” means, for the purposes of capacity development, ATWF, community water systems or non-transient non-community water systems being newly constructed; systems which do not currently meet the definition of a public water system under Rule 62-550.200, F.A.C., but which expand their infrastructure and thereby grow to become community water systems or non-transient non-community water systems; and transient non-community systems that expand their infrastructure and thereby grow to become community water systems or non-transient non-community water systems.

(57) “Off-spec” means produced water that does not meet the discharge standards as established by an applicable Department permit.

(58) “Operator” means any person who is in onsite charge of the actual operation, supervision, and maintenance of an advanced treatment water facility and includes the person in onsite charge of a shift or period of operation during any part of the day. Operator also means any person operating an electronic control system. Such persons shall be licensed in accordance with Chapter 62-602, F.A.C.

(59) “O3:TOC” means the ratio of the applied ozone to the actual total organic carbon (TOC) in the feedwater, which is the nitrite-corrected mass ratio of ozone to TOC calculated as the transferred ozone dose in milligram per liter (mg/L) divided by the sum of TOC concentration in the feedwater in mg/L plus 3.4 times the nitrite (NO2-) concentration (as N) in the feedwater in mg/L.

(60) “Pass Through” means for purposes of this chapter a condition where a constituent enters the potable reuse system in quantities or concentrations that have a significant potential to have serious adverse effects on public health or to cause an exceedance either of a treatment

requirement or of an MCL in finished drinking water.

(61) “Pathogens” means disease-producing organisms, including enteric viruses, *Giardia cysts*, and *Cryptosporidium oocysts*.

(62) “Permit condition” means a statement or stipulation which is issued with a permit and which must be complied with.

(63) “Permit” is the legal authorization to engage in or conduct any construction, operation, modification, or expansion of any installation, structure, equipment, facility, or appurtenances thereto, operation, or activity which will reasonably be expected to be a source of advanced treated water or pollution.

(64) “Permittee” means the owner, operator or other entity to which a permit for an advanced treatment water facility or activity is issued by the Department. The term “permittee” shall be functionally synonymous with the terms “owner,” “contractor,” and “licensee,” but shall not include licensed individuals, such as State certified operators, unless they are the persons to whom a facility permit is issued by the Department. The term shall extend to a permit “applicant” for purposes of this chapter.

(65) “Permitted capacity” means the treatment, reclaimed water or advanced treated water capacity for which a facility is approved by Department permit expressed in units of million gallons a day. The permit shall specify the time frame associated with the permitted capacity (e.g., annual average daily flow, monthly average daily flow, three-month average daily flow).

(66) “Person” shall be as defined in Rule 62-550.200, F.A.C.

(67) “pH” means the negative common logarithm of the hydrogen-ion activity in moles per liter, obtained from using sensors for continuous pH monitoring that can perform a three-point calibration calibrated at least once a month as described in DEP-SOP-001/01 (adopted and incorporated by reference in Chapter 62-160, F.A.C.).

(68) “Point of Disinfectant Application” means the point where the disinfectant is applied and water downstream of that point is not subject to recontamination by surface water runoff.

(69) “Potable reuse” means augmentation of a drinking water supply with reclaimed water, which includes indirect potable reuse.

(70) “Potable reuse system” means the permitted facilities interconnected for the purposes of producing finished drinking water from domestic wastewater.

(71) “Potable water” means water that meets the primary and secondary drinking water quality standards prescribed by the National Primary Drinking Water Regulations (40 CFR Part 141) of the U.S Environmental Protection Agency and Chapter 62-550, F.A.C.

(72) “Proposed permit” means a permit prepared after the close of the public comment period and, when applicable, after any public meeting, but before final issuance by the Department. A “proposed permit” is not a “draft permit.”

(73) “Public Water System” or “PWS” shall be as defined in Rule 62-550.200, F.A.C.

(74) “Raw Wastewater” means, for the purposes of this chapter, untreated wastewater and its contents entering a domestic wastewater treatment facility.

(75) “Raw Water” means intake water prior to any treatment or use.

(76) “Reclaimed Water” means water that has received at least secondary treatment and is reused after flowing out of a domestic wastewater treatment facility.

(77) “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.

(78) “Residual Disinfectant Concentration” (“C” in CT calculations) shall be as defined in Rule 62-550.200, F.A.C.

(79) “Responsible official” means one of the following:

(a) For a corporation, the president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation;

(b) For a partnership or sole proprietorship, a general partner or the proprietor, respectively; or

(c) For public agencies, a principal executive officer or ranking elected official. A principal executive officer includes the chief executive officer of the agency or a senior executive officer having the responsibility for the overall operations of a principal geographic unit of the agency, for example, a director of public works, or city or county manager.

(80) “Sanitary hazard” means a physical condition which involves or affects any part of a public water system or the source water, and that creates an imminent or potentially serious risk to the health of any person who consumes water from that system.

(81) “Secondary Contaminants” shall be as defined in Rule 62-550.200, F.A.C.

(82) “Secondary Drinking Water Standards” shall be as defined in Rule 62-550.200, F.A.C.

(83) “Secondary treatment” means wastewater treatment to a level that will achieve the limitations specified in Rule 62-600.420, F.A.C.

(84) “Severe property damage” means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

(85) “Substantial Modification” means a modification to the facility which is reasonably expected to lead to a substantially different environmental impact, or which involves a substantially different type of advanced treated water, treatment, or disposal system. A substantial modification includes changes in the characteristics of the advanced treated water, changes to the final disposition of the advanced treated water, or changes in the permitted capacity of the treatment system.

(86) “Source Control” means the elimination or control of the discharge of constituents into a wastewater collection system that at certain quantities can impact a reuse project.

(87) “Source Water” means allowable sources of water entering a potable reuse system.

(88) “Steady State” means a state in which all components of a system have achieved balance, where the volume of flow entering a system is equivalent to the volume of flow leaving a system.

(89) “Surface Water” shall be as defined in Rule 62-550.200, F.A.C.

(90) “Surrogate Parameters” 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 consituentsremoval by a treatment process and/or provides an indication of a treatment process failure.

(91) “Tertiary Treatment” means advanced treatment of wastewater that goes beyond secondary treatment, as defined in Rule 62-565.200, F.A.C.

(92) “Total Organic Carbon (TOC)” shall be as defined in Rule 62-550.200, F.A.C.

(93) “Total Trihalomethanes (TTHM)” shall be as defined in Rule 62-550.200, F.A.C.

(94) “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.

(95) “Treatment Technique” means the technology, when installed in an ATWF, which leads to the reduction of contaminant levels.

(96) “Treatment Train” means a series of treatment technologies or processes to achieve a specific treatment or water quality goal or objective.

(97) “Trihalomethane (THM)” shall be as defined in Rule 62-550.200, F.A.C.

(98) “Virus” shall be as defined in Rule 62-550.200, F.A.C.

(99) “Weekly average discharge limitation” means the maximum weekly average pollutant value allowed by the permit and calculated as the arithmetic mean of each reclaimed water or advanced treated water sample collected on a separate day during a period of seven consecutive days.

(100) “Well” shall be as defined in Rule 62-550.200, F.A.C.

*Rulemaking Authority 403.861(9), 403.064(18), F.S., Law Implemented 403.852(12), 403.861(7), 403.853(6), 403.861(17), 403.064(18), F.S., History – New xx-xx-xx.*

## 62-565.300 Forms and References.

(1) Unless otherwise specified, the technical standards and criteria contained in the following manuals and technical publications listed below are provided to assist applicants and permittees comply with the requirements of this chapter.

(a) 40 CFR Part 122, Appendix D (adopted and incorporated by reference in paragraph 62-620.100(3)(b), F.A.C., effective October 8, 2021),

(b) 40 CFR Part 136, (adopted and incorporated by reference in paragraph 62-620.100(3)(j), F.A.C., effective October 8, 2021),

(c) 40 CFR Part 141 Subpart Z, effective June 25, 2024, (http://www.flrules.org/Gateway/reference.asp?No=XXXX) is hereby adopted and incorporated by reference.

(d) U.S. Environmental Protection Agency’s 2005 Membrane Filtration Guidance Manual, effective [date] (http://www.flrules.org/Gateway/reference.asp?No=XXXX), is hereby adopted and incorporated by reference.

(e) Method A of ASTM International’s method D4194-03, effective 2014, (http://www.flrules.org/Gateway/reference.asp?No=XXXX), is hereby adopted and incorporated by reference.

(f) America’s Water Infrastructure Act (AWIA) of 2018, section 1433, effective 2018, <https://www.congress.gov/bill/115th-congress/senate-bill/3021/text>, is hereby adopted and incorporated by reference.

(g) The Department’s “Compliance Manual for Subpart H systems”, effective June 2004 (http://www.flrules.org/Gateway/reference.asp?No=XXXX) is hereby adopted and incorporated by reference.

(h) 21 CFR Part 173.25, effective July 26, 2016, (http://www.flrules.org/Gateway/reference.asp?No=XXXX), is hereby adopted and incorporated by reference.

(i) U.S. Environmental Protection Agency’s (EPA) 2020 Innovative Approaches for Validation of Ultraviolet Disinfection Reactors for Drinking Water Systems, effective [date] (<http://www.flrules.org/Gateway/reference.asp?No=XXXX>), is hereby adopted and incorporated by reference.

(j) U.S. Environmental Protection Agency’s (EPA) 2010 Long Term 2 Enhanced Surface Water Treatment Rule: Toolbox Guidance Manual, effective [date] (<http://www.flrules.org/Gateway/reference.asp?No=XXXX>), is hereby adopted and incorporated by reference.

(k) U.S. Environmental Protection Agency’s (EPA) 2006 Ultraviolet Disinfection Guidance Manual for the Final Long Term 2 Enhanced Surface Water Treatment Rule, effective [date] (<http://www.flrules.org/Gateway/reference.asp?No=XXXX>), is hereby adopted and incorporated by reference.

(2) The forms and instructions used by the Department are listed in this rule. The rule numbers are the same as the form numbers. Copies of these forms and instructions may be obtained by writing to the Division of Water Resource Management, MS 3500, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. The Department adopts and incorporates by reference the following forms:

(a) Application for an Advanced Treatment Water Facility Permit, Form 62-565.300(2)(a), effective [date] (http://www.flrules.org/Gateway/reference.asp?No=XXXX), is hereby adopted and incorporated by reference.

(b) Notification of Completion of Construction of an Advanced Treatment Water Facility, Form 62-565.300(2)(b), effective [date] (http://www.flrules.org/Gateway/reference.asp?No=XXXX), is hereby adopted and incorporated by reference.

(c) Notification of Permit Transfer of an Advanced Treatment Water Facility, Form 62-565.300(2)(c), effective [date] (http://www.flrules.org/Gateway/reference.asp?No=XXXX), is hereby adopted and incorporated by reference.

(d) Advanced Treatment Water Facility Monitoring Report, Form 62-565.300(2)(d), effective [date] (http://www.flrules.org/Gateway/reference.asp?No=XXXX), is hereby adopted and incorporated by reference.

(e) Application for a Minor Revision to an Advanced Water Facility, Form 62-565.300(2)(e), effective [date] (http://www.flrules.org/Gateway/reference.asp?No=XXXX), is hereby adopted and incorporated by reference.

(f) Advanced Treatment Water Facility Annual Report, Form 62-565.300(2)(f), effective [date] (http://www.flrules.org/Gateway/reference.asp?No=XXXX), is hereby adopted and incorporated by reference.

(g) Notification of Availability of Record Drawings and Final Operation and Maintenance Manuals of an Advanced Treatment Water Facility, Form 62-565.300(2)(g) effective [date] (http://www.flrules.org/Gateway/reference.asp?No=XXXX), is hereby adopted and incorporated by reference.

*Rulemaking Authority 403.861(9), 403.064(18), F.S., Law Implemented 403.852(12), 403.861(7), 403.853(6), 403.861(17), 403.064(18), F.S., History – New xx-xx-xx.*

## 62-565.400 Signatories to Permit Applications and Reports.

(1) All permit applications, reports, and other information requested by the Department under this Chapter shall be signed by a responsible official or by a designated representative of that person, as defined in Rule 62-565.200, F.A.C.

(2) If an authorization for the designated representative under subsection (1) of this rule, is no longer valid, a new authorization satisfying the requirements of subsection (1) of this rule, must be submitted to the Department prior to, or together with, any reports, information, or applications to be signed by an authorized representative.

(3) A responsible official or designated representative signing a document under subsection (1) of this rule, shall make the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

*Rulemaking Authority 403.861(9), 403.064(18), F.S., Law Implemented 403.852(12), 403.861(7), 403.853(6), 403.861(17), 403.064(18), F.S., History – New xx-xx-xx.*

## 62-565.500 Requirements for Potable Reuse Systems.

(1) The ATWF permit application must include a joint operations plan, which shall address the elements in paragraphs (a) through (h) below:

(a) Pathogen inactivation monitoring and reporting as established in this chapter.

(b) Each facility’s responsibility in meeting all MCL requirements set forth in Chapter 62-550, F.A.C., and the log reduction requirements of Rule 62-565.530, F.A.C., prior to the distribution of finished drinking water.

(c) For indirect potable reuse systems, the joint operations plan shall identify all Aquifer Storage and Recovery (ASR) systems associated with the potable reuse system.

(d) The procedures a wastewater treatment facility (WWTF) and an ATWF shall follow to notify the other facilities participating in the joint operations plan and the Department of:

1. Operational changes that may adversely affect the quality of the reclaimed water to be delivered to an ATWF or PWS, and

2. The events and corresponding corrective actions taken when the delivery of reclaimed water adversely affects the potable reuse system.

(e) Cybersecurity protocols in accordance with the America’s Water Infrastructure Act (AWIA) of 2018, section 2013, (adopted and incorporated by reference in paragraph 62-565.300(1)(e), F.A.C., effective [date]).

(f) Cross-connection control and separation distances between underground pipes, which shall be in accordance with Rules 62-555.360 and 62-610.469, F.A.C.;

(g) Corrective actions to be taken in the event that a delivery of advanced treated water from the ATWF to a PWS or a PWS distribution system fails to meet the applicable water quality requirements of Chapters 62-550, 62-555, and 62-610, F.A.C.;  and

(h) The procedures to implement the comprehensive pretreatment and pollutant source control programs requirements pursuant to Rule 62-565.505, F.A.C., including provisions to conduct source control investigations.

(2) A revised joint operations plan shall be submitted for review and approval to the Department not less than ninety (90) days prior to a change in the information provided pursuant to subsection 62-565.500(1), F.A.C.

(3) The pathogen requirements in Rule 62-565.530, F.A.C., shall be met by at least two separate treatment processes for enteric viruses, *Giardia cysts*, and *Cryptosporidium oocysts*. A separate treatment process may be credited with no more than 6.0-log reduction. To be acceptable, a treatment process may achieve no less than 1.0-log reduction. A single treatment process may receive log reduction credits for one or more pathogens.

(4) The treatment train shall include multiple, independent treatment barriers (i.e., redundancy, as defined in Rule 62-565.200, F.A.C.), for the control of organic compounds and pathogens.

(5) Design criteria shall address hazard identification, risk assessment, the identification of multiple treatment barriers for regulated parameters and constituents of emerging concerns, critical control points and corrective actions.

(6) Prior to placing a full-scale potable reuse system into operation, the applicant shall provide reasonable assurance that all treatment processes are installed and are achieving, as designed, the intended functions and can be operated by certified treatment process operators who meet the requirements in subsection 62-565.590(6), F.A.C. An operating protocol describing the actions to be taken to meet this subsection shall be included in the engineering report and shall be available at the facility during inspections.

(7) ATWF permittees shall meet the reliability and redundancy requirements in subsection 62-555.320(13), F.A.C.

(8) ATWF permittees shall meet the standby power requirements in paragraphs 62-555.320(14)(b) though (f), F.A.C.

(9) ATWFs shall be subject to the same setback distance requirements established in subsection 62-555.312(3), F.A.C.

(10) The setback distance described in subsection (9) above, shall be reduced, but in no case to less than 50 feet from sanitary hazards that pose a potentially high risk to water quality and public health and no less than 25 feet from sanitary hazards that pose a moderate risk to water quality and public health, if the applicant provides an affirmative demonstration in the engineering report that reclaimed water will not migrate to the potable water supply well as a result of conditions including the following: the presence, thickness, and extent of natural barriers including impermeable geological strata; the design and construction of the ATWF; the water treatment provided; or the use of alternative means to reduce public health risks, including the use of encasement or restrained joints to eliminate or minimize leakage from a pipeline that is a sanitary hazard, or the use of additional monitoring.

(11) Potable Reuse Systems shall provide safe access points for obtaining representative samples which are required by this chapter.

(12) During full-scale operation of the treatment process designed pursuant to Rule 62-565.560, F.A.C., the applicant shall be subject to the same requirements included in Rule 62-555.350, F.A.C., and continuously monitor the applicable surrogate and operational parameters established pursuant to Rule 62-565.560, F.A.C. The applicant shall implement, in full-scale operation, the treatment process as designed pursuant to Rule 62-565.560, F.A.C.

(13) Each quarter, the ATWF permittee shall calculate the percent of results of the quarter’s monitoring that did not meet the surrogate and operational permit limits established to assure proper on-going performance of the treatment process. If greater than ten percent of the monitoring results did not meet surrogate and operational permit limits, within 45 days after the end of the quarter the ATWF permittee shall submit a report to the Department describing the corrective actions planned or taken to reduce the percent to ten percent (10%) or less. The permittee shall consult with the Department and, if required, comply with an alternative monitoring plan approved by the Department.

(14) Sampling collection and analysis shall be performed using appropriate methods and standard operating procedures (SOPs) in 40 CFR Part 136, (adopted and incorporated by reference in paragraph 62-620.100(3)(j), F.A.C., effective October 8, 2021), 40 CFR Part 141 Subpart C , (adopted and incorporated by reference in subsection 62-550.550(1), F.A.C., effective July 7, 2015), 40 CFR Part 141 Subpart Z (adopted and incorporated by reference in paragraph 62-565.300(1)(c), F.A.C., effective June 25, 2024), Rule 62-4.246, F.A.C., and Chapter 62-160, F.A.C. Where necessary, the permittee may request approval of alternate procedures and laboratory methods or for alternative method detection limits (MDLs) or practical quantitative limits (PQLs).

 (15) Except as specifically provided in Rule 62-160.300, F.A.C., any laboratory test required by this chapter, for which methods have already been established and approved in 40 CFR Part 136, (adopted and incorporated by reference in paragraph 62-620.100(3)(j), F.A.C., effective October 8, 2021), 40 CFR Part 141 Subpart C, (adopted and incorporated by reference in subsection 62-550.550(1), F.A.C., effective July 7, 2015), 40 CFR Part 141 Subpart Z (adopted and incorporated by reference in paragraph 62-565.300(1)(c), F.A.C., effective June 25, 2024), Rule 62-4.246, and Chapter 62-160, F.A.C., shall be performed by a laboratory that has been certified by the Department of Health Environmental Laboratory Certification Program (DOH ELCP) for the matrix, test method, and analyte(s) being measured to comply with the permit. For ATWFs, testing for parameters listed in subsection 62-160.300(4), F.A.C., shall be conducted under the direction of a certified operator.

(16) After construction is complete and prior to placing an ATWF into full-scale operation, the permittee must provide the Department with the results of a full-scale demonstration for each unit process of the ATWF.

(a) The full-scale demonstration shall be conducted for a minimum of thirty consecutive days while the ATWF is achieving steady state.

(b) During the full-scale demonstration, sampling for all permit limitations contained in the ATWFs Department-issued permit must be conducted a minimum of one time. The sampling results from the full-scale demonstration shall be submitted to the Department on the Advanced Treatment Water Facility Monitoring Report, DEP Form 62-565.300(2)(d), (adopted and incorporated by reference in paragraph 62-565.300(2)(d), F.A.C., effective [date]).

(c) If the results of the sampling for the full-scale demonstration provide reasonable assurance that all permit limitations can be met, the Department shall issue a letter of clearance to place the ATWF into full-scale operation.

(17) Following full-scale implementation of a potable reuse system, the permittee shall submit an annual report on Advanced Treatment Water Facility Annual Report, DEP Form 62-565.300(2)(f), (adopted and incorporated by reference in paragraph 62-565.300(2)(f), F.A.C., effective [date]) no later than July 1of each year.

*Rulemaking Authority 403.861(9), 403.064(18), F.S., Law Implemented 403.852(12), 403.861(7), 403.853(6), 403.861(17), 403.064(18), F.S., History – New xx-xx-xx.*

## 62-565.505 Industrial Pretreatment Requirements for Potable Reuse Systems.

(1) A comprehensive pretreatment and pollutant souce control program shall be developed and implemented for all potable reuse projects regulated under this chapter.

(2) The comprehensive pretreatment and pollutant source control program shall include a pretreatment program developed by the applicant, approved by the Department, and implemented in accordance with Chapter 62-625, F.A.C. The applicant shall develop and adopt local discharge limitations in accordance with Chapter 62-625, F.A.C.

(3) The applicant shall adopt the legal authority to implement the comprehensive pretreatment and pollutant source control program, including authority for oversight, inspection and enforcement, and review of new connections to the collection system.

(4) The applicant shall conduct a source investigation, which includes an environmental fate and transport assessment for each chemical or constituent that may pass through or cause interference with the potable reuse system based on readily available data, be it analytical data, process knowledge or other reasonable estimation techniques and:

(a) Chemicals or constituents identified in subsection 62-625.600(8), F.A.C.;

(b) Has a primary or secondary drinking water quality standard established in Rules 62-550.310 and 62-550.320, F.A.C.; and

(c) Has an applicable standard established in Chapters 62-302, 62-304, and 62-550, F.A.C.

(5) The applicant shall develop a pretreatment outreach program to industrial users within the portions of the wastewater collction system service area that serves as the source for potable reuse systems for the purpose of managing and minimizing the discharge of chemicals and constituents in the wastewater that may adversely effect the potable reuse system.

(6) The applicant shall develop and maintain a current inventory of chemicals and contaminants identified and evaluated pursuant to subsection 62-625.600(8), F.A.C., including new chemicals and contaminants resulting from new sources or changes to existing sources, that may be discharged into the wastewater collection system;

(7) Significant industrial users as defined in Rule 62-625.200, F.A.C., shall implement a slug control plan that includes, at a minimum, all elements in sub-subparagraphs 62-625.500(2)(b)6.a. through d., F.A.C. The plan shall be re-evaluated annually and updated as necessary;

(8) The applicant shall develop a surveilance program to receive early warning of a potential occurance, including a power outage, that could adversely affect the potable reuse system treatment process and may include the following:

(a) On-line monitoring instrumentation that measures parameter(s) that may indicate a chemical peak resulting from an illicit discharge; and

(b) Notification by the local pretreatment program to the wastewater facility, advanced treatment water facility and public water system of any discharge that results in the release of contaminants above allowable limits.

(9) The applicant shall develop and implement 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.

(10) The applicant shall perform an annual review to address all aspects of the comprehensive pretreatment and pollutant source control program.

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

(a) A summary of all analytical results of influent and effluent and removal efficiencies for the indicator compounds. The indicator compounds and compounds identified in paragraph 62-625.600(8)(f), F.A.C., shall be monitored at a minimum of once every six months.

(b) Whether or not the facility complied with all applicable potable reuse system requirements, and if not, whether any noncompliance was a result of non-domestic discharges;

(c) A summary of all triggers of early warning systems and consequent responses; and

(d) A summary of all enhancements to real-time monitoring and early warning systems.

(12) The development and evaluations of local limits in accordance with Chapter 62-625, F.A.C., 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.

(13) Applicants who do not receive discharges from significant industrial users, as defined in Rule 62-625.200, F.A.C., shall notify the Department within 30 days of learning of a significant industrial user’s intent to discharge to a wastewater facility associated with the potable reuse system.

*Rulemaking Authority 403.861(9), 403.064(18), F.S., Law Implemented 403.852(12), 403.861(7), 403.853(6), 403.861(17), 403.064(18), F.S., History – New xx-xx-xx.*

## 62-565.510 Aquifer Storage and Recovery (ASR) Systems Associated with Potable Reuse Systems.

In addition to the requriements outlined in this chapter, ASR systems associated with potable reuse systems shall also be subject to the requirements of Rule 62-610.466, F.A.C.

*Rulemaking Authority 403.861(9), 403.064(18), F.S., Law Implemented 403.852(12), 403.861(7), 403.853(6), 403.861(17), 403.064(18), F.S., History – New xx-xx-xx.*

## 62-565.520 Off-spec Storage Requirements for Advanced Treatment Water Facilities.

 (1) For an ATWF for which there are alternative reuse or disposal systems permitted, those alternative reuse or disposal systems may be used for the management of off-spec water. For an ATWF for which there are no alternative reuse or disposal systems permitted, a separate, off-line system for storage of off-spec water shall be provided.

 (2) For an ATWF connected to a public water system with the capability of treating to primary and secondary drinking water standards, the storage requirements are as follows:

 (a) Off-spec storage ponds shall have sufficient storage capacity to assure the retention of the off-spec reclaimed water under adverse water conditions and maintenance of equipment. Off-spec storage ponds shall meet the following requirements:

1. A minimum of 30 years of recent climatic data determined by National Centers for Environmental Information shall be used in storage volume determinations.

2. Off-spec storage ponds shall be designed in a manner which allows for the impoundment of rainfall equal to that of the 25-year, 24-hour storm event, as defined by the respective Water Management District, in which the facility is located.

(b) Analytical means of determining off-spec storage requirements shall be used and shall account for all water inputs into the system, including water balance calculations or computer hydrological programs. Analysis shall be based on site specific data.

(c) The methods and assumptions used for determining the off-spec storage requirements shall be included described and justified in the engineering report required in Rule 62-565.570, F.A.C.

(d) For off-spec storage ponds using non-synthetic liners, the permeability, durability, strength, thickness, and integrity of the liner shall be satisfactorily demonstrated for anticipated pressure gradient, climatic conditions, installation and daily operation conditions. A quality assurance/quality control plan which substantiates the adequacy of the liner, and its installation shall be incorporated into the engineering report required in Rule 62-565.570, F.A.C.

(e) For off-spec storage ponds using synthetic liners, the liners shall be installed in accordance with the manufacturer’s specifications and recommendations. Documentation of quality assurance and quality control activities on liner installation along with permeability or seepage test results shall be submitted to the Department prior to the ATWF being placed in operation.

(f) For unlined off-spec storage ponds, a ground water monitoring plan prepared in accordance with Rule 62-520.600, F.A.C., shall be incorporated into the ATWF permit.

(g) Off-spec storage ponds shall provide a minimum three feet of freeboard.

(h) Provisions for the control of algae shall be included in the design, operation, and maintenance and shall be described in the engineering report. Pond design shall also address the control of mosquito breeding habitat. Minimum pond depths (excluding freeboard but including the design operating range) of six feet, with inside bank side slopes steeper than 3:1 (horizontal to vertical), but no steeper than 1:1, are required to discourage growth of rooted aquatic weeds. Maintenance of a minimum pond water depth of 18 inches is required. Routine aquatic weed control and regular maintenance of pond embankments and access areas are required. The use of other depth criteria for mosquito control shall be justified in the engineering report.

(i) Off-spec storage ponds shall be designed and maintained consistent with sound engineering practices to prevent the deliberate introduction of stormwater.

(j) The siting of the off-spec storage ponds shall be addressed in the engineering report in prepared under Rule 62-565.570, F.A.C. Off-spec ponds shall be sited to avoid areas of uneven subsidence, sinkholes, pockets of organic matter or other unstable soils. Ponds used to impound reclaimed water above natural grade shall be designed to prevent failure of the embankment due to hydrostatic forces, seepage or soil piping, wind and wave action, erosion, and other anticipated conditions. Results from field and laboratory tests from an adequate number of test borings and soil samples shall be the basis for computations pertaining to seepage and stability analyses.

(3) For an ATWF that uses storage tanks for storage of off-spec water, the storage requirements are as follows:

(a) Off-spec storage tanks shall have sufficient storage capacity to assure the retention of the off-spec reclaimed water with a minimum of 1.2 times the design flow capacity of the ATWF.

(b) Off-spec storage tanks shall be designed and installed in accordance with the applicable American Water Works Association (AWWA) standard (adopted and incorporated by reference in Rule 62-555.330, F.A.C., effective May 5, 2014).

(c) Off-spec storage tanks shall be checked at least annually to ensure that hatches are closed, and screens are in place; shall be cleaned at least once every five years to remove bio-growths, calcium or iron/manganese deposits, and sludge from inside the tanks; and shall be inspected at least once every five years for structural and coating integrity by personnel under the responsible charge of a professional engineer licensed in Florida.

*Rulemaking Authority 403.861(9), 403.064(18), F.S., Law Implemented 403.852(12), 403.861(7), 403.853(6), 403.861(17), 403.064(18), F.S., History – New xx-xx-xx.*

## 62-565.530 Pathogen Requirements for Potable Reuse Systems.

(1) The applicant must provide reasonable assurance that the treatment techniques being used reduce the combined health risk of acute gastroenteritis for consumers drinking the water to less than 1 in 10,000 annually. The treatment technique requirements consist of installing and properly operating filtration and disinfection water treatment processes that reliably achieve:

(a)For *Giardia lamblia* cysts: a 12-log reduction between the raw wastewater and the finished drinking water with at least 50% reduction achievedbetween apoint where the source water is not subject to recontamination and a point downstream;

(b) For *Cryptosporidium* oocytes: a 12-log reduction o between the raw wastewater and the finished drinking water with at least 50% reduction achievedbetween apoint where the source water is not subject to recontamination and a point downstream; and

(c) For enteric viruses (including rotaviruses and noroviruses): a 14-log reduction between the raw wastewater and the finished drinking water with at least 50% reduction achievedbetween apoint where the source water is not subject to recontamination, exposed during treatment to the open atmosphere and a point downstream.

(2) For the purpose of meeting the requirements of paragraph (1) above, log reduction credits for every point of treatment barrier from the domestic wastewater treatment facility, environmental buffer, ATWF and PWS may be included in calculation of the total log reduction credits achieved for each of *Giardia lamblia* cysts, *Cryptosporidium* oocytes*,* and enteric viruses*.* 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.

(3) An applicant shall propose values for log reduction value credits in its engineering report based on engineering analysis, pilot studies, available research, and guidance.

(4) Membrane filtration systems, including microfiltration, ultrafiltration, nanofiltration, reverse osmosis, or alternative membrane treatment technologies may be awarded additional pathogen log reduction value credits by conducting a Department-approved direct integrity test in accordance with the U.S. Environmental Protection Agency’s 2005 Membrane Filtration Guidance Manual, (adopted and incorporated by reference in paragraph 62-565.300(1)(c), F.A.C., effective [date]). The Department may approve credits if the results of direct integrity tests and other associated technical data support the proposed direct integrity tests suitability and sensitivity for the proposed pathogen and membrane filtration technology. For example, this may take the form of a daily pressure decay test for *Cryptosporidium* and *Giardia* removal by ultrafiltration (an example of a direct integrity test), and online monitoring of sulfate removal by reverse osmosis as a surrogate parameter for enteric virus removal.

(5) Ultraviolet (UV) systems shall comply with the treatment and operational requirements set forth in Rules 62-565.560, 62-565.570, and 62-565.580, F.A.C.

(6) During full-scale operation of the oxidation process designed pursuant to subsection 62-565.560(7), F.A.C., the applicant shall continuously monitor the surrogate and operational parameters established pursuant to paragraphs 62-565.560(7)(c) or 62-565.560(7)(d), F.A.C. The applicant shall implement, in full-scale operation, the oxidation process, as designed pursuant to subsection 62-565.560(7), F.A.C.

(7) Potable Reuse Systems with significant deficiencies related to the treatment process shall not receive the log reduction value credits in subparagraph 62-550.817(2)(b)2., F.A.C., without Department approval. The Department will notify the permittee of such systems in writing of any Department-assigned log reduction value credits that are lower than the credits shown in subparagraph 62-550.817(2)(b)2., F.A.C. The Department will assign reductions in log reduction value credits according to the criteria in the Department’s “Compliance Manual for Subpart H systems”, (adopted and incorporated by reference in paragraph 62-565.300(1)(f), F.A.C., effective [date]).

(8) Potable Reuse Systems shall meet the requirements of subsections 62-565.530(1)(a) through (c), F.A.C., by:

(a) Determining CTcalc, as defined in Rule 62-565.200, F.A.C.;

(b) Estimating log-inactivation for the CTcalc for *Giardia lamblia* cysts and enteric viruses; and

(c) Showing that 95% of the daily measurements taken each month meet or exceed the minimum log-inactivation disinfection requirements set forth in Rule 62-565.530, F.A.C.

(9) A violation of the requirement set forth in Rule 62-565.530, F.A.C., is a treatment technique violation.

(10) If, in any daily measurement, log-inactivation levels are insufficient to meet the requirements established in this rule, the operator shall take immediate steps to increase disinfection levels.

(11) The permittee must use a minimum of three separate critical control points for pathogen reduction including one disinfection control point and one filtration control point.

*Rulemaking Authority 403.861(9), 403.064(18), F.S., Law Implemented 403.852(12), 403.861(7), 403.853(6), 403.861(17), 403.064(18), F.S., History – New xx-xx-xx.*

## 62-565.540 Monitoring Requirements for Advanced Treatment Water Facilities.

(1) In addition to the surrogate and operational parameters monitoring requirements in paragraphs 62-565.560(7)(c) and (d), F.A.C., the minimum requirements for sampling and monitoring are specified in Table 1 below:

Table 1: Monitoring Frequencies for ATWFs

|  |  |  |  |
| --- | --- | --- | --- |
| **Contaminant or Disinfectant Residual Group** | **Frequency of Routine Monitoring** | **Sample Type** | **Monitoring Location** |
| Flow | Continuous | In-line meter | ATWF Influent, Internal Outfall, and ATWF Effluent |
| pH | Continuous | In-line meter | ATWF Influent, Internal Outfall, and ATWF Effluent |
| Temperature | Continuous | In-line meter | ATWF Influent, Internal Outfall, and ATWF Effluent |
| CBOD5 | Daily | Grab | ATWF Influent  |
| TSS | Daily | Grab | ATWF Influent, Internal Outfall, and ATWF Effluent |
| total organic carbon (TOC) | Daily | Grab | ATWF Influent, Internal Outfall, and ATWF Effluent |
| total organic halogen (TOX) | Weekly | Grab | ATWF Influent, Internal Outfall, and ATWF Effluent |
| *Giardia lamblia, Cryptosporidium,* and enteric viruses |  Monthly | Grab | ATWF Influent and ATWF Effluent |
| Total coliform | Daily | Grab | ATWF Effluent |
| E. coli | Daily | Grab | ATWF Effluent |
| Nitrate and Nitrite | Monthly | Composite | ATWF Effluent |
| Inorganics1 | Monthly | Composite | ATWF Effluent |
| Chlorine and/or Chloramines2 | Continuous | In-line meter | ATWF Effluent |
| Sodium | Monthly | Grab | ATWF Influent, Internal Outfall, and ATWF Effluent |
| Chlorine Dioxide3 | Continuous | In-line meter | ATWF Effluent |
| Chlorite3 | Daily | Grab | ATWF Effluent |
| Bromate4 | Daily | Grab | ATWF Effluent |
| Volatile Organics1 | Monthly | Grab | ATWF Effluent |
| Synthetic Organics1 | Monthly | Composite | ATWF Effluent |
| Secondary Contaminants1 | Monthly | Composite | ATWF Effluent |
| Gross alpha, Radium-226 and Uranium1 | Monthly | Grab | ATWF Effluent |
| Beta Particle and Photon Radioactivity1 | Monthly | Grab | ATWF Effluent |
| Ultraviolet Dose5 | Continuous | In-line meter | Internal Outfall |
| Ultraviolet Transmission at 254 nanometers5  | Continuous  | In-line meter | Internal Outfall |
| Ultraviolet Light Intensity 5 | Continuous | In-line meter | Internal Outfall  |
| Ozone4 | Continuous  | In-line meter | ATWF Effluent  |
| Perfluorooctanoic Acid (PFOA)6 | Quarterly | Grab | ATWF Influent and ATWF Effluent |
| Perfluorooctane Sulfonic Acid (PFOS)6 | Quarterly | Grab | ATWF Influent and ATWF Effluent |
| Perfluorohexane Sulfonate (PFHxS)6 | Quarterly | Grab | ATWF Influent and ATWF Effluent |
| Perfluorononanoic Acid (PFNA)6 | Quarterly | Grab | ATWF Influent and ATWF Effluent |
| Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)6 | Quarterly | Grab | ATWF Influent and ATWF Effluent |
| Perfluorobutane Sulfonate (PFBS)6 | Quarterly | Grab | ATWF Influent and ATWF Effluent |
| Hazard Index6,7 | Quarterly | Calculated | ATWF Influent and ATWF Effluent |

1Inorganics, Volatile Organics, Synthetic Organics, Secondary Contaminants, Gross alpha, Radium-226 and Uranium, and Beta Particle and Photon Radioactivity shall be as defined in Chapter 62-550, F.A.C.

2For those systems using chlorine or chloramines for disinfection.

3For those systems using chlorine dioxide for disinfection.

4For those systems using ozone for disinfection.

5For those systems using ultraviolet for disinfection.

6Per- and Polyfluoroalkyl Substances (PFAS) analytical measurements shall be performed using EPA Method 533 or 537.1 or other department-approved method. Field testing, sample collection and preservation, laboratory testing, including quality control procedures, and all record keeping shall comply with Chapters 62-160 and 62-550, F.A.C. The analytical test methods shall be sufficiently sensitive to ensure department-established method detection limits and practical quantitation limits are met.

7The Hazard Index (HI) is made up of a sum of fractions. Each fraction compares the level of each PFAS measured in the water to the highest level determined not to have risk of health effects.

Step 1. Divide the measured concentration of PFHxS by the health-based value of 9 ng/L.

Step 2. Divide the measured concentration of PFNA by the health-based value of 10 ng/L.

Step 3. Divide the measured concentration of HFPO-DA by the health-based value of 10 ng/L.

Step 4. Divide the measured concentration of PFBS by the health- based value of 2000 ng/L.

Step 5. Add the ratios from steps 1-4 together using the following equation:

Hazard Index = ([PFHxS]/ [10 ng/L]) + ([PFNA]/[10 ng/L]) + ([HFPO-DA]/[10 ng/L]) + ([PFBS] /[2000 ng/L])

Step 6. To determine HI compliance, repeat steps 1-5 for each sample collected in the past year and calculate the average HI for all the samples taken in the past year.

(2) ATWFs discharging to surface waters of the state shall also be subject to the applicable monitoring requirements established in Chapters 62-302, and 62-304, F.A.C.

(3) For *Giardia lamblia*, *Cryptosporidium*, and enteric viruses, if there are no detects in the advanced treated water for two years, the permittee may notify the Department of the applicant’s intent to transition to bi-annual monitoring.

(4) With the exception of radionuclides, for the parameters listed in Table 1 which have an established Maximum Contaminant Level (MCL), if there are no exceedances of one half of the established MCL in finished advanced treated water samples for one year, the permittee may notify the Department of the applicant’s intent to transition to quarterly sampling.

(5) With the exception of radionuclides, for the parameters listed in Table 1 which have an established Maximum Contaminant Level (MCL), if there are no exceedances of one half of the established MCL in finished advanced treated water samples for two years following the transition to quarterly sampling, the permittee may notify the Department of the applicant’s intent to transition to bi-annual sampling.

(6) For the radionuclides identified in Table 1, if there are no exceedances of one half of the established MCL in finished advanced treated water samples for one year, the permittee may notify the Department of the applicant’s intent to transition to quarterly sampling.

(7) For the radionuclides identified in Table 1, if there are no exceedances of one half of the established MCL in finished advanced treated water samples for one year following the transition to quarterly sampling, the permittee may notify the Department of the applicant’s intent to transition to annual sampling.

(8) For the PFAS and HI identified in Table 1, if there are no exceedances of one half of the established MCL for all PFAS and HI constituents in finished advanced treated water samples for one year, the permittee may notify the Department of the applicant’s intent to transition to triennial sampling.

(9) For the PFAS and HI identified in Table 1, if there are no exceedances of the MCL for all PFAS and HI constituents in finished advanced treated water samples for one year, the permittee may notify the Department of the applicant’s intent to transition to annual sampling.

(10) If a permittee is on reduced monitoring for any of the parameters identified in subsections 62-565.540(3)-(9), F.A.C., and does not meet the reduced monitoring criteria for any sampling event, the permittee shall resume monitoring in accordance with the frequencies outlined in Table 1 for that parameter.

(11) Continuous Monitoring of pH.

(a) The permittee shall maintain the pH of reclaimed water and advanced treated water within the range set forth in the ATWF permit, except excursions from the range are permitted subject to the following limitations:

(1) The total time during which the pH values are outside the required range of pH values shall not exceed 7 hours and 26 minutes in any calendar month; and

(2) No individual excursion from the range of pH values shall exceed 60 minutes.

(b) The Department may adjust the requirements set forth in paragraph (a) of this subsection with respect to the length of individual excursions from the range of pH values, if a different period of time is appropriate based upon the treatment system, plant configuration or other technical factors.

(c) An *excursion* is an unintentional and temporary incident in which the pH value of reclaimed water or advanced treated water exceeds the range set forth in the advanced treatment water facility permit.

(12) The Department shall allow use of continuous monitoring equipment, for those parameters identified in Table 1 requiring a grab sample, if all of the following conditions are met:

(a) The applicant provides an affirmative demonstration that the proposed monitoring equipment will provide a means for controlling the process that is at least as reliable and accurate as a grab sample.

(b) The proposed monitoring equipment will generate a continuous reading.

(c) The proposed monitoring equipment will be equipped with an automated data logging or recording device.

(d) The proposed monitoring equipment shall be calibrated according to the requirements of Chapter 62-160, F.A.C.

(e) The proposed monitoring equipment shall be maintained according to the manufacturer’s operation and maintenance instructions.

(f) The use of the proposed monitoring equipment and setpoints associated with use of the proposed monitoring equipment shall be fully incorporated into the operating protocol.

(13) In addition to the monitoring requirements established in subsection 62-565.540(1), F.A.C., ATWFs shall conduct semi-annual sampling of the reclaimed water entering and exiting the ATWF for the toxic pollutants that have been identified under 40 CFR Part 122, Appendix D, (adopted and incorporated by reference in paragraph 62-620.100(3)(b), F.A.C., effective October 8, 2021).

(14) Monitoring Locations.

(a) All samples shall be collected in accordance with the monitoring locations identified in table 1 above.

(b) For influent sampling, a minimum of one sample shall be taken at every entry point to the treatment system that is representative of each source before treatment. If an ATWF draws water from more than one source and the sources are combined before treatment, samples shall be taken at an entry point to the treatment system during periods of typical operating conditions (e.g., when water is representative of the sources being used).

(c) For effluent sampling, a minimum of one sample shall be taken at every discharge point from the treatment system that is representative of the advanced treated water leaving the ATWF prior to blending with other sources of water. For ATWFs involving high-level disinfection, compliance with the TSS limitations shall be achieved, and sampled for, after filtration and before application of the disinfectant.

(d) For internal outfall sampling, a minimum of one sample shall be taken at the internal outfall or outfalls identified in the Department approved Operating Protocol.

(e) The location of monitoring sites shall meet the requirements set forth in subsection 62-565.500(11), F.A.C.

(f) Sampling shall demonstrate compliance with the technology-based effluent limitation, pathogen reduction, emerging constituent, and site-specific indicator and surrogate requirements set forth in this chapter.

(g) Samples shall be taken at the monitoring sites specified in the permit, unless the permittee receives prior approval from the Department to use an alternate site where a represenatitve sample can be collected.

(14) Grab samples shall be collected during periods of minimal treatment plant pollutant removal efficiencies. The actual time and flow conditions during which such samples are taken shall be recorded.

*Rulemaking Authority 403.861(9), 403.064(18), F.S., Law Implemented 403.852(12), 403.861(7), 403.853(6), 403.861(17), 403.064(18), F.S., History – New xx-xx-xx.*

## 62-565.550 Reporting Requirements for Advanced Treatment Water Facilities.

(1) As required by the permit, the permittee shall submit monitoring results on Form 62-565.300(2)(d), (adopted and incorporated by reference in paragraph 62-565.300(2)(d), F.A.C., effective [date]), as follows:

(a) Monitoring results shall be electronically submitted using the Department’s Business Portal at http://www.fldepportal.com/go/. Reports shall be submitted by the 28th day of the month following the month of operation; and,

(b) Monitoring Reports shall be submitted for each required monitoring period including periods of no discharge.

(2) The ATWF permittee shall be responsible for reporting the log-reduction values for the pathogen inactivation requirements established in Rule 62-565.530, F.A.C., for the potable reuse system. If the pathogen inactivation requirements are being met across the entirety of the potable reuse system, the ATWF permittee shall submit analytical results from the other members entered into the joint operations plan to demonstrate compliance with the aforementioned requirements.

*Rulemaking Authority 403.861(9), 403.064(18), F.S., Law Implemented 403.852(12), 403.861(7), 403.853(6), 403.861(17), 403.064(18), F.S., History – New xx-xx-xx.*

## 62-565.560 Pilot Testing Program.

(1) Pilot testing is required for all ATWF projects.

(2) Approval of the pilot testing plan of study shall be obtained before the pilot testing program commences. The request for the pilot testing plan of study approval shall, at a minimum, describe and establish the monitoring and reporting requirements for the pilot testing program. Applicable portions of the detailed plan of study shall be signed and sealed by a professional engineer or professional geologist registered in the State of Florida. The ensuing plan of study shall be approved in writing by the Department and shall be binding upon the Department and the applicant. During the course of the study, the plan of study may be amended by written agreement between the Department and the applicant. The applicant shall coordinate with the Department during the study and shall present the study results to the Department. Failure to comply with the plan of study may result in the Department’s rejection of some or all of the data.

(3) The plan of study shall:

(a) Address the requirements of this rule, as well as the following:

(b) Include a schedule, with interim milestones, for the completion of the pilot study;

(c) Include the results of the Source Water Evaluation;

(d) Identify and establish treatment and disinfection processes;

(e) Identify proposed treatment processes to meet reclaimed water limitations;

(f) Identify and evaluate emerging constituents and surrogates in the reclaimed water and removal by the proposed treatment process based on the results of the Source Water Evaluation;

(g) Identify and evaluate reducing target pathogens and surrogates from the treatment processes;

(h) Identify mechanism of pathogen removal by treatment processes;

(i) Evaluate how the treatment processes will achieve primary and secondary drinking water standards;

(j) Identify and evaluate challenges related to treatment processes;

(k) Identify operational monitoring parameters used to measure the performance throughout the treatment processes;

(l) Identify critical control points for improved process control and system reliability;

(m) Evaluate and estimate cost of the operation and maintenance and conceptual site plan; and

(n) The plan of study shall describe the monitoring and reporting requirements for the pilot testing program.

(4) Pilot testing shall be performed using reclaimed water. The pilot testing program shall:

(a) Meet the requirements of Rules 62-565.500, .510, .520, and .530, F.A.C.;

(b) Ensure that all sampling results are at or below the maximum contaminant levels (MCLs), and within the allowable residual disinfectant levels in accordance with Rule 62-550.310, F.A.C.;

(c) Meet the treatment technique requirements established in Rules 62-565.500 and .530, F.A.C.;

(d) Evaluate the suitability of the reclaimed water for potable reuse and identify critical control points for improved process control and treatment reliability, based on the requirements of this chapter; and

(e) Provide an affirmative demonstration that the finished drinking water will be of sufficient quality to protect public health and environmental quality and that the proposed treatment and disinfection processes in the potable reuse system are capable of meeting the treatment and disinfection requirements in Chapters 62-550, 62-555, 62-565, 62-600, and 62-610, F.A.C. For direct and indirect potable reuse systems, an evaluation of enteric viruses, *Cryptosporidium*, and *Giardia* *lamblia* is required in order to provide reasonable assurance the potable reuse system is capable of producing a reclaimed water that meets the requirements of Rule 62-565.530, F.A.C.

(f) Include an evaluation of constituents in the influent that may be difficult to remove or are precursors to disinfection byproduct formation. Constituents evaluated must include those believed present that are listed in 40 CFR Part 122, Appendix D, (adopted and incorporated by reference in paragraph 62-620.100(3)(b), F.A.C., effective October 8, 2021).

(g) Include a determination of the mutagenicity of the reclaimed water, as determined by the results of a biological risk assessment approved by the Department.

(h) Include a comparison of the quality of water produced in the pilot study to other sources of drinking water currently used in the area.

(5) The pilot testing program shall accumulate a minimum of twelve months of data for the final treatment design.

(6) Upon request by the applicant, and subsequent approval by the Department, the requirements of a pilot testing program shall be altered as follows:

(a) A reduction in the duration or scope of the pilot testing program if the following conditions are met:

1. The applicant provides a detailed plan of study for the Department’s review and obtains approval before initiating the pilot testing program.

2. Applicable portions of the detailed plan of study are signed and sealed by a professional engineer or professional geologist registered in the State of Florida, where required by Chapter 471 or 492, F.S.

3. The detailed plan of study provides reasonable assurance 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 requirements of this chapter, and to demonstrate the public health and environmental safety of the advanced treated water to be produced. Results of previous pilot testing programs, use of commercially proven technologies, available research and guidance, and operating experience at similar water reclamation and reuse projects may be used as part of the demonstration.

(b) Upon request by the applicant, and subsequent approval by the Department, an elimination of the requirement to conduct a pilot testing program shall be authorized if the following conditions are met:

1. The applicant provides a detailed source water characterization demonstrating that there are no constituents in the source water that will interfere with or pass through the selected treatment technology used in a comparable potable reuse system that has been piloted or put into commercial operation.

2. Applicable portions of the detailed plan of study are signed and sealed by a professional engineer or professional geologist registered in the State of Florida, where required by Chapter 471 or 492, F.S.

3. The applicant provides reasonable assurance to demonstrate the ability of the proposed treatment processes to meet the requirements in this chapter, and to demonstrate the public health and environmental safety of the advanced treated water to be produced. Results of previous pilot testing programs, use of commercially proven technologies, available research and guidance and operating experience at similar projects may be used as part of the demonstration.

(7) For advanced treatment of water using microfiltration/ultrafiltration, reverse osmosis, and an oxidation treatment process, the applicant shall:

(a) 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 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), (adopted and incorporated by reference in paragraph 62-565.300(1)(d), F.A.C., effective [date]); and

2. The membrane produces a permeate with no more than five percent (5%) of the sample results having TOC concentrations greater than 0.5 mg/L, as verified through monitoring no less frequent than weekly.

(b) For the reverse osmosis treatment process, provide reasonable assurance that on-going performance monitoring (e.g., conductivity or TOC) will detect whether the integrity of the treatment process has been compromised. The pilot testing 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 detect when the integrity of the treatment process has been compromised.

(c) Provide reasonable assurance that a sufficient oxidation process has been designed for implementation. To demonstrate this, the applicant shall:

1. Select a total of at least nine indicator compounds based on the Source Water Evaluation, with at least one from each of the functional groups in subparagraphs a. through k. below.

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 subparagraph 1. such that removal is no less than:

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

b. 0.3-log (50 percent) for each indicator compound representing the functional groups in subparagraphs 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 subparagraphs 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 subparagraphs 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 paragraph (7)(c) of this rule, is identified that indicates when the process may no longer meet the criteria established in subparagraph (7)(c)2. of this rule.

4. Conduct testing that includes confirmation of the findings of the occurrence study in subparagraph (7)(c)1. and provides evidence that the requirements of subparagraphs (7)(c)2. and 3. of this rule 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 subparagraph (7)(c)1. of this rule. The applicant shall submit a testing protocol, as part of the plan of study in accordance with subsection (3) 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), an applicant may conduct testing demonstrating that the oxidation process will provide no less than 0.5-log (69 percent) reduction of 1,4-dioxane and a 1.2-log (94 percent) reduction of [N-Nitrosodimethylamine](https://www.bing.com/ck/a?!&&p=a3cfa76feec42241JmltdHM9MTcxNzAyNzIwMCZpZ3VpZD0yMWQ5MDE5My02Y2M4LTY0OTUtM2M2NS0xMzQzNmQxZTY1ZGImaW5zaWQ9NTIzMA&ptn=3&ver=2&hsh=3&fclid=21d90193-6cc8-6495-3c65-13436d1e65db&psq=NDMA&u=a1aHR0cHM6Ly9lbi53aWtpcGVkaWEub3JnL3dpa2kvTi1OaXRyb3NvZGltZXRoeWxhbWluZQ&ntb=1) (NDMA) and that the oxidation process will meet the Florida Department of Health (DOH) Health Advisory Level (HAL) (effective August 4, 2016, https://www.floridahealth.gov/environmental-health/drinking-water/\_documents/hal-list.pdf#search=%22dioxane%22 is hereby adopted and incorporated by reference) for 1, 4-dioxane of 0.35 ug/L.

(1) An applicant shall submit a testing protocol in accordance with subsection 62-565.560(3), F.A.C., 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 and NDMA, to demonstrate the proposed oxidation process will achieve the minimum 0.5-log and 1.2-log reductions and the HAL for 1, 4-dioxane under the proposed oxidation process's normal full-scale operating conditions.

(2) An applicant shall establish surrogate and/or operational parameters that reflect whether the minimum 0.5-log 1,4-dioxane and 1.2-log NDMA reduction design criteria and HAL for for 1, 4-dioxane are being met. At least one surrogate or operational parameter shall be capable of being monitored continuously, recorded, and have associated alarms that indicate when the process is not operating as designed.

(e) During the full-scale operation of the oxidation process designed pursuant to subsection (c) or (d), an applicant shall continuously monitor the surrogate and/or operational parameters established pursuant to subsection (c)3.d or (d)2, as applicable. An applicant shall implement, in full-scale operation, the oxidation process as designed pursuant to subsection (c) or (d).

(8) For advanced treatment of water using ozonation immediately followed by biologically activated carbon (ozone/BAC), the applicant shall:

(a) Affirmatively demonstrate that the ozone/BAC treatment process meets the requirements in Chapters 62-550, 62-555, and 62-565, F.A.C.;

(b) Select an ozonation treatment process:

1. With a design O3:TOC greater than or equal to 1.5;

2. That can achieve a minimum operational O3:TOC greater than or equal to 0.8;

3. That can maintain an ozone residual of no less than 0.05 mg/L at the beginning of the ozone contactor; and

4. That can maintain a bromate level that meets the requirements in Chapters 62-550 and 62-555, F.A.C.

(c) Select, for the ozonation process, at least one surrogate or operational parameter capable of being monitored continuously, recorded and have associated alarms that indicate when the ozonation process is not operating as designed during full-scale operation.

(d) Continuously monitor the ozonation process feedwater for nitrite.

(e) Design and operate the ozone/BAC treatment process to provide no less than 1.0 log reduction measured across:

 1. The ozonation process for two of the following indicators selected by the applicant based on the Source Water Evaluation: acesulfame, atenolol, benzotriazole, iopromide, primidone, galaxolide, benzophenone, ibuprofen, N,N-diethyl-meta-toluamide (DEET), diltiazem, carbamazepine and sulfamethoxazole, or alternative indicators selected by the applicant and approved by the Department; and

 2. The BAC process for two of the following indicators selected by the applicant based on the Source Water Evaluation: formaldehyde, acetaldehyde, dimethyl phthalate, fluoxetine, ibuprofen, methyl tert-butyl ether, ammonia, methanol, glyphosate, diethyl phthalate, phenol, carbon disulfide and acrolein, or alternative indicators selected by the applicant and approved by the Department-.

(f) Design and operate ozone/BAC biofilter(s) with an empty bed contact time of at least 15 minutes. A different empty-bed contact time may be used if it can be demonstrated to achieve the reduction of the indicators set forth in subsection (e) above at a pilot scale as part of the design of the BAC process. The biofilter shall use granular activated carbon or anthracite medium unless pilot testing supports alternative media.

(g) Select, for the biologically activated carbon process, at least one surrogate or operational parameter capable of being monitored continuously, recorded and have associated alarms that indicate when the biologically activated carbon process is not operating as designed during full-scale operation.

(9) The Department shall approve an alternative treatment process other than that specified in subsections 62-565.560(7) and (8), F.A.C., if all of the following conditions are met:

(a) The applicant affirmatively demonstrates that the alternative treatment process meets the requirements in Chapters 62-550, 62-555, 62-565, and 62-610, F.A.C.;

(b) The applicant affirmatively demonstrates that sufficient advanced treatment processes have been designed for removing a broad range of known and unknown contaminants. To demonstrate this, the applicant shall:

1. Develop a candidate list of indicator compound screening from the Source Water Evaluation that accounts for expected chemical emissions from local industry and research efforts characterizing source water. Indicator compounds shall be based on:

a. The indicator compound shall have a median concentration at least five times greater than its MDL to demonstrate a high percentage of removal.

b. The indicator shall have a detection frequency greater than 80 percent in the source water to ensure that its absence reflects treatment efficacy rather than a random or seasonal occurrence in the source water

c. Sufficiently precise and sensitive analytical methods for the compound shall be selected based on EPA approved methods, previous pilot testing programs, use of commercially proven technologies, available research and guidance and operating experience at similar projects.

d. The indicator compound shall be removable by the process(es) it is intended to monitor.

e. The indicator shall be moderately removable by the targeted process, such that 75 percent removal is feasible only when the process is functioning as designed.

f. There shall be at least one indicator that specifically monitors each chemical treatment barrier. There shall also be at least one system indicator that is partially removed by each treatment barrier, but only removed to a target of at least 75 percent if all treatment barriers are functioning as intended.

g. Testing shall include a recommendation of indicator compounds for each facility on a case-by-case basis for the Department’s approval.

(c) The applicant shall establish surrogate and/or operational parameters for the alternative treatment process that reflect whether the minimum removal efficiencies are maintained to meet the requirements in Chapters 62-550, 62-555, and 62-565, F.A.C.; and

(d) At least one surrogate or operational parameter for each unit process is capable of being monitored continuously, recorded, and have associated alarms that indicate when the process is not operating as designed during full-scale operation.

(10) Results of previous pilot testing programs, use of commercially proven technologies, available research and guidance and operating experience at similar projects may be used as part of the demonstration for this rule.

(11) The applicant shall evaluate alternate 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 an advanced treatment water facility.

(12) The pilot testing reports shall be submitted electronically to the Department at the Division of Water Resource Management, Source and Drinking Water Program at xxxx@floridadep.gov. The Department reserves the right to request hard copies of the report or portions of the report.

*Rulemaking Authority 403.861(9), 403.064(18), F.S., Law Implemented 403.852(12), 403.861(7), 403.853(6), 403.861(17), 403.064(18), F.S., History – New xx-xx-xx.*

## 62-565.570 Engineering Report.

(1) An engineering report, including the source water evaluation and results of the pilot testing program, shall be submitted in support of a permit application for an ATWF. The engineering report will serve as the preliminary design report. An Engineering report shall include the following items described in subsections (2) through (5) of this rule.

(2) Engineering Report. Engineering reports prepared under the responsible charge of one or more Florida-licensed professional engineers in accordance with Chapter 471 or 492, F.S., shall be signed, sealed, and dated by the professional engineer(s) in responsible charge. Preliminary design reports shall contain the following information where pertinent:

(a) A brief description of the project and its purpose and an estimate of the cost to construct the project;

(b) A description of the existing PWS and the wastewater treatment facility and discussion of the impact that the project will have on the existing facilities;

(c) The name/location of all water sources entering the ATWF, and design and actual flow, if applicable, on an annual average daily flow basis for each water source;

(d) The name/location of all facilities entered into the Joint Operations Plan, the existing design capacity of each facility, the existing type of treatment provided at each facility, and the number and capacity of existing finished-water pumps;

(e) The name/location, type, and useful capacity of existing off-spec and finished-water storage ponds and tanks;

(f) Documentation that existing potable water wells meet applicable construction requirements in Chapter 62-532, F.A.C.;

(g) Discussion of sanitary hazards located within 500 feet of both potable water and ASR wells or located less than 500 feet upstream of surface water intakes;

(h) A description of surface water intake structures, impoundments, and reservoirs;

(i) An assessment of the effects from indirect potable reuse on ground water and surface water levels, ground water and surface water quality, and uses of property in the area;

(j) Documentation of written notice to public water supply utilities and the appropriate approved county health department for indirect potable reuse;

(k) Documentation of public education and public participation activities to be implemented that are associated with the potable reuse system;

(l) The following ATWF treatment process information:

1. The total capacity of all water sources and treatment facilities connected to an ATWF;

2. The findings of a Source Water Evaluation in accordance with the requirements of subsection (3) of this rule, including a description of the source water for potable reuse at the point(s) of withdrawal;

3. Discussion of applicable treatment and disinfection technique requirements, in Rule 62-565.500, .510, .520, .530, .540 F.A.C.;

4. Discussion of Hazard Analysis;

5. Discussion of critical control points, surrogate and operational parameters, and monitoring points; and

6. Discussion of operation and control strategies.

(m) An evaluation of the adequacy of an ATWF to meet applicable standards and requirements given the quality of raw water from all water sources for the plant;

(n) The design daily operating period for the ATWF;

(o) A flow diagram and water balance showing all ATWF operations and processes (including residuals handling operations), chemical application points, water pumping facilities, bypass arrangements, and recycle flows;

(p) Blending ratio of volume of advanced treated water received by the public water system to the volume of other source waters received at the public water system;

(q) For ATWFs that include disinfection, discussion of the design level of *Cryptosporidium*, *Giardia lamblia*, or virus inactivation to be achieved, if applicable, and the design minimum CT or ultraviolet dose if chemical or ultraviolet disinfection will be used to achieve *Cryptosporidium*, *Giardia lamblia*, or virus inactivation. Refer to Rule 62-565.530, F.A.C.;

(r) The design dose of water treatment chemicals;

(s) 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 the ATWF;

(t) An evaluation of the types, quantities, characteristics, and disposal method of residuals generated by the ATWF;

(u) Sizes, capacities, retention times, loading rates, schematic diagrams, and other design parameters and details sufficient to demonstrate that an ATWF (including chemical application and residuals handling) and water pumping will comply with applicable requirements of this chapter, including applicable requirements in the engineering references listed in Rules 62-555.330 and 62-565.330, F.A.C. The schematic diagrams of an ATWF, including chemical application, shall show proper air gaps between drains or overflows from such processes and sanitary or storm sewers;

(v) Assurance of compliance with the odor control requirements referenced under subsection 62-555.320(9), F.A.C.;

(w) For storage tank systems subject to regulation under Chapter 62-761, F.A.C., assurance that the storage tank systems will meet applicable performance standards in Chapter 62-761, F.A.C.;

(x) Discussion of housing and safety or protective equipment for new or altered chemical application facilities;

(y) The following advanced treated water storage information: the name/location and type of storage tanks or ponds, the useful capacity of storage tanks or ponds including supporting calculations, schematic diagrams, and other design parameters and details sufficient to demonstrate compliance with applicable requirements of this chapter, including applicable requirements in the engineering references listed in Rules 62-555.330 and 62-565.330, F.A.C.;

(z) Discussion of ATWF process piping conveying either raw, partially treated, or advanced treated water, and the information in subparagraphs 1. and 2., below.

1. Hydraulic analyses or other justification for the size of new or altered pipes that convey reclaimed water.

2. Discussion of color coding or marking of new or relocated pipes that convey reclaimed water. Refer to paragraph 62-555.320(10)(b) and subsection 62-555.320(21), F.A.C.;

(aa) The project site information in subparagraphs 1. through 2., below.

1. A site plan showing the approximate location of the ATWF; structures used to treat, store, or handle advanced treated water, water treatment chemicals, or storage of residuals prior to disposal; structures housing water pumping or treatment processes, including chemical application systems; and pipes that convey reclaimed water, including ATWF process piping, conveying either raw, partially treated, or advanced treated water. The site plan shall indicate sizes of pipes that convey reclaimed water and approximate locations of meters, valves, critical control points, monitoring points, and blow-offs; approximate locations of interconnections between potable reuse system components; and approximate dimensions and elevations of structures.

2. Discussion of approximate ground water elevations in relation to subsurface structures.;

(bb) A description of materials that will be used for potable reuse system components and documentation that the materials and components will comply with the following standards, regulations, or requirements:

1. The American Water Works Association standards (adopted and incorporated by reference in Rule 62-555.330, F.A.C., effective May 5, 2014), if applicable. The Department shall allow the use of pipe and appurtenances that do not conform to applicable American Water Works Association (AWWA) standards (adopted and incorporated by reference in Rule 62-555.330, F.A.C., effective May 5, 2014), only if ATWF permit applicants provide documentation showing that the alternate pipe and appurtenances provide strength, durability, reliability, and public health protection at least equal to that provided by pipe and appurtenances that conform to applicable AWWA standards.

2. Newly installed or constructed potable reuse system components that come into contact with advanced treated water or water treatment chemicals shall conform to the applicable standards, regulations, or requirements referenced in paragraph 62-555.320(3)(b), F.A.C., and National Science Foundation (NSF) International Standard 61 (adopted and incorporated by reference in Rule 62-555.335, F.A.C., effective August 8, 2003). The Department shall allow exceptions to conformance with these standards, regulations, or requirements only if documentation and assurance are provided in accordance with paragraph 62-555.320(3)(d), F.A.C.

3. The lead use prohibition in Rule 62-555.322, F.A.C., if applicable;

(cc) Discussion of color coding of aboveground piping associated with potable reuse system components;

(dd) A description of electrical systems and provisions for standby power at new or altered ATWF;

(ee) A description of operation and control strategies and instrumentation and control systems, including monitoring or alarm systems, at new or altered ATWF, pumping, or storage facilities. Refer to paragraph, sub-subparagraph, and paragraphs 62-565.560(7)(b), 62-565.560(7)(c)3.d., 62-565.560(7)(d), 62-565.560(8), 62-565.560(9)(d), F.A.C.;

(ff) Discussion of procedures for keeping potable reuse system components in operation, or for minimizing interruptions in the operation of the existing components, including an implementation plan for the surveillance program as required in subsection 62-565.505(8), F.A.C.; and

(gg) Demonstration of sufficient managerial capacity by addressing topics below:

1. Ownership, management, and organization;

2. Master planning;

3. Emergency response planning; and,

4. Customer service.

(3) A 12-month source water evaluation of chemicals or constituents that are known or believed present based on available data, be it analytical data, process knowledge or other reasonable estimation techniques that are listed in Rule 62-565.505, F.A.C., constituents in the reclaimed water that have a primary or secondary drinking water standard, may be difficult to remove, or are precursors to disinfection byproduct formation.

(a) The data used for the source water evaluation shall be representative of the water that will be received by the ATWF.

(b) A source water evaluation shall be completed for permit renewal, upon the addition of a new significant industrial user, upon the modification of an existing industrial user’s permit where effluent limitations have been revised, or upon the revision of the local limits for the wastewater facility that is entered into the Joint Operations Plan.

(4) The findings of a pilot testing program in accordance with the requirements of Rule 62-565.560, F.A.C.

(5) An operating protocol shall be designed to ensure that the advanced treated water being produced at the ATWF is of sufficient quality to meet the requirements established in this chapter. The operating protocol shall address the following:

(a) The criteria used to make continuous determinations of the acceptability of the advanced treated water being produced;

(b)The steps and procedures to be followed by the operator when advanced treated water is produced that does not meet the requirements established in this chapter; and

(c) The steps and procedures to be followed by the operator when the ATWF treatment facility resumes normal operation, and advanced treated water being produced does meet the requirements established in this chapter.

(d) ATWFs utilizing a UV treatment process shall develop and document a UV system performance monitoring program, to be included in the facility’s operating protocol. The UV system performance monitoring program and associated documentation shall include and be updated in the event of changes in any of the following:

1. The operating parameters determined through validation for disinfection or challenge testing;

2. Monitoring locations and frequencies;

3. Sensor calibration procedures and frequencies;

4. Conditions that necessitate diversion of flow to an alternate discharge system; and

5. Corrective actions to be taken in the event the system is found to be operating outside of the parameters specified in the system performance monitoring program or a high-priority alarm event occurs.

(e) ATWFs utilizing a biologically activated carbon filter immediately following an oxidation treatment process shall develop and document a program for managing the microbial community in the filter to prevent a release of filter biomass into other ATWF or PWS processes. The program shall address conditions that necessitate diversion of flow to an alternate discharge system and corrective actions to be taken in the event of filter biomass release. The program shall be included in the facility’s operating protocol.

(6) The ATWF permittee shall review and revise the operating protocol upon each permit renewal and submit to the Department for review in support of a permit application.

(7) The quality of water used for the pilot testing program shall be representative of the water quality that will be the source water for the ATWF.

*Rulemaking Authority 403.861(9), 403.064(18), F.S., Law Implemented 403.852(12), 403.861(7), 403.853(6), 403.861(17), 403.064(18), F.S., History – New xx-xx-xx.*

## 62-565.580 Design and Construction.

(1) ATWFs shall be designed in accordance with sound engineering practice.

(2) A permit for innovative or alternative treatment processes or equipment shall not be issued unless the applicant provides a preliminary design report or design data as as part of the permit application. Supporting information must demonstrate that the process or equipment is capable of consistently and reliably producing advanced treated water meeting applicable standards and requirements. Supporting information shall include the following:

(a) The manufacturer’s technical information;

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

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

(3) Direct or Indirect Advanced Treatment Water Additives.

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

1. NSF International Standard 60, effective 2016, (<http://www.flrules.org/Gateway/reference.asp?No=XXXX)>, is hereby adopted and incorporated by reference.

2. The standards in *Water Chemicals Codex* effective 1982, (<http://www.flrules.org/Gateway/reference.asp?No=XXXX)>, is hereby adopted and incorporated by reference;

3. The standards in *Food Chemicals Codex,* effective 2006, (<http://www.flrules.org/Gateway/reference.asp?No=XXXX)>, is hereby adopted and incorporated by reference.

(b) Newly installed or constructed ATWF components that come into contact with advanced teated water, or water treatment chemicals shall conform to the applicable standards, regulations, or requirements referenced in subparagraphs 1. through 3., below.

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

a. NSF International Standard 61 effective 2020, (<http://www.flrules.org/Gateway/reference.asp?No=XXXX)>, is hereby adopted and incorporated by reference. (adopted and incorporated by reference in Rule 62-555.335, F.A.C., effective August 28, 2003);

b. NSF International Standard 42, effective 2010, (<http://www.flrules.org/Gateway/reference.asp?No=XXXX)>, is hereby adopted and incorporated by reference ;

c. NSF International Standard 44, effective 2021, (<http://www.flrules.org/Gateway/reference.asp?No=XXXX)>, is hereby adopted and incorporated by reference;

d. NSF International Standard 53, effective 2021, (<http://www.flrules.org/Gateway/reference.asp?No=XXXX)>, is hereby adopted and incorporated by reference;

e. NSF International Standard 55, effective 2021, (<http://www.flrules.org/Gateway/reference.asp?No=XXXX)>, is hereby adopted and incorporated by reference;

f. NSF International Standard 58, effective 2021, (<http://www.flrules.org/Gateway/reference.asp?No=XXXX)>, is hereby adopted and incorporated by reference;

g. NSF International Standard 62, effective 2021, (<http://www.flrules.org/Gateway/reference.asp?No=XXXX)>, is hereby adopted and incorporated by reference;

h. Section 6 of NSF International Standard 14 effective 2021, (<http://www.flrules.org/Gateway/reference.asp?No=XXXX)>, is hereby adopted and incorporated by reference; or

i. The Food and Drug Administration’s regulations for indirect food additives as contained in the April 1, 2002, revision of 21 CFR Parts 174 through 189, effective January 31, 2023, (<http://www.flrules.org/Gateway/reference.asp?No=XXXX)>, is hereby adopted and incorporated by reference.

2. Newly installed ion-exchange resins that come into contact with advanced treated water or water treatment chemicals shall be part of an ion-exchange water softener that conforms to NSF International Standard 44 (adopted and incorporated by reference in Rule 62-555.335, F.A.C., effective August 28, 2003) or shall conform to one of the following:

a. NSF International Standard 61 effective 2022, (<http://www.flrules.org/Gateway/reference.asp?No=XXXX)>, is hereby adopted and incorporated by reference;

b. The Food and Drug Administration’s regulations for secondary direct food additives from ion-exchange resins as contained in the April 1, 2002, revision of 21 CFR Part 173.25, effective January 31, 2023, (<http://www.flrules.org/Gateway/reference.asp?No=XXXX)>, is hereby adopted and incorporated by reference.

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

a. All cement, admixtures, form release agents, curing compounds, and sealers used in or on the concrete or mortar shall conform to NSF International Standard 61 (adopted and incorporated by reference in Rule 62-565.570 F.A.C., effective 2022).

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

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

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

(d) The Department shall allow exceptions to the requirements in paragraph (b) above if ATWF permit applicants provide the following:

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

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

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

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

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

(a) Housing of Well Pumps.

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

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

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

(b) Well Pump Discharge Piping.

1. New or altered discharge piping shall be designed and constructed in accordance with Section 3.2.7.3 in *Recommended Standards for Water Works* (adopted and incorporated by reference in Rule 62-555.330, F.A.C., effective May 5, 2014), except that a check valve is not required in the discharge piping from a jet pump and except that the required smooth-nosed sampling tap shall be located as specified in subparagraph 2., below.

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

(c) Well Vents. Well pumps installed on or after August 28, 2003, except those installed under a construction permit for which the Department received a complete application before August 28, 2003, shall pump from a well that is vented to the atmosphere unless the well pump is a packer-type jet pump, the well casing also serves as well pump suction piping, the well is a flowing artesian well, there is no appreciable drawdown in the well, or the supplier of water provides justification for not venting the well to the atmosphere. All well vents shall terminate at least 12 inches above the 100-year flood elevation and, in coastal areas subject to flooding by wave action, at least 12 inches above the 100-year wave-action elevation. New or altered well vents shall be designed and constructed in accordance with Section 3.2.7.5 in *Recommended Standards for Water Works* (adopted and incorporated by reference in Rule 62-555.330, F.A.C., effective May 5, 2014).

(7) ATWFs shall comply with the objectionable odor prohibition under subsection 62-296.320(2), F.A.C. (“Objectionable odor” is defined in Rule 62-210.200, F.A.C.). Applicants for ATWF permits, shall provide in the preliminary design report or drawings, specifications, and design data accompanying their permit application assurance of compliance with subsection 62-296.320(2), F.A.C. Assurance of compliance may be based upon water quality data; use of appropriate water treatment processes and chemicals; proper treatment of vented gases; use of mitigative measures including buffer zones owned or under the control of the supplier of water; etc.

(8) All reclaimed water piping, valves, and outlets shall be color coded as required under paragraph 62-610.469(7)(f), F.A.C. All advanced treated water valves and outlets shall be appropriately tagged or labeled (bearing the words in English and Spanish: “Do not drink” together with the equivalent standard international symbol) to warn the public and employees that the water is not intended for drinking. Underground piping, which is not manufactured of metal or concrete, shall be color coded for advanced treated water using blue as a dominant color, with purple banding around the pipe. The pipe and band colors shall be easily differentiated to ensure proper identification of the pipe. For pipes greater than 6 inches in diameter, bands shall be four inches wide, and spaced no more than 24 inches apart, measured center-to-center.  For pipes 6 inches in diameter or smaller, bands shall be two inches wide, and spaced no more than 18 inches apart, measured center-to-center.   Underground metal and concrete pipe shall be color coded or marked using blue and purple banding predominantly. If tape is used to mark the pipe, the tape shall be permanently affixed to the pipe. Visible, above-ground portions of the advanced treated water system shall be clearly color coded or marked. New systems and expansions of existing systems shall comply with this color-coding standard. It is recommended, but shall not be required, that distribution and application facilities located on private properties, including residential properties, be color coded using blue and purple banding.

(9) Alarms for Nitrate/Nitrite Removal Equipment. An alarm system shall be provided for any ATWF equipment that is necessary to achieve compliance with the primary drinking water standard for nitrate or nitrite. The alarm system shall be activated in the event of equipment failure and shall include an audio-visual alarm at the plant.

(10) ATWFs utilizing a UV treatment process shall provide to the Department the results of a test to establish the operating conditions under which the UV system will deliver the design dose in accordance with paragraph 62-565.570(2)(q), F.A.C., or subsection 62-565.560(7), F.A.C., as applicable. The test shall:

(a) Be conducted on a full-scale reactor that is essentially identical to the UV reactor to be used by the system and using a source water that is essentially identical in quality to the water to be treated by the UV system;

(b) Include the following factors:

1. UV absorbance of the water;

2. Lamp fouling and aging;

3. Measurement uncertainty of on-line sensors;

4. UV dose distributions arising from the velocity profiles through the reactor;

5. Failure of UV lamps and other critical system components;

6. Inlet and outlet piping or channel configuration of the UV reactor; and

7. Lamp and sensor locations.

(c) In order to receive log reduction value credits, UV reactors shall be validated in accordance with US EPA guidance on ultraviolet disinfection.

(11) ATWFs utilizing an ozone/BAC treatment process shall provide to the Department the results of a validation test to demonstrate that the process will reliably achieve the minimum 1.0 log reduction of each indicator under full-scale operating conditions pursuant to paragraph 62-565.560(8)(e), F.A.C. The validation study for the ozonation process shall include challenge tests using the indicator(s) selected pursuant to paragraph 62-565.560(8)(e)(1), F.A.C. The validation study for the BAC process shall include challenge tests using the indicator(s) selected pursuant to paragraph 62-565.560(8)(e)(2), F.A.C. The ozone/BAC treatment process shall be revalidated as part of an application for permit renewal, or in the event that a design modification is made, or components are replaced that will impact operation or monitoring.

(12) ATWFs utilizing an alternative treatment process pursuant to 62-565.560(9), F.A.C., shall provide to the Department the results of a validation test to demonstrate that the process will reliably achieve the 75% minimum removal of the selected indicator(s) under full-scale operating conditions pursuant to paragraph 62-565.560(9)(b), F.A.C. An alternative treatment process pursuant to 62-565.560(9), F.A.C., shall be revalidated as part of an application for permit renewal, or in the event that a design modification is made, or components are replaced that will impact operation or monitoring.

*Rulemaking Authority 403.861(9), 403.064(18), F.S., Law Implemented 403.852(12), 403.861(7), 403.853(6), 403.861(17), 403.064(18), F.S., History – New xx-xx-xx.*

## 62-565.590 Operation and Maintenance.

(1) A permittee of newly constructed or modified ATWF shall provide notification to the Department that a draft operation and maintenance manual is available. This notice shall be provided prior to placing the newly constructed or modified portion of the facility into operation. Within six months after placing the new or modified facility into operation, the permittee shall provide notification that an up-to-date operation and maintenance manual is available. The manual shall provide for the reliable and efficient operation and maintenance of the facilities as follows:

(a) The detail of the manual shall be consistent with the complexity of the system. The manual shall be developed in accordance with the unique requirements of the individual ATWF and shall provide the operator with adequate information and description regarding the design, operation, and maintenance features of the facility involved.

(b) The manual shall include basic hydraulic and engineering design criteria for the facility, as well as information and procedures required for normal control and distribution of reclaimed water, advanced treated water, and residuals within the facility. In addition, information concerning process control and performance evaluation for the facility, as well as equipment and procedural descriptions (including any notification/reporting requirements of appropriate agencies) for emergency operating conditions, and a list of spare parts that must be readily available shall be included. Regular maintenance and repair instructions for all equipment; laboratory testing equipment and monitoring procedures; safety and personnel requirements; and a “troubleshooting” problem guide shall be included in the manual.

(2) A copy of the approved manual shall be provided to the operator/s by the permittee of the facility. The manual shall be available for reference at the facility or other approved site. The permittee shall maintain at least one copy of the approved manual.

(3) The manual shall be revised to reflect any facility alterations performed or to reflect experience resulting from facility operation.

(4) ATWF operators shall maintain a separate operation and maintenance (O&M) log for each ATWF. The ATWF O&M log shall be maintained on site at the plant in a location accessible to 24-hour inspection and protected from weather damage. The plant O&M log shall be maintained in a hard-bound book with consecutive page numbering, or alternatively, part or all of the plant O&M log may be maintained electronically upon written request by the permittee or supplier of water and written approval by the Department. The Department shall approve partial or complete electronic plant O&M logs if the permittee demonstrates that required data will remain accessible to 24-hour inspection and protected from weather damage; that adequate data storage capacity and data backup will be provided; that entries made by recording equipment will be date/time stamped; and that entries made by an operator will be date/time stamped and accompanied by an electronic signature unique to, and under the sole control of, the operator. The ATWF O&M log shall be maintained current to the last operation and maintenance performed and shall contain a minimum of the previous three months of data at all times. The ATWF O&M log shall contain the following information, which shall be entered in the O&M log during each plant visit before leaving the plant:

(a) Identification of the ATWF;

(b) The signature and license number of the operator making any entries;

(c) Date and time in and out of the ATWF;

(d) Description of specific operation and maintenance activities, including any preventive maintenance or repairs made or requested; and

(e) Results of tests performed and samples taken, unless documented on a laboratory sheet.

(5) All licensed operators shall submit to the permittee all required reports in the manner required by Rule 62-565.550, F.A.C.

(6) An ATWF permittee shall provide for the proper operation and maintenance of the facility in accordance with Chapter 62-565, F.A.C. An ATWF permittee shall employ only operators appropriately licensed in accordance with Chapter 62-602, F.A.C., to be on-site and responsible for the operation, supervision and maintenance of an ATWF at all times as provided below.

(a) For an ATWF receiving reclaimed water, either directly or indirectly, from a wastewater treatment facility providing at a minimum tertiary treatment, the Lead/Chief Operator position(s) shall be covered by an individual that is licensed at the Class A level in drinking water.

(b) For an ATWF receiving reclaimed water from a wastewater treatment facility providing no more than secondary treatment, as defined in Rule 62-565.200, F.A.C., the Lead/Chief Operator position(s) shall be covered by the following:

 1. A single operator that is licensed at the Class A level in both drinking water and wastewater treatment; or

2. A combination of operators individually licensed at the Class A drinking water treatment and Class A wastewater treatment level.

(c) A Class A Lead/Chief Operator of the wastewater treatment facility or public water system of the potable reuse system may simultaneously serve as the Lead/Chief Operator for the ATWF as long as the requirements in (6) above are met at the ATWF.

(d) The Lead/Chief Operator(s) shall be employed full time which means at least 5 days per week, a minimum of 35 hours per week, including leave time. A Lead/Chief Operator shall be available during all periods of ATWF operation. “Available” means able to be contacted as needed to initiate the appropriate action within 15 minutes.

(e) An ATWF shall be staffed 24 hours per day, 7 days per week.

(f) For an ATWF receiving reclaimed water, either directly or indirectly, from a wastewater treatment facility providing at a minimum tertiary treatment, the ATWF shall be staffed by an individual that is licensed at the Class B level in drinking water.

(g) For an ATWF receiving reclaimed water from a wastewater treatment facility providing no more than secondary treatment, as defined in Rule 62-565.200, F.A.C., the ATWF shall be staffed by the following:

 1. A single operator that is licensed at the Class B level in both drinking water and wastewater treatment; or

2. A combination of operators individually licensed at the Class B drinking water treatment and Class B wastewater treatment level.

(h) For an ATWF with established non-compliance, the Department shall require a higher license classification or additional staffing when necessary to provide reasonable assurance that the facility will be operated in compliance with the ATWF permit.

(i) An individual employed in the daily onsite operational control of an ATWF may use this experience to meet the experience requirements of a Class A, B, or C wastewater treatment or drinking water treatment plant operator license. For ATWFs that are staffed with both drinking water and wastewater treatment plant operators, no more than 50 percent of time and experience shall count towards either a drinking water or wastewater treatment plant operator license unless an alternative has been approved in accordance with (6)(j) below.

(j) An applicant may request alternative staffing levels from (6) above, based on the treatment technologies being utilized at the ATWF. This request can be submitted with the engineering report, or as a minor permit revision and shall include a request for an alternative from the 50 percent time and experience constraint in (6)(i) above as necessary.

(k) When alternative staffing requirements are approved, the percentage of time and experience counting towards either a drinking water or wastewater treatment plant operator license will be based on the approved alternative staffing requirements.

*Rulemaking Authority 403.861(9), 403.064(18), F.S., Law Implemented 403.852(12), 403.861(7), 403.853(6), 403.861(17), 403.064(18), F.S., History – New xx-xx-xx.*

## 62-565.600 Procedure to Obtain Permits.

(1) Any person intending to construct, operate, or modify an ATWF shall submit Advanced Treatment Water Facility Permit Application, DEP Form 62-565.300(2)(a), (adopted and incorporated by reference in paragraph 62-565.300(2)(a), F.A.C., effective [date]) and shall submit additional information requested in accordance with Rule 62-4.055, F.A.C., to comply with the requirements of this section.

(2) An applicant for a permit for a new or substantially modified ATWF shall submit an application to the Department at least 180 days before commencing operation of new or modified ATWF. An applicant shall apply at least 90 days before commencement of construction on a new or modified ATWF.

(3) Initiation or commencement of construction means to begin performing on-site modification, fabrication, erection or installation of a treatment facility or a conveyance system for the discharge of wastes. For the purposes of the permit, land clearing and site preparation activities related to this construction are not included herein; however, before undertaking these activities, other permits may be required.

(4) The permit application 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 permit application and supporting documents shall be electronically or digitally signed and sealed by a professional engineer or professional geologist, in accordance with Chapters 61G15-23 and 61G16-2, F.A.C., respectively.

(5) All applications, supporting documents, and processing fees shall be submitted electronically to the Division of Water Resource Management, Source and Drinking Water Program at xxxx@xxxxx. If a professional engineer or professional geologist is unable to electronically or digitally sign and seal documents, a signed and sealed original paper copy of the applicable portions of the permit application and supporting documents, along with an electronically scanned copy of the signed and sealed original paper copy, shall be mailed to the Department’s Division of Water Resource Management, Source and Drinking Water Program, MS 3540, 2600 Blair Stone Road, Tallahassee, Florida, 32399-2400. After [insert date of five years after effective rule date], electronic or digital signing and sealing shall be required. Application processing fees shall be equivalent to the Drinking Water Construction Permit Fees based on design capacity in Million Gallons per Day (MGD) for Categories I through III, as established in the fee schedule in paragraph 62-4.050(4)(n), F.A.C. Each application must be accompanied by the proper processing fee in accordance with subsection 62-4.050(5), F.A.C. The fee shall be paid electronically or by check, payable to the Department of Environmental Protection at the address above.

(6) Annual operating license fees shall be equivalent to the Annual Operating License Fees for Public Water Systems, as established in Rule 62-4.053, F.A.C. The fee shall be paid electronically or by check, payable to the Department of Environmental Protection and sent to the Division of Water Resource Management, Source and Drinking Water Program, MS 3540, 2600 Blair Stone Road, Tallahassee, Florida, 32399-2400.

(7) Any substantial change to a complete application shall require an additional processing fee determined pursuant to the schedule set forth in paragraph 62-4.050(4)(n), F.A.C.

(8) An applicant for a permit for a new ATWF, or for substantial modifications to an existing ATWF, shall submit DEP Form 62-565.300(2)(b), Notification of Completion of Construction, upon completion of construction.

(9) Record drawings shall be prepared for new facilities or for substantial modifications to existing facilities permitted pursuant to this chapter. Record drawings shall be prepared and distributed as follows:

(a) Record drawings shall be prepared for new ATWFs or for substantial modification to existing ATWFs under Chapter 62-620, F.A.C. These drawings do not need to be prepared until the permit is issued and the facility constructed.

(b) Record drawings shall include a set of plans and specifications which identify substantial deviations, referenced in the notification of completion of construction, that have occurred since the initial permit was issued.

(c) Record drawings shall be furnished to the permittee by the contractor and shall be based on information gathered and prepared under their direction. Record drawings shall be reviewed to determine their adequacy and certified by a professional engineer registered in the State of Florida. The engineer shall be the project design engineer or an engineer who has been retained by the permittee to provide professional engineering services during the construction phase of project completion.

(d) Notification of availability of record drawings is not required before placing an ATWF into operation but shall be filed with the Department within six months of completion of construction. Notification shall be submitted on DEP Form 62-565.300(2)(g) (adopted and incorporated by reference in paragraph 62-565.300(2)(g), F.A.C., effective [date]).

*Rulemaking Authority 403.861(9), 403.064(18), F.S., Law Implemented 403.852(12), 403.861(7), 403.853(6), 403.861(17), 403.064(18), F.S., History – New xx-xx-xx.*

## 62-565.605 Standards for Issuing or Denying Permits.

(1) No Department permit shall be issued under this chapter for a term of more than five years.

(2) An ATWF permit shall be issued only if the applicant affirmatively provides the Department with reasonable assurance, based on a preliminary design report, plans, test results, installation of pollution control equipment, or other information, that the construction, modification, or operation of the ATWF will not be in contravention of Chapter 403, F.S., and applicable Department rules.

(3) The Department shall take into consideration an ATWF permit applicant’s violation of any Department rules at any facility or activity associated with the potable reuse system when determining whether the applicant has provided reasonable assurance that Department standards will be met.

(4) Standards for issuing or denying ATWF permits shall be in accordance with Rule 62-4.070, F.A.C.

*Rulemaking Authority 403.861(9), 403.064(18), F.S., Law Implemented 403.852(12), 403.861(7), 403.853(6), 403.861(17), 403.064(18), F.S., History – New xx-xx-xx.*

## 62-565.610 Revisions to Permit Conditions.

(1) Substantial revisions.

(a) For good cause and after notice and, if requested, an administrative hearing pursuant to Section 120.57, F.S., the Department shall require the permittee to conform to new or additional permit conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions. In determining what is a reasonable time to conform to new or additional permit conditions, the Department shall consider:

1. The extent of construction or other work necessary to come into conformance,

2. Any site-specific conditions affecting the time to come into conformance; and,

3. Any other matters affecting time to come into conformance based on professionally accepted engineering or scientific practices.

(b) For the purpose of this section, good cause shall include any of the following:

1. A showing of any change in the environment or surrounding conditions that requires a revision to conform to applicable water quality standards.

2. Adoption or revision of statutes, rules, or standards, including toxicity standards or prohibitions, which require the revision of a permit condition for compliance.

3. A showing that there are material and substantial alterations or additions to the permitted facility or activity, including a change in the permittee’s residuals disposal practice, which occurred after permit issuance which justifies the application of permit conditions that are different in or absent from the existing permit.

4. A showing that new information, other than revised rules or test methods, received by the Department was not available at the time of permit issuance and would have justified the application of different permit conditions at the time of issuance. This cause shall include any significant information derived from testing required after issuance of the permit.

5. A showing that revision of a compliance schedule is necessary because of delays caused by an Act of God, strike, or materials shortage or other event over which the permittee has little or no control and for which there is no reasonably available remedy. However, in no case may a compliance schedule be revised to extend beyond a Federal or State statutory deadline, if applicable. In determining whether there is a reasonable available remedy, the Department shall consider:

a. The extent of time and work involved in available remedies,

b. Site-specific conditions affecting available remedies; and,

c. Any other limitations affecting available remedies based on professionally accepted engineering or scientific practices.

6. A showing that there is a technical mistake in a permit condition which needs to be corrected.

7. A showing that revision of a permit is required under subparagraph 62-565.610(1)(b)5., F.A.C.

(c) A permittee may request a revision of a permit for any reason, including for good cause set forth in paragraph (b) of this subsection.

(d) When a permit is revised, only the conditions subject to revision are reopened. All other requirements and conditions of the existing permit shall remain in effect until the permit expires.

(2) Minor Revisions.

(a) Minor revisions may be made to permits by the Department or at the request of the permittee. The corrections or changes listed in this section shall be contained in a letter to the permittee which shall be attached to an existing permit. A permittee shall not be required to file an application for revisions required by the Department for corrections of typographical or calculation errors.

(b) Requests by the permittee for changes in ownership or operational control of a facility shall be made on Notification of Permit Transfer, DEP Form 62-565.300(2)(c), (adopted and incorporated by reference in paragraph 62-565.300(2)(c), F.A.C., effective [date]) provided that no other change in the permit is necessary. The request shall be accompanied by the processing fee set forth in paragraph 62-4.050(4)(n), F.A.C. If other changes are necessary, requests shall be made in accordance with subsections of this section.

(c) Requests by the permittee for minor revisions to permit conditions, other than changes in ownership, shall be made on Request for a Minor Revision, DEP Form 62-565.300(2)(e), (adopted and incorporated by reference in paragraph 62-565.300(2)(e), F.A.C., effective [date]). The processing fee for a minor revision to permit conditions shall be equivalent to the fee established in sub-subparagraph 62-4.050(4)(n)7.b., F.A.C. The application requirements for minor modifications to an ATWF include a description of the proposed modification and, if applicable, any reports, plans, and specifications which were developed to implement the modification.

1. The following minor revisions do not require the permittee to pay a processing fee:

a. Corrections of typographical errors,

b. Approved changes in an interim compliance date in a schedule of compliance, provided the new date is not more than 120 days after the date specified in the existing permit and does not interfere with attainment of the final compliance date requirement,

c. Changes in the construction schedule for a new ATWF, provided that no such change shall affect the permittee’s obligation to have all pollution control equipment installed and in operation prior to water leaving the ATWF,

2. The following revisions require the permittee to pay a processing fee as set forth in paragraph 62-4.050(4)(n), F.A.C.:

a. Changes to increase or decrease the permit requirements for monitoring or reporting,

b. Minor modifications to the facility.

(d) The Department shall prepare a draft permit and public notice under subsection 62-565.640(2), F.A.C., for any change to decrease permit requirements for monitoring or reporting.

(e) No permit revision is required for routine facility maintenance, or any modification associated with ancillary or electrical equipment and structures.

*Rulemaking Authority 403.861(9), 403.064(18), F.S., Law Implemented 403.852(12), 403.861(7), 403.853(6), 403.861(17), 403.064(18), F.S., History – New xx-xx-xx.*

## 62-565.615 Renewals.

(1) A permittee shall submit an application to renew an existing permit at least 180 days before the expiration date of the existing permit.

(2) The permittee shall apply on Advanced Treatment Water Facility Permit Application, DEP Form 62-565.300(2)(a), (adopted and incorporated by reference in paragraph 62-565.300(2)(a), F.A.C., effective [date]) and include submittal of the appropriate processing fee set forth in paragraph 62-4.050(4)(n), F.A.C.

(3) An application filed in accordance with subsection (1) and (2) of this Rule, shall be considered timely and sufficient. When an application for renewal of a permit is timely and sufficient, the existing permit shall not expire until the Department has taken final action on the application for renewal or until the last day for seeking judicial review of the agency order or a later date fixed by order of the reviewing court.

(4) The late submittal of a renewal application shall be considered timely and sufficient for the purpose of extending the effectiveness of the expiring permit only if it is submitted and made complete before the expiration date.

*Rulemaking Authority 403.861(9), 403.064(18), F.S., Law Implemented 403.852(12), 403.861(7), 403.853(6), 403.861(17), 403.064(18), F.S., History – New xx-xx-xx.*

## 62-565.620 Transfer of Permit.

(1) A permit may be transferred by the existing permittee to a proposed permittee only if the permit has been revised in accordance with subsection 62-565.610(2), F.A.C., to identify the proposed permittee and to incorporate other applicable statutory or rule requirements in effect at the time of revision or if the permit has been reissued.

(2) Each request for transfer of an ATWF permit shall be made and processed in accordance with Rule 62-4.120, F.A.C., except that the current permittee and the proposed permittee shall jointly submit Notification of Permit Transfer, DEP Form 62-565.300(2)(c) (adopted and incorporated by reference in paragraph 62-565.300(2)(c), F.A.C., effective [date]). Each application for transfer of an ATWF permit shall be accompanied by the proper processing fee, made payable to the Department of Environmental Protection mailed to the Division of Water Resource Management, Source and Drinking Water Program, MS 3540, 2600 Blair Stone Road, Tallahassee, Florida, 32399-2400 or electronically submitted to the Department using the DEP Business Portal at http://www-fldepportal.com/go/.

*Rulemaking Authority 403.861(9), 403.064(18), F.S., Law Implemented 403.852(12), 403.861(7), 403.853(6), 403.861(17), 403.064(18), F.S., History – New xx-xx-xx.*

## 62-565.625 Suspension and Revocation.

Standards for suspension and revocation of an ATWF permit shall be in accordance with Rule 62-4.100, F.A.C.

*Rulemaking Authority 403.861(9), 403.064(18), F.S., Law Implemented 403.852(12), 403.861(7), 403.853(6), 403.861(17), 403.064(18), F.S., History – New xx-xx-xx.*

## 62-565.630 Recordkeeping.

(1) Unless the permit specifically indicates an alternative location, the permittee shall maintain the following records on the site of the permitted facility or activity:

(a) Records of all compliance monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, including, if applicable, a copy of the laboratory certification showing the certification number of the laboratory, for at least five years from the date the sample or measurement was taken;

(b) Copies of all reports, required by the permit for at least five years from the date the report was prepared;

(c) Records of all data, including reports and documents, used to complete the application for the permit for at least five years from the date the application was filed;

(d) All records used to calculate emissions pursuant to this rule for a period of five years from the date on which such emissions information is submitted to the Department for any regulatory purpose.

(e) Copies of the logs and schedules showing plant operations and equipment maintenance for five years from the date on the logs or schedules;

(f) A copy of the current permit;

(g) A copy of the current operation and maintenance manual as required by Rule 62-565.590, F.A.C.;

(h) A copy of any required record drawings;

(i) Copies of the licenses of the current certified operators; and

(j) A copy of the Joint Operations Plan as required in Rule 62-565.500, F.A.C.

*Rulemaking Authority 403.861(9), 403.064(18), F.S., Law Implemented 403.852(12), 403.861(7), 403.853(6), 403.861(17), 403.064(18), F.S., History – New xx-xx-xx.*

## 62-565.635 Application Processing.

(1) Within 30 days after receipt of an application for permit and its processing fee, the Department shall notify the applicant if the application is not complete and shall request submittal of the additional information needed to review the application that the Department is authorized by law to request. If an applicant for a permit issued under this chapter is required to submit with the application a preliminary design report, engineering report, or other design materials for review, the Department shall advise the applicant if the report or materials are deficient and shall request additional information as appropriate. All Department requests for additional information shall be made in accordance with Sections 120.60, 403.0875 and 403.0876, F.S.

(2) If the application is for permit renewal, the Department shall specify a date for the submittal of the requested information.

(3) Within 30 days after receipt of such additional information, the Department shall review it and may request only that information needed to clarify such additional information or to answer new questions raised by or directly related to such additional information.

(4) If the Department decides that a site visit is necessary in conjunction with processing the application, the applicant shall be notified and a visit scheduled.

(5) If the applicant fails to provide information requested or to correct deficiencies noted in the application, which were either requested or notified in accordance with subsection (1), and the information or correction is necessary to meet the requirements of this chapter, the permit shall be denied. If the incomplete application is for renewal of an expiring permit and the renewal is denied, appropriate enforcement action shall be imposed on the applicant for continuing to discharge into waters after the denial is final.

(6) The Department shall notify the applicant that the application is complete after receipt of all required information. The date on which the Department notifies the applicant that the application is complete is the effective date of the application.

(7) When an application is complete, the Department shall determine whether to prepare a draft permit for issuance or denial of a permit. The initial preparation of a draft permit for issuance does not preclude the Department from denying a permit after an opportunity for public comment or public meeting, if requested.

(8) The Department shall render a decision as to whether the draft permit will be for issuance or denial within 90 days after the Department has received all of the information necessary to make the application complete. If this time schedule is not met, the permit applicant may apply for an order from the circuit court requiring the Department to render a decision within a specified time.

(9) If the Department intends to deny the permit application, it shall issue a notice of intent to deny. Public notice under subsection 62-565.640(2), F.A.C., shall not be required. However, the Department shall prepare a statement of basis or fact sheet with the reasons for the proposed action. If the decision to deny is changed, except through an administrative hearing under Section 120.57, F.S., the Department shall withdraw the notice of intent to deny and shall proceed to prepare a draft permit. If the applicant requests an administrative hearing under Section 120.57, F.S., on the Department intent to deny, the applicant shall publish notice of proposed agency action under subsections 62-565.640(1) and 62-110.106(7), F.A.C. Upon completion of the administrative hearing, the Department shall issue or deny the permit in accordance with the conclusions of the proceedings, provided the applicant has published notice as required in subsections 62-565.640(1) and 62-110.106(7), F.A.C. If the applicant has not published notice as required in these rules, the Department shall proceed to prepare a draft permit.

(10) If the Department intends to prepare a draft permit for issuance, it shall prepare and mail to the applicant, not later than the effective date of the application, a project decision schedule. The schedule shall specify, at a minimum, target dates for the following:

(a) Preparation of a draft permit;

(b) Public notice, if required, under subsections 62-565.640(2) through (4), F.A.C.;

(c) Completion of the public comment period, including any public meeting, if held;

(d) Public notice, if required, under subsection 62-110.106(7), F.A.C.; and,

(e) Completion of any focal proceedings which may be associated with the application.

(11) A draft permit for issuance shall contain the following information:

(a) All conditions the applicant must meet;

(b) All applicable compliance schedules;

(c) All monitoring requirements; and,

(d) All reclaimed water or advanced treated water limitations, flow limitations, criteria, prohibitions, all general conditions, and all variances, if applicable.

(12) All draft permits shall be accompanied by a statement of basis or a fact sheet on which the Department relied in making its decision. The statement of basis or fact sheet shall be prepared in accordance with the Department of Environmental Protection Guide to Permitting Wastewater Facilities or Activities Under Chapter 62-620, F.A.C.

(13) Comments from the public under subsections 62-565.640(2) through (4), F.A.C., shall be considered in evaluation of the draft permit.. If a permit is issued, the Department shall prepare a response to the significant comments in accordance with Rule 62-565.645, F.A.C.

(14) The administrative record of the draft permit shall be available for public inspection at the Department office issuing the permit and shall consist of:

(a) The application and any supporting data provided by the applicant;

(b) The draft permit;

(c) The statement of basis or fact sheet;

(d) All documents cited in the statement of basis or fact sheet; and,

(e) Other documents contained in the supporting file.

(15) Material readily available at the Department office issuing the permit or published material that is generally available that is included in the administrative record need not be physically included with the rest of the record as long as it is specifically referred to in the statement of basis or the fact sheet.

(16) The Department shall:

(a) Prepare a proposed permit for potable reuse projects under this chapter, after the close of the public comment period under subsections 62-565.640(2) through (4), F.A.C., or, if requested, after any public meeting under Rule 62-565.645, F.A.C.; and

(b) Prepare a final permit for potable reuse projects under this chapter after public notice under subsection 62-565.640(1), F.A.C., or, if requested, after an administrative hearing.

(17) Permits for potable reuse projects shall be issued or denied as follows:

(a) The Department shall grant a permit or deny the permit application within 30 days after public notice of the decision on the draft permit as required under subsection 62-565.640(1), F.A.C.

(b) The time for issuing a permit or denying a permit application shall be tolled by the timely filing of a request for an administrative hearing under Section 120.569, F.S. The time shall be tolled until 45 days after the submission of a recommended order or until the administrative petition is dismissed or withdrawn.

(c) If these time schedules are not met, the permit applicant may apply for an order from the circuit court requiring the Department to render a decision within a specified time.

*Rulemaking Authority 403.861(9), 403.064(18), F.S., Law Implemented 403.852(12), 403.861(7), 403.853(6), 403.861(17), 403.064(18), F.S., History – New xx-xx-xx.*

## 62-565.640 Public Notice.

(1) Public notice under Chapter 120, F.S., and subsection 62-110.106(7), F.A.C., advising the applicant and all affected persons of their right to an administrative hearing shall be given as follows:

(a) Public notice shall be required for all permits for new or substantially modified facilities and those facilities described in subparagraph 62-110.106(7)(a)1., F.A.C.;

(b) Notice shall be given in accordance with subsection 62-110.106(7), F.A.C.; and,

(c) If the applicant is also required to give notice under subsections (2) through (4) of this rule, the notice required in this subsection shall be given following the preparation of a proposed permit under subsection 62-565.635(16), F.A.C.

(2) Public notice for potable reuse projects under this chapter, shall announce the preparation of a draft permit and solicit public comments on its efficacy or announce the date, time and location of a public meeting to take oral comments on a draft permit.

(a) Public notice under this subsection is required when the Department prepares a draft permit for all new advanced treatment water facilities, for all substantially revised permits, for all renewals of permits which have been issued under this chapter, and for minor revisions to a permit when the revision proposes to decrease a permit requirement for monitoring or reporting. No public notice is required when a request for a permit, permit revision, revocation and reissuance, or termination is denied. Written notice of that denial shall be given to anyone requesting it and to the permittee.

(b) Public notices may describe more than one permit or permit action.

(c) Public notice of the preparation of a draft permit shall allow at least 30 days for public comment.

(d) Public notice of a public meeting shall be given at least 30 days before the meeting. The notice may be given at the same time as public notice of the draft permit and the two notices may be combined.

(3) Public notice of activities described in subsection (2) of this rule, shall be given as set forth in paragraphs (a) and (b), below.

(a) Notice shall be given by mailing a copy of a notice to:

1. The applicant;

2. Any other agency which the Department knows has an interest in the draft permit or public meeting;

3. State agencies with jurisdiction over historical and archaeological sites; the Florida Department of State, Division of Archives and History;

4. Any unit of local government having jurisdiction over the area where the facility is proposed to be located;

5. Persons on Department mailing lists which shall be compiled by notifying the public of the opportunity to be placed on the mailing lists and from those persons who request in writing to be on the lists; and

6. Any industrial user identified in the permit application of a privately owned treatment works.

(b) For all major facilities and all other facilities of local interest, notice as described in subsection (4) of this rule, shall be given by publication one time only by the permittee at his expense in the daily or weekly newspaper of general circulation within the area affected by the facility or activity and meeting the requirements of Chapter 50, F.S. The Department shall provide the permittee with a copy of the notice to be published. Proof of publication of the notice shall be submitted by the permittee to the Department within two weeks of the date the notice appeared in the newspaper.

(4) Public notices required by paragraph (3)(b) of this rule, shall contain the following minimum information:

(a) Name and address of the Department office processing the permit action for which notice is being given;

(b) Name and address of the permittee or the permit applicant and, if different, of the facility or activity regulated by the permit;

(c) A brief description of the business conducted at the site or plant described in the permit application or the draft permit;

(d) Name, address and telephone number of a person in the Department from whom interested persons may obtain further information, including copies of the draft permit, statement of basis or fact sheet, and the application;

(e) A brief description of the public comment procedures and the time, date and place of any public meeting that will be held, including a statement of procedures to request a public meeting if one has not already been scheduled, and other procedures by which the public may participate in the final permit decision;

(f) A description of the location of the administrative record, the times at which the record will be open for public inspection, and a statement that all data submitted by the applicant is available as part of the administrative record;

(g) Reference to the date of previous public notices relating to the permit; and

(h) A brief description of the nature and purpose of a public meeting, if held.

(5) In addition to the public notice described in subsection (4) of this rule, all persons identified in subparagraphs (3)(a)1. through 4. of this rule, shall be mailed a copy of the fact sheet or statement of basis, the permit application form, and the draft permit. Upon request, persons identified in subparagraphs (3)(a)5. through 6. of this rule, will be provided the above documents at cost.

*Rulemaking Authority 403.861(9), 403.064(18), F.S., Law Implemented 403.852(12), 403.861(7), 403.853(6), 403.861(17), 403.064(18), F.S., History – New xx-xx-xx.*

## 62-565.645 Public Comments and Requests for Public Meetings.

(1) During the public comment period provided in Rule 62-565.640, F.A.C., any interested person may submit written comments on the draft permit or may request a public meeting, if no public meeting has been scheduled.

(2) A request for a public meeting shall be in writing and shall state the nature of the issues proposed to be raised in the meeting.

(3) All significant comments, both written to the Department and presented at a public meeting, shall be considered in making the final decision and shall be answered when a final permit is issued. The response shall be available to the public and shall:

(a) Specify which provisions, if any, of the draft permit have been changed in the final permit decision, and the reasons for the change; and,

(b) Briefly describe and respond to all significant comments on the draft permit raised during the public comment period or during any public meeting.

(4) The Department shall hold a public meeting after public notice under subsection 62-565.640(3), F.A.C., whenever a significant degree of public interest in a draft permit is expressed through public comments and requests for a public meeting. The Department may also hold a public meeting whenever it might clarify one or more issues involved in the permit decision.

(5) If a public meeting is held, any person may submit oral or written statements and data concerning the draft permit.

(6) The public comment period under subsection 62-565.640(2), F.A.C., shall automatically be extended to the close of any public meeting under this section. The presiding officer at the public meeting may also extend the comment period by so stating at the meeting.

(7) A tape recording of the public meeting shall be made available to the public during regular business hours at the Department office processing the permit application.

*Rulemaking Authority 403.861(9), 403.064(18), F.S., Law Implemented 403.852(12), 403.861(7), 403.853(6), 403.861(17), 403.064(18), F.S., History – New xx-xx-xx.*

## 62-565.650 General Conditions for All Permits.

(1) The permittee shall, at all times, properly operate and maintain the Advanced Treatment Water Facility (ATWF) and systems of treatment and control, and related appurtenances, that are installed and used by the permittee to achieve compliance with the conditions of this permit. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to maintain or achieve compliance with the conditions of the permit.

(2) The permittee shall provide an operation and maintenance manual in accordance with Rule 62-565.590, F.A.C.

(3) Any residuals generated by the ATWF, or associated processes shall be disposed of in a landfill in accordance with Chapter 62-701, F.A.C., incinerated in accordance with Chapter 62-200 Series, F.A.C., or transported to another treatment facility for disposal in accordance with other applicable Department rules.

(4) The permittee shall maintain the following records on-site at the ATWF, unless the permit specifically indicates an alternative location, and make them available for inspection:

(a) Records of all compliance monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, including, if applicable, a copy of the laboratory certification showing the certification number of the laboratory, for at least five years from the date the sample or measurement was taken;

(b) Copies of all reports required by the permit for at least five years from the date the report was prepared;

(c) Records of all data, including reports and documents, used to complete the application for the permit for at least five years from the date the application was filed;

(d) A copy of the current Joint Operations Plan;

(e) A copy of the current permit;

(f) A copy of the current operation and maintenance manual;

(g) A copy of required record drawings;

(h) Copies of the licenses of the current certified operators; and,

(i) Copies of the logs and schedules showing plant operations and equipment maintenance for five years from the date on the logs or schedules.

(5) In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data, and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except as such use is proscribed by Section 403.111, F.S., or subsection 62-565.100(5), F.A.C.

(6) The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to Chapter 403, F.S. Any permit noncompliance constitutes a violation of Chapter 403, F.S., and is grounds for enforcement action, permit termination, permit revocation and reissuance, or permit revision.

(7) This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit constitutes grounds for revocation and enforcement action by the Department.

(8) As provided in Section 403.087(8), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor authorize any infringement of federal, state, or local laws or regulations. This permit is not a waiver or approval of any other Department permit or authorization that may be required for other aspects of the total project which are not addressed in this permit.

(9) This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

(10) This permit does not relieve the permittee from liability and penalties for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted source; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department. The permittee shall take all reasonable steps to minimize or prevent any discharge, reuse of reclaimed water, or residuals disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(11) If the permittee wishes to continue an activity regulated by this permit after its expiration date, the permittee shall apply for and obtain a new permit.

(12) The permittee shall apply for a revision to the ATWF permit in accordance with Rules 62-565.600 and 62-565.610, F.A.C., at least 90 days before construction of any planned substantial modifications to the permitted facility is to commence or with Rule 62-565.610, F.A.C., for minor modifications to the permitted facility.

(13) This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit revision, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

(14) This permit is transferable only upon Department approval in accordance with Rule 62-565.620, F.A.C. The permittee shall be liable for any noncompliance of the permitted activity until the transfer is approved by the Department.

(15) The permittee shall give the Department written notice at least 60 days before inactivation or abandonment of an ATWF or connected facilities and shall specify what steps will be taken to safeguard public health and safety during and following inactivation or abandonment.

(16) The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, including an authorized representative of the Department, when applicable, upon presentation of credentials or other documents as may be required by law, and at reasonable times, depending upon the nature of the concern being investigated, to:

(a) Enter upon the permittee’s premises where a regulated facility, system, or activity is located or conducted, or where records shall be kept under the conditions of this permit;

(b) Have access to and copy any records that shall be kept under the conditions of this permit;

(c) Inspect the facilities, equipment, practices, or operations regulated or required under this permit; and,

(d) Sample or monitor any substances or parameters at any location necessary to assure compliance with this permit or Department rules.

(17) The permittee, in accepting this permit, agrees to pay the applicable regulatory program and surveillance fee in accordance with Rule 62-4.052, F.A.C.

(18) Bypass Provisions.

(a) Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless the permittee affirmatively demonstrates that:

1. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and,

2. There were no feasible alternatives to the bypass, including the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and,

3. The permittee submitted notices as required under paragraph (18)(b) of this permit.

(b) If the permittee knows in advance of the need for a bypass, it shall submit prior notice to the Department, if possible, at least 10 days before the date of the bypass. The permittee shall submit notice of an unanticipated bypass within 24 hours of learning about the bypass as required in subsection (18), of this permit. A notice shall include a description of the bypass and its cause; the period of the bypass, including exact dates and times; if the bypass has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent recurrence of the bypass.

(c) The Department shall approve an anticipated bypass, after considering its adverse effect, if the permittee demonstrates that it will meet the three conditions listed in subparagraphs (18)(a)1. through 3., of this rule.

(d) A permittee may allow any bypass to occur which does not cause reclaimed water or advanced treated water limitations to be exceeded if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provision of subparagraphs (18)(a)1. through 3., of this rule.

(19) Upset Provisions.

(a) A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

1. An upset occurred, and that the permittee can identify the cause(s) of the upset,

2. The permitted facility was at the time being properly operated, and

3. The permittee complied with any remedial measures required under subsection (10), of this permit.

(b) In any enforcement proceeding, the burden of proof for establishing the occurrence of an upset rests with the permittee.

(c) Before an enforcement proceeding is instituted, no representation made during the Department review of a claim that noncompliance was caused by an upset is final agency action subject to judicial review.

(d) Reclaimed water resulting from an upset shall be considered off-spec water. It shall be diverted to the off-spec water storage area in accordance with Rule 62-565.520, F.A.C.

(20) When requested by the Department, the permittee shall within a reasonable time provide any information required by law which is needed to determine whether there is cause for revising, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. The permittee shall also provide to the Department upon request copies of records required by this permit to be kept. If the permittee becomes aware of relevant facts that were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be promptly submitted, or corrections promptly reported to the Department.

(21) Unless specifically stated otherwise in Department rules, the permittee, in accepting this permit, agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

(22) The permittee shall give advance notice to the Department of any planned changes in the permitted ATWF which may result in noncompliance with permit requirements. The permittee shall be responsible for any and all damages which may result from the changes and may be subject to enforcement action by the Department for penalties or revocation of this permit. The notice shall include the following information:

(a) A description of the anticipated noncompliance;

(b) The period of the anticipated noncompliance, including dates and times; and,

(c) Steps being taken to prevent future occurrence of the noncompliance.

(23) The permit shall only be valid for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit constitutes grounds for revocation and enforcement action by the Department.

(24) Reopener clause. The permit may be revised or revoked and reissued if a standard is promulgated by the Department that is more stringent than the requirements of the permit.

*Rulemaking Authority 403.861(9), 403.064(18), F.S., Law Implemented 403.852(12), 403.861(7), 403.853(6), 403.861(17), 403.064(18), F.S., History – New xx-xx-xx.*

## 62-565.655 Guidelines for Establishing Specific Permit Conditions.

In addition to the general conditions listed in Rule 62-565.650, F.A.C., an ATWF permit shall contain specific conditions necessary to preserve and protect the quality of the water leaving the ATWF and to ensure proper operation of the potable reuse system. The specific conditions shall address:

(1) Specific conditions necessary to provide reasonable assurance that Department rules will be met.

(2) Applicable requirements in Chapters 62-550, 62-555, 62-565 and 62-610, F.A.C.

(3) The manner, nature, volume, and frequency of the water leaving the ATWF.

(4) Technology-based effluent limitations for emerging constituents based on site-specific indicators and surrogates set forth in Rule 62-565.560, F.A.C.;

(5) Pathogen reduction requirements;

(6) Any requirement in addition to or more stringent than applicable promulgated limitations necessary to provide reasonable assurance that the water leaving the ATWF will not cause or contribute to violations of drinking water standards and pathogens reduction requirements in Rules 62-565.500, .510, .520, .530, and .540, F.A.C.

(7) The schedule for construction of the facility or any modification thereto, and any required start-up or testing period needed, including dates for compliance monitoring;

(8) Sampling and monitoring in accordance with Rule 62-565.540, F.A.C.

(a) Monitoring results reported at the intervals specified in the ATWF permit shall be reported on the Advanced Treatment Water Facility Monitoring Report, DEP Form 62-565.300(2)(d), (adopted and incorporated by reference in paragraph 62-565.300(2)(d), F.A.C., effective [date]), or as specified in the ATWF permit.

(b) If the permittee monitors any contaminant more frequently than required by the permit, using Department approved test procedures, the results of this monitoring shall be included in the calculation and reporting of the data submitted on the Advanced Treatment Water Facility Monitoring Report.

(c) Calculations for all limitations which require averaging of measurements shall use an arithmetic mean unless otherwise specified in this permit.

(d) Except as specifically provided in Rule 62-160.300, F.A.C., any laboratory test required by an ATWF permit shall be performed by a laboratory that has been certified. Such certification shall be for the matrix, test method and analyte(s).

(e) Field activities including on-site tests and sample collection shall follow the applicable standard operating procedures described in DEP-SOP-001/01 (adopted and incorporated by reference in Chapter 62-160, F.A.C.)

(f) Alternate field procedures and laboratory methods may be used where they have been approved in accordance with Rules 62-160.220 and 62-160.330, F.A.C.

(9) Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule detailed elsewhere in this permit shall be submitted no later than 14 days following each schedule date.

(10) The permittee’s responsibility to report all instances of noncompliance not reported under subsections 62-565.650(21), F.A.C., and 62-565.655(9), F.A.C., of this rule at the time monitoring reports are submitted. This report shall contain the same information required by subsection 62-565.650(21), F.A.C., of this permit.

(11) ATWF staffing requirements in accordance with subsection 62-565.590(6), F.A.C.

(12) When an ATWF permit is renewed or reissued standards, log reduction values or conditions shall be at least as stringent as the standards, log reduction values or conditions in the previous permit unless the circumstances on which the previous permit was based have materially and substantially changed since the time the permit was issued and would constitute cause for permit revision or revocation and reissuance.

*Rulemaking Authority 403.861(9), 403.064(18), F.S., Law Implemented 403.852(12), 403.861(7), 403.853(6), 403.861(17), 403.064(18), F.S., History – New xx-xx-xx.*

## 62-565.700 Compliance for ATWFs and Potable Reuse Systems.

(1) General.

(a) The Department uses the information submitted on Advanced Treatment Water Facility Monitoring Report, DEP Form 62-565.300(2)(d), (adopted and incorporated by reference in paragraph 62-565.300(2)(d), F.A.C., effective [date]), required by Rule 62-565.550, F.A.C., to establish ATWF compliance, or noncompliance, with the treatment standards of this rule.

(b) The Department may also take enforcement action based on its own sample collection activities using any of the annual, monthly, weekly, or maximum-permissible concentrations specified in this chapter. Use of such data shall not preclude enforcement action pursuant to the provisions of this or any other chapter of the Florida Administrative Code. The use of grab or composite samples for evaluating annual, monthly, or weekly compliance shall be consistent with grab or composite sampling technique.

(c) Nothing in this or any other rules of the Florida Administrative Code shall preclude the use, by the Department, of additional or more representative sampling data in establishing compliance status.

(2) Inspections.

(a) Any designated representative of the Department may inspect an ATWF, or any component of the potable reuse system, at any reasonable time, for the purpose of ascertaining the state of compliance with the law or with rules or orders of the Department.

(b) Inspections shall be conducted to ensure compliance with the operational requirements established in this chapter.

(c) The Department shall provide written notice of any non-compliance with applicable rules or orders of the Department to the permittee no more than thirty days following an inspection.

*Rulemaking Authority 403.861(9), 403.064(18), F.S., Law Implemented 403.852(12), 403.861(7), 403.853(6), 403.861(17), 403.064(18), F.S., History – New xx-xx-x*