



NOTICES OF PROPOSED RULEMAKING

This section of the *Arizona Administrative Register* contains Notices of Proposed Rulemakings.

A proposed rulemaking is filed by an agency upon completion and submittal of a Notice of Rulemaking Docket Opening. Often these two documents are filed at the same time and published in the same *Register* issue.

When an agency files a Notice of Proposed Rulemaking under the Administrative Procedure Act (APA), the notice is published in the *Register* within three weeks of filing. See the publication schedule in the back of each issue of the *Register* for more information.

Under the APA, an agency must allow at least 30 days to elapse after the publication of the Notice of Proposed Rulemaking in the *Register* before beginning any proceedings for making, amending, or repealing any rule (A.R.S. §§ 41-1013 and 41-1022).

The Office of the Secretary of State is the filing office and publisher of these rules. Questions about the interpretation of the proposed rules should be addressed to the agency that promulgated the rules. Refer to item #4 below to contact the person charged with the rulemaking and item #10 for the close of record and information related to public hearings and oral comments.

**NOTICE OF PROPOSED RULEMAKING
TITLE 18. ENVIRONMENTAL QUALITY
CHAPTER 9. DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER POLLUTION CONTROL**

[R17-100]

PREAMBLE

| <u>1. Article, Part of Sections Affected (as applicable)</u> | <u>Rulemaking Action</u> |
|---|---------------------------------|
| Article 6 | Repeal |
| R18-9-601 | Repeal |
| R18-9-602 | Repeal |
| R18-9-603 | Repeal |
| Article 7 | Amend |
| R18-9-701 | Repeal |
| R18-9-702 | Repeal |
| R18-9-703 | Repeal |
| R18-9-704 | Repeal |
| R18-9-705 | Repeal |
| R18-9-706 | Repeal |
| R18-9-707 | Repeal |
| R18-9-708 | Repeal |
| R18-9-709 | Repeal |
| R18-9-710 | Repeal |
| R18-9-711 | Repeal |
| R18-9-712 | Repeal |
| R18-9-713 | Repeal |
| R18-9-714 | Repeal |
| R18-9-715 | Repeal |
| R18-9-716 | Repeal |
| R18-9-717 | Repeal |
| R18-9-718 | Repeal |
| R18-9-719 | Repeal |
| R18-9-720 | Repeal |
| Part A | New Part |
| R18-9-A701 | Repeal |
| R18-9-A701 | Amend |
| R18-9-A702 | Repeal |
| R18-9-A702 | Amend |
| R18-9-A703 | Repeal |
| R18-9-A703 | Amend |
| R18-9-A704 | Repeal |
| R18-9-A704 | Amend |
| R18-9-A705 | Repeal |
| R18-9-A705 | Amend |
| R18-9-A706 | Repeal |
| R18-9-A706 | Amend |
| R18-9-A707 | New Section |



| | |
|------------|-------------|
| Part B | New Part |
| R18-9-B701 | Renumber |
| R18-9-B701 | Amend |
| R18-9-B702 | Renumber |
| R18-9-B702 | Amend |
| R18-9-B703 | Renumber |
| R18-9-B703 | Amend |
| R18-9-B704 | Renumber |
| R18-9-B704 | Amend |
| R18-9-B705 | Renumber |
| R18-9-B705 | Amend |
| R18-9-B706 | Renumber |
| R18-9-B706 | Amend |
| R18-9-B707 | Renumber |
| R18-9-B707 | Amend |
| R18-9-B708 | Renumber |
| R18-9-B708 | Amend |
| R18-9-B709 | Renumber |
| R18-9-B709 | Amend |
| R18-9-B710 | Renumber |
| R18-9-B710 | Amend |
| Part C | New Part |
| R18-9-C701 | Renumber |
| R18-9-C701 | Amend |
| Part D | New Part |
| R18-9-D701 | Renumber |
| R18-9-D701 | Amend |
| R18-9-D702 | Renumber |
| R18-9-D702 | Amend |
| Part E | New Part |
| R18-9-E701 | New Section |

2. Citations to the agency's statutory rulemaking authority to include the authorizing statute (general) and the implementing statute (specific):

Authorizing statutes: A.R.S. § 49-203(A)(6).

Implementing statute: A.R.S. § 49-203.

3. Citations to all related notices published in the Register as specified in R1-1-409(A) that pertain to the record of the proposed rule:

Notice of Rulemaking Docket Opening: 23 A.A.R. 1687, June 23, 2017 (*in this issue*)

Notice of Rulemaking Docket Opening: 22 A.A.R. 16, January 1, 2016

4. The agency's contact person who can answer question about the rulemaking:

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5. An agency's justification and reason why a rule should be made, amended, repealed or renumbered, to include an explanation about the rulemaking:

Summary

The Arizona Department of Environmental Quality (ADEQ) proposes to amend 18 A.A.C. 9, Articles 6 & 7 to update and restructure the reclaimed water rules, and allow for treatment of reclaimed water for potable use.

ADEQ last adopted a comprehensive revision of the reclaimed water reuse rules in January, 2001. These rules have fostered the beneficial reuse of reclaimed water while protecting water quality and human health. This regulatory framework has served Arizona well in expanding its water supply portfolio.

Since 2001, however, the science and technology of treatment and monitoring have advanced and new concerns and needs have arisen, including the need for clarification of ambiguities in the rules. In early 2016, ADEQ held informal listening sessions in Tucson, Phoenix, and Flagstaff to gather comments and feedback on the current rules. This rule proposal is an outcome of that process and represents the first round of three planned rulemaking phases.

In addition to meeting stakeholders' water augmentation requests, this rulemaking furthers the goals of the Governor's Arizona Water Initiative's Augmentation Council, originated by Governor Ducey under Executive Order 2015-13 and the Governor's Blue Ribbon Panel on Water Sustainability, which was formed in 2009 by Governor Brewer. The *Blue Ribbon Panel on Water Sustain-*



ability Final Report contained recommendations to advance and expand the use of reclaimed water and other recycled waters. In *The Arizona Water Initiative Annual Report, July 1, 2016*, experts identified the need for water augmentation through expanding reclaimed water reuse. This rulemaking is the first phase in expanding the use of reclaimed and recycled waters to meet these augmentation needs.

Based on the need for augmentation and the listening sessions held in early 2016, future phases will likely involve updates and amendments to A.A.C. Title 18, Chapter 11, Article 3, Reclaimed Water Quality Standards and additional amendments to A.A.C. Title 18, Chapter 9, Article 7 regarding infrastructure and technology and potable use criteria.

ADEQ is planning a second rulemaking phase that will involve amending A.A.C. Title 18, Chapter 11, Article 3, Reclaimed Water Quality Standards. To assist ADEQ in revising the reclaimed water quality standards, ADEQ has convened an expert workgroup to review the suitability of existing standards in light of current knowledge and provide recommendations on revisions.

ADEQ has also convened a workgroup of experts to provide recommendations to ADEQ on infrastructure and technology for a third rulemaking phase. This work group is charged with two tasks: (1) review the reclaimed water conveyance requirements (formerly A.A.C. Title 18, Chapter 9, Article 6 provisions, which are now proposed for incorporation into Part B of Article 7) and determine whether the current technical criteria are adequate, and (2) develop and recommend comprehensive criteria for advanced water treatment of reclaimed water for direct potable use. Comprehensive criteria for direct potable use would replace the interim criteria specified in Part E of this rulemaking.

ADEQ intends to modify the reclaimed rules in phases for several reasons. The review and modification process for such an expansive program is expected to take a good deal of time. The workgroups have been established to provide technical recommendations, but their review is expected to take approximately six months. ADEQ will then modify the rules, considering workgroup and other stakeholder recommendations to further modify the rules. The magnitude of necessary future modification cannot be fully known at this time without further review and stakeholder process. Currently, however, gray water permits are underutilized because of impracticable requirements. Further, the rules as originally written did not account for advanced reclaimed water treatment technologies so the rules now potentially suppress potable water augmentation innovation and implementation. Phasing the rulemaking will allow for the flow of innovation and utilization of reclaimed and gray water permits. If ADEQ batches all of the phases into one rulemaking, it may be years before permittees may utilize Type 3 gray water permits sufficiently, and before the state can begin to augment its water supply through treated reclaimed water potable use. Also, modifying the rule in phases will allow the regulated community and the public to adapt to the new structure and standards as the rules are modified, and provide additional opportunities for comment and improvement of the rules.

Explanation of Major Modifications

ADEQ proposes several major changes for 18 A.A.C. 9, Articles 6 and 7 in this rulemaking, including the following:

- Nomenclature and Restructuring Modifications;
- Modification of the Prohibition Against Providing Reclaimed Water for Human Consumption;
- Addition of Interim Permitting Criteria for an Advanced Reclaimed Water Treatment Facility, Which Produces Potable Water from Reclaimed Source Water;
- Modification of Gray Water Permitting Requirements;
- Modification of Notice and Signage Provisions;
- Modification of Reporting Requirements;
- Modification of Permit Revocation Provisions;
- Addition of Recycled Permit Transition Provision;
- Repeal of Unnecessary Sections and Subsections;
- Modification of Permit Notice Requirements; and
- Other minor clarifications, grammatical changes, and technical and consistency modifications to implement the above listed overarching changes.

Nomenclature and Restructuring Modifications.

ADEQ modified the overall nomenclature of Article 7. Under ADEQ’s current regulations, gray water, industrial wastewater, and reclaimed water are regulated as “reclaimed water.” However, gray water, industrial wastewater, and reclaimed water are all separate and unique categories of “recycled water.” ADEQ proposes to modify Article 7 to regulate all of these categories of water under the same umbrella term of “recycled water.” ADEQ renamed A.A.C. Title 18, Chapter 9, Article 7, from Direct Reuse of Reclaimed Water to Use of Recycled Water. A definition for recycled water is also proposed in R18-9-A701. To implement this new nomenclature, ADEQ proposes a new organizational structure for Article 7 clearly distinguishing the general recycled water provisions and the different categories of recycled water. The proposed structure is designed to ease the addition of any potential new categories of recycled waters in the future.

ADEQ modified the general provisions for reclaimed water to be applicable to all recycled waters and moved the provisions into Part A. Reclaimed water is now addressed in Part B. Reuse of industrial wastewater is regulated separately in Part C. Gray water is now regulated in Part D. Part E, which has no counterpart in the current rules, contains the interim criteria for advanced reclaimed-water treatment for distribution of water for direct potable reuse. Below is the proposed structure for Article 7:

Table 1 Proposed Article 7 Restructure According to Part

| Article 7 | Use of Recycled Water |
|-----------|--------------------------------|
| Part A | General Provisions |
| Part B | Reclaimed Water |
| Part C | Recycled Industrial Wastewater |



| | |
|--------|--------------------------------|
| Part D | Gray Water |
| Part E | Purified Water for Potable Use |

In the current rules, the permit types are listed consecutively in R18-9-711 through R18-9-719. However, as a part of the nomenclature and restructuring changes, ADEQ proposes these permits be located in the part of the rule addressing the particular category of recycled water regulated in the permit. For example, gray water is regulated under Part D. Also as a result of the restructure, every permit is now a “recycled water” permit and renamed as such. Below is a table showing each of the permit types proposed for regulation under Article 7.

Table 2 Proposed Permits by Type

| <i>Permit Type</i> | <i>Part</i> |
|---|-------------|
| Type 1 Recycled Water General Permit for Gray Water | D |
| Type 2 Recycled Water General Permit for Direct Reuse of Class A+ Reclaimed Water | B |
| Type 2 Recycled Water General Permit for Direct Reuse of Class A Reclaimed Water | B |
| Type 2 Recycled Water General Permit for Direct Reuse of Class B+ Reclaimed Water | B |
| Type 2 Recycled Water General Permit for Direct Reuse of Class B Reclaimed Water | B |
| Type 2 Recycled Water General Permit for Direct Reuse of Class C Reclaimed Water | B |
| Type 3 Recycled Water General Permit for a Reclaimed Water Blending Facility | B |
| Type 3 Recycled Water General Permit for a Reclaimed Water Agent | B |
| Type 3 Recycled Water General Permit for Gray Water | D |
| Recycled Water Individual Permit (General) | A |
| Recycled Water Individual Permit for Industrial Wastewater That Is Reused | C |
| Recycled Water Individual Permit for an Advanced Reclaimed Water Treatment Facility | E |

The Recycled Water Individual Permit Application in Part A must be used for specific individual permits, which are prescribed by other Parts in Article 7 for particular types of water or situations (e.g. an individual permit for a reclaimed water agent). The Part A individual permit application may also be used for situations involving more than one type of permit at one facility or for situations not captured by a general permit in order to ensure recycled water is used appropriately for the end use. For example, one individual permit may be issued for a facility using gray water and reclaimed water.

The proposed modifications also transfer all of the provisions from A.A.C. Title 18, Chapter 9, Article 6, Reclaimed Water Conveyances, into Article 7 for regulation as general reclaimed water requirements under Part B of Article 7. The definitions for “open water conveyance” and “pipeline conveyance” are moved into the Article 7 General Provisions definition section, R18-9-A701. The reclaimed water pipeline conveyance and open water conveyance sections, R18-9-602 and R18-9-603, respectively, are moved into the section for general requirements for reclaimed water, R18-9-B702. These provisions are only applicable to reclaimed water conveyance and distribution and so are only regulated under the reclaimed water category under Part B of Article 7.

Modification of the Prohibition Against Providing Reclaimed Water for Human Consumption.

In furtherance of augmenting Arizona’s potable water supply to meet future demands, ADEQ is providing an exception to the prohibition against providing reclaimed water for human consumption by allowing reclaimed water to be treated appropriately for potable use.

ADEQ proposes to leave the current reclaimed classes and permitting methodology substantially in place to allow for the continued appropriate regulation of reclaimed water, which has benefited the state over the years. Without additional advanced treatment, current classes of reclaimed water (A+, A, B+, B, and C) are not verifiably safe to drink. For this reason, ADEQ maintains the prohibition against providing direct reclaimed water for human consumption should continue in order to protect human health.

However, a body of research and studies has shown, and ADEQ concurs, the science and technology of advanced water treatment is at a level today where reclaimed water can be reliably treated to produce potable water. Therefore, ADEQ proposes to modify the prohibition against providing reclaimed water for human consumption to allow for an exception. As proposed, reclaimed water may be used as a source water for human consumption if the water undergoes further advanced water treatment and permitting under Part E. Part E prescribes a permitting process and a list of criteria that must be considered for ADEQ to issue a permit for an advanced reclaimed water treatment facility as an end user. The proposed term “advanced reclaimed water treatment facility” is defined in R18-9-A701(1).

Given the proven effectiveness of advanced water treatment techniques to produce drinkable water, ADEQ intends reclaimed water appropriately treated by an advanced reclaimed water treatment facility is no longer considered “reclaimed water” and therefore subsequent use is not to be “direct reuse” of reclaimed water as defined in the rules. To implement this concept, ADEQ proposes to modify the definition of “direct reuse” to clarify it does not include the use of potable water produced by an advanced reclaimed water treatment facility. ADEQ also proposes part of the definition of advanced reclaimed water treatment facility to specifically state, “Potable water produced by such a facility is not reclaimed water.”

In other words, while an advanced reclaimed water treatment facility is considered an end user of reclaimed water, a person receiving water produced by an advanced reclaimed water treatment facility is not an end user of reclaimed water and is not subject to the end user permitting requirements under Article 7. However, water produced by an advanced reclaimed water treatment facility



may be subject to other water quality regulations. For example, if the water produced by an advanced reclaimed water treatment facility is subsequently delivered to a public water system, Safe Drinking Water Act regulations would apply as they would to a surface source water.

Addition of Interim Permitting Criteria for an Advanced Reclaimed Water Treatment Facility, Which Produces Potable Water from Reclaimed Source Water.

Part E of this proposed rulemaking provides protective interim permitting criteria for an advanced reclaimed water treatment facility. These interim rules will remain in effect until ADEQ next modifies Article 7 to perfect the interim criteria based on experience and additional stakeholder input.

As stated in the previous section above, ADEQ is confident in the science and technology that advanced water treatment techniques can provide a finished water suitable for any potable use. These conclusions are based on research of laboratory analyses and multiple publications. E.g. *WaterReuse, Framework for Direct Potable Use 79* (2015) (“The ability of a wide range of treatment processes to meet chemical and pathogen standards for [advanced treated water] production. . . . have been demonstrated and are well documented. . .”). These conclusions are also supported in practice by facilities in the United States and internationally currently producing potable water by treating reclaimed water through multiple treatment technology barriers.

An advanced reclaimed water treatment facility consists of a chain of state-of-the-art treatment processes provide multiple purification mechanisms that remove contaminants from reclaimed water to produce potable water. The source water allowed by the proposed Part E, Class A+ and B+ reclaimed water, already has received a significant level of treatment by high performance wastewater treatment plants. An advanced reclaimed water treatment facility further purifies this water through a sequence of technologies such as ultrafiltration, reverse osmosis, advanced oxidation, and granular activated carbon. These technologies remove chemical constituents and have the capability to eliminate microbial contaminants many times over. For example, typical treatment trains employed for this purpose provide six to ten or more logarithm removal levels for microbial contaminants. This is equivalent to a removal capability of 99.9999 to 99.99999999 percent or more. This is far more than needed considering the high quality of the source water. By comparison, under the Safe Drinking Water Act, public water systems fed by surface water sources must maintain 4 log removal of viruses, which is equivalent to a 99.99 percent removal. The Safe Drinking Water Act applies its most stringent microbial log removal targets to viruses.

State-of-the-art monitoring technology is also used to track in real time the treatment processes and the quality of the finished water product. Using these monitoring technologies, nonconforming water can be diverted almost immediately. These technological advances ensure the facility can reliably purify water for drinking from virtually any source water to any desired standard of protection and ensure no nonconforming water is co-mingled with potable water for delivery.

Under the proposed rules, an advanced reclaimed water treatment facility must obtain a Recycled Water Individual Permit for an Advanced Reclaimed Water Treatment Facility. An applicant would provide the same information as required for any Recycled Water Individual Permit, as well as additional information required in a prescribed design report. The design report must demonstrate the advanced treatment provides multiple barriers of protection reliably producing water suitable for human consumption. Among other required information, the design report must include proof of pilot studies and results, a plan for monitoring for public health, and a complete identification, description, and analysis of the treatment stream, treatment system performance alerts and various technologies. The proposed interim criteria will serve as a framework to develop final criteria for the design, treatment, monitoring, and operation of advanced reclaimed water treatment facilities producing potable water.

To assist in further developing the interim criteria into final criteria, ADEQ has convened a workgroup of experts with access and knowledge of recent publications, research, and practice. Several of these experts have knowledge of or are involved in developing a recent document on Arizona-specific potable use considerations facilitated by the Steering Committee on Arizona Potable Reuse (SCAPR), an ad hoc group formed by experts from municipalities, consulting firms, and academia. Once finalized, ADEQ will likely use this document to further expand the potable use criteria in a later rulemaking phase. However, during this interim period, ADEQ is confident the interim criteria will ensure that any advanced reclaimed water treatment plant proposed produces an exceptional and drinkable finished water product.

Modification of Gray Water Permitting Requirements.

ADEQ updated the gray water use rules to clarify ambiguities and expand the utility of gray water permits.

ADEQ proposes to modify some of the language and requirements in the Type 1 General Permit for Gray Water in R18-9-D701, which regulates residential gray water use. The proposed rule provides greater clarity as to what best practices are most appropriate, safe, and practical. The changes proposed in this rule revision reflect more than 15 years of experience under the current approach. The changes:

- Clarify the use of gray water for safely watering food plants;
- Allow gray water use for shrubs as well as trees;
- Disallow mixing of water used to wash diapers or similarly soiled garments with gray water because disinfection is too complicated for most home gray water systems;
- Provide examples for minimizing standing water on the surface, including the now widespread practice of distributing gray water under a mulch cover;
- Mandate that if blockage, backup, or overload of the system occurs, distribution of gray water should cease until the deficiency is corrected. This may provide additional options over the former language, which required the flow to be directed to the sewer or septic tank;
- Broaden the scope of filtration language to clarify that best practices and additional components may achieve the same level of water quality;



- Specify that gray water storage tank holding time should be 24 hours or less to avoid development of anaerobic conditions and odors (such tanks have proven problematic in practice, leading to the use of surge tanks with shorter holding times in some systems); and
- Provide specific examples of flood gray water application including containment by horticultural mulch basins and swales.

Further, under the proposed R18-9-A703 Recycled Water Individual Permit, ADEQ will allow the addition of kitchen sink and dishwasher wastewater to a gray water source, as long as the water is treated appropriately for its end use.

Additionally, ADEQ proposes to increase the utility of the Type 3 General Permit for Gray water. The current Type 3 General Permit for Gray Water is not usable for most applicants due to inappropriate gray water dispersal requirements. The dispersal requirements as currently written mirror the disposal requirements for an on-site wastewater treatment facility, which require disposal into trenches. Trench disposal for on-site waste water treatment facilities is intended to allow for the infiltration of septic tank effluent, which gray water is not. Trench disposal limits the ability of a gray water permittee to use the water for simple irrigation or composting uses.

The proposed R18-9-D702 Type 3 Recycled Water General Permit for Gray Water also reshapes the former Type 3 permit. The new permit language addresses a need by many non-household entities to use gray water for simple subsurface irrigation of landscape plants in a way that protects human health and the environment.

Modification of Notice and Signage Provisions.

Recognizing that not all allowed end uses are amenable to posting signs, the proposed rules allow a permittee to post signs or provide notification for Type 2 Reclaimed Water General Permits for Direct Reuse of Class A+, A, B+, B, and C waters in R18-9-B704 through -B708.

ADEQ proposes changes to the signage requirement for “Mobile Reclaimed Water Dispersal” in R18-9-B702 to accommodate dispersal equipment other than trucks and tanks.

Modification of Reporting Requirements.

ADEQ proposes in R18-9-A705 to mandate if certain informational changes have occurred, a recycled water permittee must report such changes at least once annually by January 31st. While certain informational changes must be submitted for notice purposes only, ADEQ proposes any other changes will require a new permit application. ADEQ also proposes required annual reporting be due by a calendar date versus the permit anniversary date, in order to minimize work for both ADEQ and the customer to keep track of specific permit effective dates.

Modification of Permit Revocation Provisions.

ADEQ proposes to simplify and consolidate permit revocation provisions into one section, R18-9-A706, for both general and individual permits.

Addition of Recycled Permit Transition Provision.

ADEQ proposes a permit transition provision so that until their permits expire, existing permittees will follow Article 7 rules as they existed at the beginning of 2017.

Repeal of Unnecessary Sections and Subsections.

Upon review, some sections and subsection in Article 7 are unnecessary because the Department is already required by statute or rule to implement such sections or subsections. For example, the Department is already subject to permitting and licensing time-frame requirements by statute in Arizona Revised Statutes Title 41 and general agency rules in the Arizona Administrative Code, Title 18, Chapter 1. In addition, enforcement and penalty procedures in the current R18-9-720 are already established in A.R.S. §§ 49-261 through 49-263.

Modification of Notice Requirements.

In R18-9-A703, ADEQ proposes the agency must post notices of permitting decisions and for hearings on the Department’s website, rather than in newspaper publications.

Section by Section Explanation of Proposed Rules

Table 3 Section by Section Crosswalk and Condensed Explanation of Proposed Rules

| <i>Proposed Rule Number and Title</i> | <i>Current Rule Number and Title</i> | <i>Condensed Explanation of Modification</i> |
|---------------------------------------|---|---|
| Repeal Article 6 | Article 6 Reclaimed Water Conveyances | Repeal as this article will no longer be necessary because all text will be transferred to Article 7. |
| Repeal | R18-6-601 Definitions | Repeal and transfer text into the Article 7 definitions in R18-9-A701. |
| Repeal | R18-9-602 Pipeline Conveyances of Reclaimed Water | Repeal and transfer text into the reclaimed water general requirements in R18-9-B702(J). |
| Repeal | R18-9-603 Open Water Conveyances of Reclaimed Water | Repeal and transfer text into the reclaimed water general requirements in R18-9-B702(K). |
| | | |



| <i>Proposed Rule Number and Title</i> | <i>Current Rule Number and Title</i> | <i>Condensed Explanation of Modification</i> |
|--|--|---|
| Article 7 Use of Recycled Water | Article 7 Direct Reuse of Reclaimed Water | Restructure into several parts to regulate different types of water under the umbrella term recycled water. |
| Part A General Provisions | N/A | New part for recycled water general provisions. |
| R18-9-A701 Definitions | R18-9-701 Definitions | Renumbered. Insert “Open water conveyance” and “pipeline conveyance” definitions from Article 6 here. Amend gray water definition to be consistent with statutory definition. Add a definition for recycled water. Add a definition for an advanced reclaimed water treatment facility. Modify definition of direct reuse to clarify it does not include the use of potable water produced by an advanced reclaimed water treatment facility. Add a definition for a sewage treatment facility to clarify the term means the same as it does under the Aquifer Protection Program. |
| R18-9-A702 Applicability and Standards for Recycled Water | R18-9-702 Applicability and Standards for Reclaimed Water Classes | Renumber and make minor amendments to clarify applicability under recycled water structure. |
| R18-9-A703 Recycled Water Individual Permit Application | R18-9-705 Reclaimed Water Individual Permit Application | Renumber and amend to include certain general information changes an applicant must annually submit. Modify the notice requirements from requiring newspaper notices to posting on the Department’s website. Repeal pre-application conference provision as ADEQ is always willing to hold pre-application conferences when requested by applicants. Repeal provisions already required by other agency rules or specific applicable statutes. Amend to ensure treatment measures will be employed to meet appropriate water quality. Fix rule references. |
| R18-9-A704 Recycled Water General Permit | R18-9-708 Reusing Reclaimed Water Under a General Permit | Renumber and clarify process and information required for Notice of Intent to Use Recycled Water. Recycled Water Authorization is not automatically issued for a Type 3 permit and ADEQ must inform permittees of its receipt of a Notice of Intent for Type 2 permits. |
| R18-9-A705 Recycled Water Permit Term, Information Changes, and Renewal | R18-9-709 Reclaimed Water General Permit Renewal and Transfer | Renumber and completely restructure to apply to all recycled water permits. Requires the permittee to provide certain information annually if there are any changes in the information. If there are any changes other than those allowed with notice, a new permit is required. |
| R18-9-A706 Recycled Water Permit Revocation | R18-9-710 Reclaimed Water General Permit Revocation | Renumber, restructure, and simplify permit revocation procedures for general and individual permits. This rule was modified to be applicable to all recycled water permits, not just reclaimed water general permits. |
| R18-9-A707. Recycled Water Permit Transition | N/A | Add provisions so until their permits expire, existing permittees will follow Article 7 rules as they existed at the beginning of 2017. |
| Repeal | R18-9-720 Enforcement and Penalties | Repeal because enforcement and penalty processes are provided by statute in A.R.S. §§ 49-261 through 49-263. |
| Part B Reclaimed Water | N/A | New part for reclaimed water regulation. |
| R18-9-B701 Transition of Aquifer Protection Permits and Permits for the Reuse of Reclaimed Wastewater | R18-9-703 Transition of Permits | Renumber and minor grammar edits and consistency changes, such as updating cross-references and nomenclature. |
| R18-9-B702 General Requirements | R18-9-704 General Requirements | Modify the prohibition against direct reuse for human consumption to allow for an exemption for reclaimed water treated under Part E. The hose bibb provision is transferred to its own subsection to clarify all hose bibbs discharging reclaimed water shall be secured to prevent use by the public, not just hose bibbs associated with irrigation. Modify signage and notice requirements. Pipeline and open water conveyance requirements from Article 6 are moved into this section. Renumber and make nomenclature, grammar, and reference fixes for consistency. This section is still only applicable to reclaimed water. |



| <i>Proposed Rule Number and Title</i> | <i>Current Rule Number and Title</i> | <i>Condensed Explanation of Modification</i> |
|---|--|---|
| R18-9-B703 General Provisions for Recycled Water Individual Permit for Reclaimed Water | R18-9-706 Reclaimed Water Individual Permit Application | Renumber and make minor consistency and clarification edits. Remove permit transfer provisions, now covered in Part A. Add provisions for closure as applicable and signage and notification requirements, as appropriate for the end use. Update reference to strip chart recordings to the more generic word "data" to reflect digital data collection methods. For clarity, provide reference to discretionary alternate direct reuses allowed under R18-11-309. |
| R18-9-B704 Type 2 Recycled Water General Permit for Direct Reuse of Class A+ Reclaimed Water | R18-9-712 Type 2 Recycled Water General Permit for Direct Reuse of Class A+ Reclaimed Water | Renumber and make minor changes for consistency. |
| R18-9-B705 Type 2 Recycled Water General Permit for Direct Reuse of Class A Reclaimed Water | R18-9-713 Type 2 Reclaimed Water General Permit for Direct Reuse of Class A Reclaimed Water | Renumber and minor changes for consistency and clarity. |
| R18-9-B706 Type 2 Recycled Water General Permit for Direct Reuse of Class B+ Reclaimed Water | R18-9-714 Type 2 Reclaimed Water General Permit for Direct Reuse of Class B+ Reclaimed Water | Renumber and make minor changes for consistency. |
| R18-9-B707 Type 2 Recycled Water General Permit for Direct Reuse of Class B Reclaimed Water | R18-9-715 Type 2 Reclaimed Water General Permit for Direct Reuse of Class B Reclaimed Water | Renumber and make minor changes for consistency. |
| R18-9-B708 Type 2 Recycled Water General Permit for Direct Reuse of Class C Reclaimed Water | R18-9-716 Type 2 Reclaimed Water General Permit for Direct Reuse of Class C Reclaimed Water | Renumber and make minor changes for consistency. |
| R18-9-B709 Type 3 Recycled Water General Permit for a Reclaimed Water Blending Facility | R18-9-717 Type 3 Reclaimed Water General Permit for a Reclaimed Water Blending Facility | Renumber and clarify information requirements for Type 3 blending facility applications. Clarify requirements if nitrogen or fecal coliform concentrations are exceeded. Modifies annual reporting date from permit anniversary to a uniform calendar year date of January 31. |
| R18-9-B710 Type 3 Recycled Water General Permit for a Reclaimed Water Agent | R18-9-718 Type 3 Reclaimed Water General Permit for a Reclaimed Water Agent | Renumbered, modified for consistency, and clarifies information requirements for Type 3 water agent permit. Modifies annual reporting date from permit anniversary to a uniform calendar year date of January 31. |
| Part C Recycled Industrial Wastewater | N/A | New part for recycled industrial wastewater regulation. |
| R18-9-C701 Recycled Water Individual Permit for Industrial Wastewater | R18-9-707 Reclaimed Water Individual Permit Where Industrial Wastewater Influences the Characteristics of Reclaimed Water | Renumber and minor changes for consistency. Updated industrial code terminology. |
| Part D Gray Water | N/A | New part for gray water regulation. |
| R18-9-D701 Type 1 Recycled Water General Permit for Gray Water | R18-9-711 Type 1 Reclaimed Water General Permit for Gray Water | Renumber and make minor changes for consistency. Several changes to clarify ambiguities in current rule and to provide more useful guidance for residential gray water use. |



| <i>Proposed Rule Number and Title</i> | <i>Current Rule Number and Title</i> | <i>Condensed Explanation of Modification</i> |
|---|---|--|
| R18-9-D702 Type 3 Recycled Water General Permit for Gray Water | R18-9-719 Type 3 Reclaimed Water General Permit for Gray Water | Renumber and make minor changes for consistency. Significant changes to technical requirements for large-scale gray water use. New requirements expand the utility of the permit. |
| Part E Purified Water for Potable Use | N/A | New part for potable use regulation. |
| R18-9-E701 Recycled Water Individual Permit for an Advanced Reclaimed Water Treatment Facility | N/A | New section to provide an individual permit process for an advanced reclaimed water treatment facility, a facility treats reclaimed water to produce potable water. Provides interim criteria requirements permittees must meet for purifying water for potable use. Clarifies product water subject to the Safe Drinking Water Act would be treated as surface water. |

6. A reference to any study relevant to the rule that the agency reviewed and proposes either to rely on or not to rely on in its evaluation of or justification for the rule, where the public may obtain or review each study, all data underlying each study, and any analysis of each study and other supporting material:

Framework for Direct Potable Reuse, Sept 14, 2015, sponsored by the WaterReuse Association and co-sponsored by NWRI, American Water Works Association, and Water Environment Federation.

George Tchobanoglous, University of California, Davis, et al., “Direct Potable Reuse: A Path Forward” (2011), sponsored by WaterReuse, Bureau of Reclamation, and California State Water Resources Control Board.

WaterReuse Research Foundation, *The Opportunities and Economics of Direct Potable Reuse* (2014).

7. A showing of good cause why the rule is necessary to promote a statewide interest if the rule will diminish a previous grant of authority of a political subdivision of this state:

Not applicable

8. The preliminary summary of the economic, small business, and consumer impact:

This rule does not limit conduct already occurring, but rather allows for conduct previously prohibited. Currently, no one is allowed to provide reclaimed water for human consumption under the rule, except as allowed by current substantive policy. However, ADEQ proposes to modify the prohibition and allow for the distribution of highly treated reclaimed water in order to augment Arizona’s water supply and spark innovation. Based on Southern California figures as reported in WaterReuse Research Foundation’s *The Opportunities and Economics of Direct Potable Reuse*, the total cost of treating reclaimed water to produce potable water, including treatment, conveyance and brine management may run between \$820 acre-foot and \$2000 acre-foot. This cost is likely lower than imported water supply and brackish groundwater supply options. The price of direct potable use may be more expensive than current conservation options, but conservation typically requires increasingly more expensive technologies and resources as the level of acre-feet saved increases. Advanced water treatment may provide increased supply with limited additional resources. Advanced reclaimed water treatment is a voluntary activity which may be pursued to augment Arizona’s water supply for environmental reasons, and it may soon become a profitable industry given the high value of potable water in Arizona.

Gray water requirement modifications will allow for activity previously effectively impossible to legally implement. The other rule modifications should have limited, if any, economic effects, except to clarify requirements and restructure the rules.

9. The agency’s contact person who can answer questions about the economic, small business, and consumer impact statement:

Name: Heidi M. Haggerty (Welborn)

Address: Department of Environmental Quality
Water Quality Division
1110 W. Washington St.
Phoenix, AZ 85007

Telephone: (602) 771- 4815 (This number may be reached toll-free in state by dialing 1-800-234-5677 and entering the seven digit number at any time during the automated message.)

E-mail: haggerty.heidi@azdeq.gov

10. The time, place, and nature of the proceedings to make, amend, repeal, or renumber the rule or, if no proceeding is scheduled, where, when, and how persons may request an oral proceeding on the proposed rule:

ADEQ has scheduled an oral proceeding to receive oral comments on the rules, in accordance with A.R.S. § 41-1023; the time, place, and location of the hearing are listed below:

Date: July 25, 2017

Time: 10:00 a.m.

Location: Department of Environmental Quality
1110 W. Washington, Room 3175
Phoenix, AZ 85007

Nature: Oral Proceeding on the proposed rules, with opportunity for formal comments on the record

Close of Comment: 5:00 p.m. on July 25, 2017



Written or e-mailed comments may be made to the contact person listed above by the close of comment date. Upon request, ADEQ will provide appropriate auxiliary aids and services to persons with disabilities, at no charge, to assist in accessible communication to enable people who have speech, hearing, vision, learning, or other impairments to participate equally, including qualified sign language interpreters. To request an auxiliary aid or service, to obtain this document in alternative format, or for further information, please contact Christine Harp at (602) 771-4280 or via email at harp.christine@azdeq.gov as early as possible to allow time to arrange the accommodation. TTY/TTD Services: 7-1-1. The ADA does not require ADEQ to take any action fundamentally altering the nature of its programs, services or activities, or impose an undue financial or administrative burden on ADEQ.

11. All agencies shall list other matters prescribed by statute applicable to the specific agency or to any specific rule or class of rules. Additionally, an agency subject to Council review under A.R.S. §§ 41-1052 and 41-1055 shall respond to the following questions:

a. Whether the rule requires a permit, whether a general permit is used and if not, the reasons why a general permit is not used:

The rules require several different types of permits. General permits are used where possible. However, individual permits are prescribed for case-by-case situations. An individual permit is also required for advanced reclaimed water treatment facilities. Such facilities will have varying advanced water treatment techniques and will also require case-by-case facility-specific determinations.

b. Whether a federal law is applicable to the subject of the rule, whether the rule is more stringent than federal law and if so, citation to the statutory authority to exceed the requirements of federal law:

There is no federal law applicable to reclaimed water.

c. Whether a person submitted an analysis to the agency that compares the rule's impact on the competitiveness of business in this state to the impact on business in other states:

No analysis has been submitted.

12. A list of any incorporated by reference material as specified in A.R.S. § 41-1028 and its location in the rules:

None

13. The full text of the rules follows:

**TITLE 18. ENVIRONMENTAL QUALITY
CHAPTER 9. DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER POLLUTION CONTROL**

ARTICLE 6. RECLAIMED WATER CONVEYANCES REPEALED

Section

- R18-9-601. ~~Definitions~~ Repealed
- R18-9-602. ~~Pipeline Conveyances of Reclaimed Water~~ Repealed
- R18-9-603. ~~Open Water Conveyances of Reclaimed Water~~ Repealed

ARTICLE 7. DIRECT REUSE OF RECLAIMED USE OF RECYCLED WATER

Section

- R18-9-701. ~~Definitions~~ Renumbered
- R18-9-702. ~~Applicability and Standards for Reclaimed Water Classes~~ Renumbered
- R18-9-703. ~~Transition of Permits~~ Renumbered
- R18-9-704. ~~General Requirements~~ Renumbered
- R18-9-705. ~~Reclaimed Water Individual Permit Application~~ Renumbered
- R18-9-706. ~~Reclaimed Water Individual Permit General Provisions~~ Renumbered
- R18-9-707. ~~Reclaimed Water Individual Permit Where Industrial Wastewater Influences the Characteristics of Reclaimed Water~~ Renumbered
- R18-9-708. ~~Reusing Reclaimed Water Under a General Permit~~ Renumbered
- R18-9-709. ~~Reclaimed Water General Permit Renewal and Transfer~~ Renumbered
- R18-9-710. ~~Reclaimed Water General Permit Revocation~~ Renumbered
- R18-9-711. ~~Type 1 Reclaimed Water General Permit for Gray Water~~ Renumbered
- R18-9-712. ~~Type 2 Reclaimed Water General Permit for Direct Reuse of Class A+ Reclaimed Water~~ Renumbered
- R18-9-713. ~~Type 2 Reclaimed Water General Permit for Direct Reuse of Class A Reclaimed Water~~ Renumbered
- R18-9-714. ~~Type 2 Reclaimed Water General Permit for Direct Reuse of Class B+ Reclaimed Water~~ Renumbered
- R18-9-715. ~~Type 2 Reclaimed Water General Permit for Direct Reuse of Class B Reclaimed Water~~ Renumbered
- R18-9-716. ~~Type 2 Reclaimed Water General Permit for Direct Reuse of Class C Reclaimed Water~~ Renumbered
- R18-9-717. ~~Type 3 Reclaimed Water General Permit for a Reclaimed Water Blending Facility~~ Renumbered
- R18-9-718. ~~Type 3 Reclaimed Water General Permit for a Reclaimed Water Agent~~ Renumbered
- R18-9-719. ~~Type 3 Reclaimed Water General Permit for Gray Water~~ Renumbered
- R18-9-720. ~~Enforcement and Penalties~~ Repealed

PART A. GENERAL PROVISIONS

Section



~~R18-9-701-R18-9-A701. Definitions~~
~~R18-9-702-R18-9-A702. Applicability and Standards for Reclaimed Recycled Water Classes~~
~~R18-9-705-R18-9-A703. Reclaimed Recycled Water Individual Permit Application~~
~~R18-9-708-R18-9-A704. Reusing Reclaimed Recycled Water Under a General Permit~~
~~R18-9-709-R18-9-A705. Reclaimed Recycled Water General Permit Term, Information Changes, and Renewal and Transfer~~
~~R18-9-710-R18-9-A706. Reclaimed Recycled Water General Permit Revocation~~
~~R18-9-A707. Recycled Water Permit Transition~~

PART B. RECLAIMED WATER

~~R18-9-703-R18-9-B701. Transition of Aquifer Protection Permits and Permits for the Reuse of Reclaimed Wastewater~~
~~R18-9-704-R18-9-B702. General Requirements~~
~~R18-9-706-R18-9-B703. General Provisions for Reclaimed Recycled Water Individual Permit for Reclaimed Water General Provisions~~
~~R18-9-712-R18-9-B704. Type 2 Reclaimed Recycled Water General Permit for Direct Reuse of Class A+ Reclaimed Water~~
~~R18-9-713-R18-9-B705. Type 2 Reclaimed Recycled Water General Permit for Direct Reuse of Class A Reclaimed Water~~
~~R18-9-714-R18-9-B706. Type 2 Reclaimed Recycled Water General Permit for Direct Reuse of Class B+ Reclaimed Water~~
~~R18-9-715-R18-9-B707. Type 2 Reclaimed Recycled Water General Permit for Direct Reuse of Class B Reclaimed Water~~
~~R18-9-716-R18-9-B708. Type 2 Reclaimed Recycled Water General Permit for Direct Reuse of Class C Reclaimed Water~~
~~R18-9-717-R18-9-B709. Type 3 Reclaimed Recycled Water General Permit for a Reclaimed Water Blending Facility~~
~~R18-9-718-R18-9-B710. Type 3 Reclaimed Recycled Water General Permit for a Reclaimed Water Agent~~

PART C. RECYCLED INDUSTRIAL WASTEWATER

Section

~~R18-9-707-R18-9-C701. Reclaimed Recycled Water Individual Permit Where for Industrial Wastewater Influences the Characteristics of Reclaimed Water That Is Reused~~

PART D. GRAY WATER

Section

~~R18-9-711-R18-9-D701. Type 1 Reclaimed Recycled Water General Permit for Gray Water~~
~~R18-9-719-R18-9-D702. Type 3 Reclaimed Recycled Water General Permit for Gray Water~~

PART E. PURIFIED WATER FOR POTABLE USE

Section

~~R18-9-E701. Recycled Water Individual Permit for an Advanced Reclaimed Water Treatment Facility~~

ARTICLE 6. RECLAIMED WATER CONVEYANCES REPEALED

R18-9-601. Definitions Repealed

In addition to the definitions provided in R18-9-701, the following terms apply to this Article:

1. "Open water conveyance" means any constructed open waterway, including canals and laterals that transports reclaimed water from a sewage treatment facility to a reclaimed water blending facility or from a sewage treatment facility or reclaimed water blending facility to the point of land application or end use. An open water conveyance does not include waters of the United States.
2. "Pipeline conveyance" means any system of pipelines that transports reclaimed water from a sewage treatment facility to a reclaimed water blending facility or from a sewage treatment facility or reclaimed water blending facility to the point of land application or end use.

R18-9-602. Pipeline Conveyances of Reclaimed Water Repealed

A. Applicability.

1. Any person constructing a pipeline conveyance on or after January 1, 2001, whether new or a replacement of an existing pipeline shall meet the requirements of this Article.
2. Any person who has constructed a pipeline conveyance before January 1, 2001, is considered to be in compliance with this Article.

B. A person shall design and construct a pipeline conveyance system using good engineering judgement following standards of practice.

C. A person shall construct a pipeline conveyance so that:

1. Reclaimed water does not find its way into, or otherwise contaminate, a potable water system;
2. System structural integrity is maintained; and
3. The capability for inspection, maintenance, and testing is maintained.

D. A person shall construct a pipeline conveyance and all appurtenances conducting reclaimed water to withstand a static pressure of at least 50 pounds per square inch greater than the design working pressure without leakage as determined in A.A.C. R18-9-E301(D)(2)(j).

E. A person shall provide a pipeline conveyance with thrust blocks or restrained joints where needed to prevent excessive movement of the pipeline.

F. The following requirements for minimum separation distance apply. A person shall:

1. Locate a pipeline conveyance no closer than 50 feet from a drinking water well unless the pipeline conveyance is constructed as specified under subsection (F)(3);
2. Locate a pipeline conveyance no closer than two feet vertically nor six feet horizontally from a potable water pipeline unless the pipeline conveyance is constructed as specified under subsection (F)(3);



- 3. Construct a pipeline conveyance that does not meet the minimum separation distances specified in subsections (F)(1) and (F)(2) by encasing the pipeline conveyance in at least six inches of concrete or using mechanical joint ductile iron pipe or other materials of equivalent or greater tensile and compressive strength at least 10 feet beyond any point on the pipeline conveyance within the specified minimum separation distance; and
- 4. If a reclaimed water system is supplemented with water from a potable water system, separate the potable water system from the pipeline conveyance by an air gap.

G. A person shall:

- 1. For a pipeline conveyance, eight inches in diameter or less, use pipe marked on opposite sides in English: "CAUTION: RECLAIMED WATER, DO NOT DRINK" in intervals of three feet or less and colored purple or wrapped with durable purple tape.
- 2. For a mechanical appurtenance to a pipeline conveyance, ensure that the mechanical appurtenance is colored purple or legibly marked to identify it as part of the reclaimed water distribution system and distinguish it from systems for potable water distribution and sewage collection.

R18-9-603. Open Water Conveyances of Reclaimed Water Repealed

~~A. This Article applies to an open water conveyance, regardless of the date of construction.~~

~~B. A person shall maintain an open water conveyance to prevent release of reclaimed water except as allowed under federal and state regulations. The maintenance program shall include periodic inspections and follow-up corrective measures to ensure the integrity of conveyance banks and capacity of the conveyance to safely carry operational flows.~~

C. Signage for Class B+, B, and C Reclaimed Water. A person shall:

- 1. Ensure that signs state: "CAUTION: RECLAIMED WATER, DO NOT DRINK," and display the international "do not drink" symbol;
- 2. Place signs at all points of ingress and, if the open water conveyance is operated with open access, at least every ¼ mile along the length of the open water conveyance; and
- 3. Ensure that signs are visible and legible from both sides of the open water conveyance.

ARTICLE 7. DIRECT REUSE OF RECLAIMED USE OF RECYCLED WATER

PART A. GENERAL PROVISIONS

~~R18-9-701, R18-9-A701, Definitions~~

Unless provided otherwise, the definitions provided in A.R.S. § 49-201, A.A.C. R18-9-101, R18-9-601, R18-11-301, and the following terms apply to this Article:

- 1. "Advanced reclaimed water treatment facility" means a facility that treats and purifies Class A+ or Class B+ reclaimed water to produce potable water suitable for distribution for human consumption. R18-9-B702(B) does not apply to an advanced reclaimed water treatment facility. Potable water produced by an advanced reclaimed water treatment facility is not reclaimed water.
- ~~2.~~ "Direct reuse" means the beneficial use of reclaimed water for a purpose allowed by this Article. The following is not a direct reuse of reclaimed water:
 - a. The use of water subsequent to its discharge under the conditions of a ~~National~~ Arizona Pollutant Discharge Elimination System permit;
 - b. The use of water subsequent to discharge under the conditions of an Aquifer Protection Permit issued under 18 A.A.C. 9, Articles 1 through 3; ~~or~~
 - c. The use of industrial wastewater, reclaimed water, or both, in a workplace subject to a federal program that protects workers from workplace exposures; ~~or~~
 - d. The use of potable water produced by an advanced reclaimed water treatment facility.
- ~~3.~~ "Direct reuse site" means an area permitted for the application or impoundment of reclaimed water. An impoundment operated for disposal under an Aquifer Protection Permit is not a direct reuse site.
- ~~4.~~ "End user" means a person who directly reuses reclaimed water meeting the standards for Classes A+, A, B+, B, and C, established under 18 A.A.C. 11, Article 3.
- ~~5.~~ "Gray water" means wastewater that has been collected separately from a sewage flow and that originates from a clothes washer, bathtub, shower, and sink, or a bathroom tub, shower or sink but that does not include wastewater from a kitchen sink, dishwasher, or toilet. A.R.S. § 49-201(18).
- ~~6.~~ "Industrial wastewater" means wastewater generated from an industrial process.
- ~~7.~~ "Irrigation" means the beneficial use of water or reclaimed water, or both, for growing crops, turf, or silviculture, or for landscaping.
- ~~8.~~ "Open access" means ~~that~~ access to reclaimed water by the general public is uncontrolled.
- 9. "Open water conveyance" means any constructed open waterway, including canals and laterals, that transports reclaimed water from a sewage treatment facility to a reclaimed water blending facility or from a sewage treatment facility or reclaimed water blending facility to the point of land application or end use. An open water conveyance does not include waters of the United States.
- 10. "Pipeline conveyance" means any system of pipelines that transports reclaimed water from a sewage treatment facility to a reclaimed water blending facility or from a sewage treatment facility or reclaimed water blending facility to the point of land application or end use.
- ~~8-11.~~ "Reclaimed water" means water that has been treated or processed by a wastewater treatment plant or an on-site wastewater treatment facility. A.R.S. § ~~49-201(31)~~ 49-201(32).
- ~~9-12.~~ "Reclaimed water agent" means a person who holds a permit to distribute reclaimed water to more than one end user.



- ~~10-13.~~ “Reclaimed water blending facility” means an installation or method of operation that receives reclaimed water from a sewage treatment facility or other reclaimed water blending facility classified to produce Class C or better reclaimed water and blends it with other water so that the produced water may be used for a higher-class purpose listed in 18 A.A.C. 11, Article 3, ~~Appendix Table A.~~
14. “Recycled water” means a processed water that originated as a waste or discarded water, including reclaimed water and gray water, for which the Department has designated water quality specifications to allow the water to be used as a supply.
- ~~11-15.~~ “Restricted access” means that access to reclaimed water by the general public is controlled.
16. “Sewage Treatment Facility” means a sewage treatment facility as defined in 18 A.A.C. 9, Article 1.

~~R18-9-702.~~ **R18-9-A702. Applicability and Standards for Reclaimed Recycled Water Classes**

- A. This Article applies to:
1. An owner or operator of a sewage treatment facility that generates reclaimed water for direct reuse,
 2. An owner or operator of a reclaimed water blending facility,
 3. A reclaimed water agent,
 4. An end user of reclaimed water,
 5. A person who uses ~~gray water~~ recycled water regulated under this Article,
 6. A person who directly reuses reclaimed water from a sewage treatment facility combined with industrial wastewater or combined with ~~reclaimed~~ water from an industrial wastewater treatment facility, and
 7. A person who directly reuses reclaimed water from an industrial wastewater treatment facility in the production or processing of a crop or substance that may be used as human or animal food.
- B. Reclaimed water classes A+, A, B+, B, and C specified in this Article shall meet the standards established in 18 A.A.C. 11, Article 3.
- C. Nothing in this Article exempts the disposal of reclaimed water from the Aquifer Protection Permit requirements under A.R.S. Title 49, Chapter 2, Articles 1, 2, and 3.

~~R18-9-703.~~ **R18-9-B701.**

~~R18-9-704.~~ **R18-9-B702.**

~~R18-9-705.~~ **R18-9-A703. Reclaimed Recycled Water Individual Permit Application**

- ~~A.~~ Pre-application conference. Upon request of an applicant, the Department shall schedule and hold a pre-application conference with the applicant to discuss any requirements in this Article.
- ~~B-A.~~ To apply for a Reclaimed Recycled Water Individual Permit, a person shall provide the Department with:
1. The applicable permit fee specified under 18 A.A.C. 14; and
 - ~~2.~~ The following information on a form provided by the Department:
 - a. The name, e-mail address, telephone number, and mailing address of the owner or operator of the facility or, if applicable, the reclaimed water agent;
 - b. The social security number of the applicant, if the applicant is an individual;
 - c. The legal description of the direct reuse site, including latitude and longitude coordinates; township range, and section; site address, if applicable; and a map showing the facility or site location;
 - d. Any other federal or state environmental permits issued to the applicant;
 - e. Source of ~~reclaimed recycled~~ water to be ~~directly reused~~ used;
 - f. ~~The applicant may propose for approval, and the Department may issue, a single permit that includes more than one type of recycled water allowed by this article, including for multiple classes of reclaimed water, if the applicant demonstrates the waters will be treated appropriately for the end use;~~
 - g. ~~The applicant may propose, and the Department may permit, the inclusion of kitchen sink and dishwasher wastewater with gray water under a Recycled Water Individual Permit, if the applicant demonstrates such waters will be treated appropriately for the end use;~~
 - ~~f-h.~~ Volume of reclaimed Estimated volume of recycled water to be ~~directly reused~~ used on an annual basis;
 - ~~g-l.~~ Class of reclaimed water to be directly reused, if applicable;
 - ~~h-j.~~ Description of the ~~direct reuse~~ use activity; and
 - k. Any treatment measures utilized to meet or maintain reclaimed water quality standards or otherwise ensure the quality of the recycled water is fit for the intended use; and
 - ~~i-l.~~ The applicant’s ~~signature certifying certification~~ that the information submitted in the application is true and accurate to the best of the applicant’s knowledge;
 2. A copy of the certificate of disclosure of violations required under A.R.S. § 49-109; and
 3. The applicable permit fee specified under 18 A.A.C. 14.
- ~~C.~~ Administrative completeness review. Upon receipt, the Department shall review the Reclaimed Water Individual Permit application to determine its administrative completeness under A.R.S. § 41-1074 and A.A.C. R18-1-503.
- ~~D.~~ Substantive review. Upon receipt of a complete Reclaimed Water Individual Permit application, the Department shall review the application to determine its substantive adequacy under A.R.S. § 41-1075 and A.A.C. R18-1-504.
- ~~E.~~ Draft permit. The Department shall provide the applicant a copy of a draft of the Reclaimed Recycled Water Individual Permit before the notice specified in subsection (F) is published.
- ~~F-B.~~ Public participation.
1. Notice of Preliminary Decision.
 - a. The Department shall publish a Notice of Preliminary Decision to issue or deny a Reclaimed Water Individual Permit within a period of time that allows the Department to meet the licensing time frame requirements under 18 A.A.C. 5.
 - ~~b-a.~~ The Department shall publish the Notice of Preliminary Decision regarding the issuance or denial of a final permit determination in one or more newspapers of general circulation where the facility is located on the Department’s website.



- e.b. The Department shall accept written comments from the public before a ~~Reclaimed~~ Recycled Water Individual Permit is issued or denied.
- ~~e.c.~~ The written public comment period begins on the publication date of the Notice of Preliminary Decision and extends for 30 calendar days.
- 2. After publishing the notice specified in subsection ~~(F)(1)(a)~~ (B)(1)(a), the Department shall hold a public hearing to address the Notice of Preliminary Decision if the Department determines that:
 - a. ~~Public~~ Significant public interest in a public hearing exists, or
 - b. ~~Issues~~ Significant issues or information have been brought to the attention of the Department that are relevant to the permitting decision and have not been considered previously in the permitting process.
- 3. If the Department determines ~~that a public hearing is necessary and a public hearing has not already been noticed under subsection (F)(1)(a)~~ (B)(1)(a), the Department shall schedule a public hearing and republish the Notice of Preliminary Decision ~~as a legal notice at least once, in one or more newspapers of general circulation where the facility is located and notice of the public hearing on the Department's website.~~
- 4. The Department shall accept written public comment until the close of the hearing record as specified by the person presiding at the public hearing.

G.C. Final permit issuance or denial.

- 1. ~~The Department shall give the applicant written notification of its final decision to issue or deny the permit application within the overall licensing time frame requirements in 18 A.A.C. 5.~~
- 2.1. The Department may deny a ~~Reclaimed~~ Recycled Water Individual Permit if the Department determines upon completion of the application process ~~that~~ the applicant has:
 - a. Failed or refused to correct a deficiency in the permit application;
 - b. Failed to demonstrate ~~that~~ the facility and the operation will protect public health and water quality. This determination shall be based on:
 - i. The information submitted in the permit application,
 - ii. Any information submitted to the Department as written public comment or following a public hearing; or
 - iii. Any information relevant to the demonstration ~~that is~~ developed or acquired by the Department, or
 - c. Provided false or misleading information.
- 3.2. If the Department denies a ~~Reclaimed~~ Recycled Water Individual Permit the Department shall provide the applicant with written notification ~~that explains~~ explaining the following:
 - a. The reasons for the denial with references to the statutes or rules on which the denial is based.
 - b. The applicant's right to appeal the denial, including the number of days the applicant has to file a notice of appeal, and the name and telephone number of the Department contact person who can answer questions regarding the appeals process.
 - c. The applicant's right to request an informal settlement conference under A.R.S. §§ 41-1092.03(A) and 41-1092.06.

R18-9-706-R18-9-B703.

R18-9-707-R18-9-C701.

R18-9-708-R18-9-A704. Reusing Reclaimed Recycled Water Under a General Permit

- A. Type 1 ~~Reclaimed~~ Recycled Water General Permit ~~for Gray Water.~~ A person may ~~directly reuse reclaimed use recycled~~ use recycled water without notice to the Department if ~~the use:~~
 - 1. ~~The direct reuse is~~ is specifically authorized by and meets the requirements of this Article, and
 - 2. Complies with the requirements of the Type 1 ~~Reclaimed~~ Recycled Water General Permit under ~~R18-9-714~~ this Article.
- B. Type 2 ~~Reclaimed~~ Recycled Water General Permit ~~for Reclaimed Water.~~
 - 1. A person may ~~directly reuse reclaimed use recycled~~ use recycled water under a Type 2 ~~Reclaimed~~ Recycled Water General Permit if:
 - a. The ~~direct reuse use~~ use is authorized by and meets the requirements of this Article;
 - b. The ~~direct reuse use~~ use meets all the conditions of the applicable Type 2 ~~Reclaimed~~ Recycled Water General Permit under ~~R18-9-712 through R18-9-716~~ this Article;
 - c. The person files a Notice of Intent ~~for Direct Reuse of Reclaimed to Use Recycled~~ to Use Recycled Water under subsection (B)(2); and
 - d. The person submits the applicable fee established in 18 A.A.C. 14.
 - 2. Notice of Intent ~~for Direct Reuse of Reclaimed to Use Recycled~~ to Use Recycled Water.
 - a. A person shall submit, by ~~certified~~ certified mail, in person, or by another method approved by the Department, the Notice of Intent ~~for Direct Reuse of Reclaimed to Use Recycled~~ to Use Recycled Water on a form provided by the Department.
 - b. The Notice of Intent ~~for Direct Reuse of Reclaimed to Use Recycled~~ to Use Recycled Water shall include;
 - i. The name, address, e-mail address, and telephone number of the applicant;
 - ii. ~~The social security number of the applicant, if the applicant is an individual;~~
 - iii. The name, address, and telephone number of the contact person;
 - iv. ~~iii.~~ The source, estimated volume, and, if applicable, class of reclaimed recycled water to be directly reused used;
 - v. ~~A legal description of the direct reuse site, including~~ iv. The latitude and longitude coordinates of the approximate center point of the use site;
 - vi. ~~v.~~ v. The description of the direct reuse use activity, including a description of acreage and the type of vegetation to be irrigated, if applicable to the type of direct reuse activity; and
 - vii. ~~vi.~~ vi. The permittee's applicant's signature certifying certification that the permittee applicant agrees to comply with all requirements of this Article, including specific terms of the applicable Reclaimed Recycled Water General Permit.
 - c. ~~For a Type 2 Recycled Water General Permit for Direct Reuse of Reclaimed Water, the Notice of Intent to Use Recycled Water must include the description of the direct reuse activity, including a description of acreage and the type of vegetation to be irrigated, if applicable to the type of direct reuse activity.~~



3. The Department shall notify the applicant that the Department received the Notice of Intent to Use Recycled Water and that the applicant is authorized to use the recycled water according to Type 2 permit conditions.
- C. Type 3 Reclaimed Recycled Water General Permit for Reclaimed Water and Type 3 Recycled Water General Permit for Gray Water. A person may shall not operate under a Type 3 Reclaimed Recycled Water General Permit after filing an applicable Notice of Intent to Operate with the Department and receiving until the Department issues a written Verification of General Permit Conformance for the operation Recycled Water Authorization.
1. Application submittal. The applicant shall submit, either by certified mail, in person at the Department, or by another method approved by the Department:
 - a. The Notice of Intent to Operate Use Recycled Water on a form provided by the Department containing the information specified in the applicable Type 3 Reclaimed Recycled Water General Permit under R18-9-717(B), R18-9-718(C), or R18-9-719(B) this Article, and
 - b. The applicable fee established in 18 A.A.C. 14.
 2. ~~Verification issuance.~~ Issuance of Recycled Water Authorization. If, after reviewing the Notice of Intent to Operate Use Recycled Water, the Department determines that the direct reuse conforms with the conditions of a Type 3 Reclaimed Recycled Water General Permit and all other applicable requirements of this Article, the Department shall issue the ~~Verification of General Permit Conformance~~ Recycled Water Authorization.
 3. ~~Verification denial~~ Denial of Recycled Water Authorization.
 - a. If the Department determines on the basis of its review or an inspection that the direct reuse use does not conform to the conditions of the applicable Type 3 Reclaimed Recycled Water General Permit or other applicable requirements of this Article, the Department shall notify the applicant of its decision not to issue the ~~Verification of General Permit Conformance~~ Recycled Water Authorization.
 - b. ~~If an application is denied, the applicant shall not operate under a Type 3 Reclaimed Recycled Water General Permit.~~
 - e-b. The applicant may appeal the decision not to issue a ~~Verification of General Permit Conformance~~ Recycled Water Authorization under A.R.S. §§ 41-1092 through 41-1092.12.
 4. ~~Automatic issuance.~~ If the Department does not issue the Verification of General Permit Conformance within the time frame specified under 18 A.A.C. 1, Article 5, and does not notify the applicant that it will not issue the verification, the verification automatically becomes effective upon expiration of the overall time frame.

R18-9-709, R18-9-A705, Reclaimed Recycled Water General Permit Term, Information Changes, and Renewal and Transfer

- ~~A.~~ General permit renewal. A permittee shall renew a Reclaimed Water General Permit at least 90 days before the permit expires by following the procedure described in either R18-9-708(B) or (C) and include the applicable fee established in 18 A.A.C. 14.
1. ~~A Type 1 Reclaimed Water General Permit is valid as long as the conditions of the general permit and the requirements of this Article are met. No renewal is required;~~
 2. ~~A Type 2 Reclaimed Water General Permit is valid for five years from the date the Department receives the Notice of Intent for Direct Reuse of Reclaimed Water;~~
 3. ~~A Type 3 Reclaimed Water General Permit is valid for five years from the date the Verification of General Permit Conformance becomes effective.~~
- ~~B.~~ General permit transfer. A permittee shall provide notice to the Department by certified mail within 15 days following the transfer of a Type 2 or Type 3 Reclaimed Water General Permit. The Notice of Transfer shall:
1. ~~Contain any information that has changed from the original Notice of Intent for Direct Reuse of Reclaimed Water or the Notice of Intent to Operate, including all information on the proposed new permittee, and~~
 2. ~~Include the applicable fee established in 18 A.A.C. 14.~~
- ~~A.~~ A recycled water general permit is valid as follows:
1. ~~A Type 1 Reclaimed Water General Permit is valid as long as the conditions of the general permit and the requirements of this Article are met. No renewal is required.~~
 2. ~~A Type 2 Recycled Water General Permit is valid for five years from the date the Department receives the Notice of Intent to Use Recycled Water;~~
 3. ~~A Type 3 Recycled Water General Permit is valid for five years from the date the Recycled Water Authorization is issued.~~
- ~~B.~~ If any change in the following information occurs, a permittee operating under any individual, or Type 2 or Type 3 recycled water general permit shall update the Department with such changes at least once annually by January 31:
1. Permittee.
 2. Ownership.
 3. Contact person.
 4. Phone number, address, email address, or telephone number, or any combination of any of the above, for permittee or contact person.
 5. Name of the use site.
 6. For a Type 2 Recycled Water General Permit for Direct Reuse of Class A + or B + Reclaimed Water remaining under the same ownership:
 - a. Expansion of the reuse area.
 - b. Addition of another allowable use if it is located within the same property boundary as the boundary identified in the Notice of Intent to Use Recycled Water submitted to the Department.
 7. An increase in Class A, B, or C reclaimed water use of more than ten percent but less than twenty percent above the volume of reclaimed water currently permitted for use at the reuse site, if applicable.
- ~~C.~~ To renew any Type 2 or Type 3 Recycled Water General Permit, a permittee must submit a Notice of Renewal at least 30 days before the permit expires and include the applicable fee established in 18 A.A.C. 14. A permittee may update or change any information as described in subsections (B) in a Notice of Renewal.



D. For changes not described in subsections (B) or (C), the permittee must submit a new Notice of Intent to Use Recycled Water or a Recycled Water Individual Permit application, as applicable.

R18-9-710, R18-9-A706, Reclaimed Recycled Water General Permit Revocation

A. The Director may revoke a Reclaimed Water General Permit if the permittee fails to comply with any requirement in this Article, including a condition specified in the applicable Reclaimed Water General Permit. The Director shall make the determination based on the risk to public health and safety or a threat to waters of the state.

1. Before revoking a general permit, the Department shall provide notice to the permittee by certified mail of the Department's intent to revoke the Reclaimed Water General Permit. The notice of intent to revoke the general permit shall provide the permittee a reasonable opportunity to correct any noncompliance and specify a time frame within which the permittee shall achieve compliance.

2. If the permittee fails to correct the noncompliance within the specified time frame, the Department shall notify the permittee, by certified mail, of the Director's decision to revoke the Reclaimed Water General Permit.

B. The Director shall revoke a Reclaimed Water General Permit for any or all facilities located within a specific geographic area, if, due to a geologic or hydrologic condition, the cumulative effect of the facilities subject to the Reclaimed Water General Permit has violated or will violate a Water Quality Standard established under A.R.S. §§ 49-221 and 49-223.

A. After notice and opportunity for a hearing, the Director may revoke coverage under a Recycled Water General Permit and require the permittee to obtain an individual permit in order to operate for any of the following:

1. The permittee failed to comply with any applicable provision of A.R.S. Title 49, Chapter 2; Article 7 of this Chapter; or any permit condition;

2. The permittee misrepresented or omitted a fact, information, or data related to an application or permit condition;

3. The Director determines a permitted activity is causing or will cause a violation of a water quality standard established under A.R.S. §§ 49-221;

4. A permitted activity is causing or will cause imminent and substantial endangerment to public health or the environment.

B. The Director may revoke coverage under a general permit for any or all facilities within a specific geographic area, if, due to geologic or hydrologic conditions, the cumulative effect of the facilities subject to the Recycled Water General Permit has violated or will violate a water quality standard established under A.R.S. § 49-221.

C. If an individual permit is issued to replace general permit coverage, the coverage under the general permit is automatically revoked upon issuance of the individual permit.

D. The Director may, after notice and opportunity for hearing, suspend or revoke a Recycled Water Individual Permit for any of the reasons listed in subsections (A)(1) through (A)(4) of this section.

R18-9-A707, Recycled Water Permit Transition

The terms and conditions of Type 2, Type 3, and individual reclaimed water permits issued before January 1, 2018, including permits issued for gray water, shall remain in effect according to the language of this Article effective as of the date the permit was issued.

R18-9-711, R18-9-D701.

R18-9-712, R18-9-B704.

R18-9-713, R18-9-B705.

R18-9-714, R18-9-B706.

R18-9-715, R18-9-B707.

R18-9-716, R18-9-B708.

R18-9-717, R18-9-B709.

R18-9-718, R18-9-B710.

R18-9-719, R18-9-D702.

R18-9-720. Enforcement and Penalties Repealed

Any person who violates a condition specified in a permit issued under this Article, falsifies data or information submitted to the Department as required under Articles 6 or 7 of this Chapter, or violates a provision of Article 6 or 7 of this Chapter, is subject to the enforcement actions prescribed under A.R.S. §§ 49-261 and 49-262.

PART B. RECLAIMED WATER

R18-9-B701. Transition of Aquifer Protection Permits and Permits for the Reuse of Reclaimed Wastewater.

A. A person may directly reuse reclaimed water under an individual Aquifer Protection Permit or a Permit for the Reuse of Reclaimed Wastewater issued by the Department before January 1, 2001 if the person meets the conditions of the permit and the permit does not expire.

B. A person meeting the requirements of subsection (A) may apply for a new reclaimed water permit under this Article.

1. To obtain a reclaimed water permit, a person shall submit a ~~Reclaimed Recycled~~ Water Individual Permit application, required under ~~R18-9-705(B)~~ ~~R18-9-A703(A)~~, or a Notice of Intent for ~~Direct Reuse of Reclaimed~~ ~~to Use Recycled~~ Water, required under ~~R18-9-708(B)(2)~~ ~~R18-9-A704(B)(2)~~ or ~~R18-9-A704(B)(3)~~, or a Notice of Intent to Operate, required under ~~R18-9-708(C)(4)~~ to the Department at least 120 days before the current permit expires.

2. The Department shall continue the terms of the individual Aquifer Protection Permit or the Permit for the Reuse of Reclaimed Wastewater beyond the stated date of expiration if:



- a. The permitted direct reuse is of a continuing nature; and
 - b. The permittee submits a timely and complete application for a new permit.
- C. Sewage treatment facility generating reclaimed water.
1. At the request of a permittee holding an individual Aquifer Protection Permit, the Department shall amend an individual Aquifer Protection Permit issued before January 1, 2001 if the permittee adequately demonstrates that the applicable quality of reclaimed water produced for direct reuse is achieved. The Department shall review:
 - a. The information in the individual Aquifer Protection Permit application, any applicable supporting documentation, and the water quality test results from the previous two years to determine the classification of reclaimed water generated by the sewage treatment facility; and
 - b. The available water quality data if the sewage treatment facility has operated for less than two years.
 2. The Department shall ensure that issue an amended individual Aquifer Protection Permit under procedures specified under 18 A.A.C. 9, Article 2 contains containing:
 - a. Identification of the class of reclaimed water generated by the facility;
 - b. Requirements for monitoring reclaimed water quality and flow at a frequency appropriate to demonstrate compliance with this Article and 18 A.A.C. 11, Article 3;
 - c. Requirements for quarterly reporting of the following data to the Department, any reclaimed water agent who has contracted for delivery of reclaimed water from the facility, and any end user who has not waived interest in receiving this information:
 - i. Water quality test results demonstrating that reclaimed water produced by the facility meets the applicable standards for the class of water identified in subsection (C)(2)(a), and
 - ii. The total volume of reclaimed water generated for direct reuse.
 - d. Provision for cessation of delivery, if necessary, and storage or disposal if reclaimed water cannot be delivered for direct reuse.

R18-9-B702. General Requirements

- A. Sewage treatment facility. ~~Except for permits continued under R18-9-703(A), a~~ A sewage treatment facility owner or operator shall provide reclaimed water for direct reuse only as authorized under an individual Aquifer Protection Permit amended under R18-9-703(C)(2).
- B. Additional treatment. If an owner or operator of a facility accepts reclaimed water and provides additional treatment for a higher quality direct reuse, the facility is considered a sewage treatment facility and shall operate under the requirements of provide reclaimed water for direct reuse only as authorized under an individual Aquifer Protection Permit amended under R18-9-703(C)(2).
- C. Reclaimed water blending facility. An owner or operator of a reclaimed water blending facility shall not conduct blending operations without obtaining only as authorized under a Reclaimed Recycled Water Individual Permit or Reclaimed a Type 3 Recycled Water General Permit for a Reclaimed Water Blending Facility.
- D. Reclaimed water agent. A person shall not operate as a reclaimed water agent without obtaining only as authorized under a Reclaimed Recycled Water Individual Permit or a Reclaimed Type 3 Recycled Water General Permit for a Reclaimed Water Agent.
- E. End user. A person shall not directly reuse reclaimed water unless permitted under this Article.
- F. Irrigating with reclaimed water. A permittee irrigating with reclaimed water applying reclaimed water for an irrigation use allowed in Chapter 11, Article 3, Table A shall:
 1. Use application methods that reasonably preclude human contact with reclaimed water;
 2. Prevent reclaimed water from standing on open access areas during normal periods of use; and
 3. Prevent reclaimed water from coming into contact with drinking fountains, water coolers, or eating areas; and
 4. Secure hose bibbs discharging reclaimed water to prevent use by the public.
- G. Hose bibbs. A permittee directly reusing reclaimed water shall secure hose bibbs discharging reclaimed water to prevent use by the public.
- ~~G.H.~~ Prohibited activities.
 1. Irrigating with untreated sewage;
 2. Providing water for human consumption from a reclaimed water source except as allowed in Part E of this article.
 - ~~2-3.~~ Providing or using reclaimed water for any of the following activities:
 - ~~a.~~ Direct reuse for human consumption;
 - ~~b-a.~~ Direct reuse for swimming, wind surfing, water skiing, or other full-immersion water activity with a potential of ingestion; or
 - ~~e-b.~~ Direct reuse for evaporative cooling or misting.
 - ~~3-4.~~ Misapplying reclaimed water for any of the following reasons:
 - a. Application of a stated class of reclaimed water that is of lesser quality than allowed by this Article for the type of direct reuse application;
 - b. Application of reclaimed water to any area other than a direct reuse site; or
 - c. Allowing runoff of reclaimed water or reclaimed water mixed with stormwater from a direct reuse site, except for:
 - i. agricultural return flow that is directed onto an adjacent field or returned to an open water conveyance; or
 - ii. a discharge authorized by an individual or general NPDES or AZPDES permit.
- H.I. Signage and Notification. A permittee shall place and maintain signage at locations and provide applicable notification as specified in Table 1 so the public is informed that reclaimed water is in use and that no one should drink from the system.



Table 1. Signage and Notification Requirements for Direct Reuse Sites

| Reclaimed Water Class | Hose Bibbs | Residential Irrigation | Schoolground Irrigation | Other Open Access Irrigation | Restricted Access Irrigation | Mobile Reclaimed Water Dispersal |
|-----------------------|------------|--|---|------------------------------|--|---|
| A+ | Each bibb | Front yard, or all entrances to a subdivision if the signage is supplemented by written yearly notification to individual homeowners by the homeowner's association. | On premises visible to staff and students | None | None | Back of truck or on-tank <u>On dispersal equipment and visible to the public</u> |
| A | Each bibb | Front yard, or all entrances to a subdivision if the signage is supplemented by written yearly notification to individual homeowners by the homeowner's association. | On premises visible to staff and students | None | None | Back of truck or on-tank <u>On dispersal equipment and visible to the public</u> |
| B+ | Each bibb | Direct Reuse Not Allowed | Direct Reuse Not Allowed | Direct Reuse Not Allowed | 1. Ingress points 2. On premises or at reasonably spaced intervals not more than 1/4 mile, as applicable to the use 3. Notice on golf score cards, if applicable | Back of truck or on-tank <u>On dispersal equipment and visible to the public</u> |
| B | Each bibb | Direct Reuse Not Allowed | Direct Reuse Not Allowed | Direct Reuse Not Allowed | 1. Ingress points 2. On premises or at reasonably spaced intervals not more than 1/4 mile, as applicable to the use 3. Notice on golf score cards, if applicable | Back of truck or on-tank <u>On dispersal equipment and visible to the public</u> |
| C | Each bibb | Direct Reuse Not Allowed | Direct Reuse Not Allowed | Direct Reuse Not Allowed | 1. Ingress points 2. On premises or at reasonably spaced intervals not more than 1/4 mile, as applicable to the use | Back of truck or on-tank <u>On dispersal equipment and visible to the public</u> |

Note: All impoundments with open access including lakes, ponds, ornamental fountains, waterfalls, and other water features shall be posted with signs regardless of the class of reclaimed water.

J. Pipeline Conveyances of Reclaimed Water.

1. Applicability. Any person constructing a pipeline conveyance, whether new or a replacement of an existing pipeline, shall meet the requirements of this subsection.
2. A person shall design and construct a pipeline conveyance system using good engineering judgement following standards of practice.
3. A person shall construct a pipeline conveyance so that:
 - a. Reclaimed water does not find its way into, or otherwise contaminate, a potable water system;
 - b. System structural integrity is maintained; and
 - c. The capability for inspection, maintenance, and testing is maintained.
4. A person shall construct a pipeline conveyance and all appurtenances conducting reclaimed water to withstand a static pressure of at least 50 pounds per square inch greater than the design working pressure without leakage as determined in R18-9-E301(D)(2)(j).
5. A person shall provide a pipeline conveyance with thrust blocks or restrained joints where needed to prevent excessive movement of the pipeline.
6. The following requirements for minimum separation distance apply. A person shall:



- a. Locate a pipeline conveyance no closer than 50 feet from a drinking water well unless the pipeline conveyance is constructed as specified under subsection (J)(5)(c);
 - b. Locate a pipeline conveyance no closer than two feet vertically nor six feet horizontally from a potable water pipeline unless the pipeline conveyance is constructed as specified under subsection (J)(5)(c);
 - c. Construct a pipeline conveyance that does not meet the minimum separation distances specified in subsections (J)(5)(a) and (J)(5)(b) by encasing the pipeline conveyance in at least six inches of concrete or using mechanical joint ductile iron pipe or other materials of equivalent or greater tensile and compressive strength at least 10 feet beyond any point on the pipeline conveyance within the specified minimum separation distance; and
 - d. If a reclaimed water system is supplemented with water from a potable water system, separate the potable water system from the pipeline conveyance by an air gap.
7. A person shall:
- a. For a pipeline conveyance, eight inches in diameter or less, use pipe marked on opposite sides in English: "CAUTION: RECLAIMED WATER, DO NOT DRINK" in intervals of three feet or less and colored purple or wrapped with durable purple tape.
 - b. For a mechanical appurtenance to a pipeline conveyance, ensure the mechanical appurtenance is colored purple or legibly marked to identify it as part of the reclaimed water distribution system and distinguish it from systems for potable water distribution and sewage collection.

K. Open Water Conveyances of Reclaimed Water.

1. This subsection applies to an open water conveyance, regardless of the date of construction.
2. A person shall maintain an open water conveyance to prevent release of reclaimed water except as allowed under federal and state regulations. The maintenance program shall include periodic inspections and follow-up corrective measures to ensure the integrity of conveyance banks and capacity of the conveyance to safely carry operational flows.
3. Signage for Class B+, B, and C Reclaimed Water. A person shall:
 - a. Ensure signs state: "CAUTION: RECLAIMED WATER, DO NOT DRINK," and display the international "do not drink" symbol;
 - b. Place signs at all points of ingress and, if the open water conveyance is operated with open access, at least every 1/4-mile along the length of the open water conveyance; and
 - c. Ensure signs are visible and legible from both sides of the open water conveyance.

R18-9-B703. General Provisions for Reclaimed Recycled Water Individual Permit for Reclaimed Water General Provisions

- A. A Reclaimed Recycled Water Individual Permit for Reclaimed Water is obtained under R18-9-705 R18-9-A703. A Reclaimed Recycled Water Individual Permit for Reclaimed Water:
1. Is valid for five years;
 2. May be amended, transferred, reissued, or revoked by the Director based on whether the permittee meets the terms of the individual permit and the requirements of this Article. Must be updated as prescribed by R18-9-A705; and
 3. Continues, pending the issuance of a new permit, with the same terms following its expiration if the following are met:
 - a. The permittee submits an application for a new permit at least 60 days before the expiration of the existing permit; and
 - b. The permitted activity is of a continuing nature.
- B. A Reclaimed Recycled Water Individual Permit for Reclaimed Water shall contain, if applicable:
1. The class of reclaimed water to be applied for direct reuse or the alternative water quality criteria appropriate for a direct reuse type not listed in 18 A.A.C. 11, Article 3, Table A that ADEQ may allow under R18-11-309;
 2. Specific types of direct reuse applications or and any limitations on reuse;
 3. Requirements for monitoring reclaimed water quality and flow to demonstrate compliance with this Article and 18 A.A.C. 11, Article 3;
 4. Requirements for reporting the following data to demonstrate compliance with this Article and 18 A.A.C. 11, Article 3:
 - a. Water quality test results demonstrating that the reclaimed water meets the applicable standards for the class of water or the alternative water quality criteria identified in subsection (B)(1), and
 - b. The total volume of reclaimed water generated for direct reuse.
 5. Requirements for maintaining records of all monitoring information and monitoring activities that include:
 - a. The date, description of sampling location, and time of sampling or measurement;
 - b. The name of the person who performed the sampling or measurement;
 - c. The date the analyses were performed;
 - d. The name of the person who performed the analyses;
 - e. The analytical techniques or methods used;
 - f. The results of the analyses; and
 - g. Documentation of sampling technique, sample preservation, and transportation, including chain-of-custody forms.
 6. Requirements to retain all monitoring activity records and results, including all original strip chart recordings data for continuous monitoring instrumentation, and calibration and maintenance records for five years from the date of sampling or analysis. The Director shall extend the five-year retention period:
 - a. During the course of an unresolved litigation regarding compliance with the permit conditions, or
 - b. For any other justifiable cause.
 7. A requirement to allow all end users access to the records of physical, chemical, and biological quality of the reclaimed water.
 8. Signage or other notification requirements appropriate to the use; and
 9. Closure requirements, if applicable.
- C. Permit transfer. A permittee may transfer a Reclaimed Water Individual Permit to another person if the following conditions are met:
1. The permittee notifies the Director of the proposed transfer.



- 2. The permittee submits a written agreement containing a specific date for the transfer of permit responsibility and coverage between the current permittee and the proposed new permittee, including an acknowledgment that the existing permittee is liable for violations up to the date of transfer and that the proposed new permittee will be liable for violations from that date forward.
- 3. The notice specified in subsection (C)(1) contains any information for the proposed new permittee that is changed from the information submitted under R18-9-705(B).
- 4. The Director, within 30 days of receiving a transfer notice from the permittee, does not notify both the current permittee and proposed new permittee of the intent to amend, revoke, or reissue the permit or require the proposed new permittee to file an application for a new permit rather than agreeing to transfer the current permit.

R18-9-B704. Type 2 Reclaimed Recycled Water General Permit for Direct Reuse of Class A+ Reclaimed Water

- A. A Type 2 Reclaimed Recycled Water General Permit for Direct Reuse of Class A+ Reclaimed Water allows any direct reuse application of reclaimed water listed in 18 A.A.C. 11, Article 3, ~~Appendix Table A~~, if the conditions in this Article are met.
- B. Record maintenance. A permittee shall maintain records for five years ~~that describe~~ describing the direct reuse site and the total amount of reclaimed water used annually for the permitted direct reuse activity. The records shall be made available to the Department upon request.
- C. A permittee shall post signs or provide notification or both as specified in ~~R18-9-704(H)~~ R18-9-B702(I).
- D. No lining is required for an impoundment storing Class A+ reclaimed water.

R18-9-B705. Type 2 Reclaimed Recycled Water General Permit for Direct Reuse of Class A Reclaimed Water

- A. A Type 2 Reclaimed Recycled Water General Permit for the Direct Reuse of Class A Reclaimed Water allows any direct reuse application of reclaimed water listed in 18 A.A.C. 11, Article 3, ~~Appendix Table A~~, if the conditions in this Article are met.
- B. Records and reporting. A permittee shall:
 - 1. Maintain records containing the following information for five years, and make them available to the Department upon request:
 - a. The direct reuse site,
 - b. The volume of reclaimed water applied monthly for each category of direct reuse activity listed in 18 A.A.C. 11, Article 3, ~~Appendix Table A~~,
 - c. The total nitrogen concentration of the reclaimed water applied, if applicable, and
 - d. The acreage and type of vegetation to which the reclaimed water is applied, if applicable.
 - 2. Report annually to the Department on or before the anniversary date of the Notice of Intent to Use Recycled Water:
 - a. The volume of reclaimed water received,
 - b. The type of reclaimed water application, and
 - c. If used for irrigation, the vegetation and acreage irrigated.
- C. Nitrogen management. A permittee shall ensure ~~that~~:
 - 1. Impoundments storing reclaimed water allowed by the general permit are lined using a low-hydraulic conductivity artificial or site-specific liner material achieving a calculated discharge rate less than 550 gallons per acre per day; and
 - 2. The application rates of the reclaimed water are based on one of the following:
 - a. ~~The~~ If assigned, the water allotment ~~assigned~~ specified by the Arizona Department of Water Resources;
 - b. A water balance that considers consumptive use of water by the crop, turf, or landscape vegetation; or
 - c. An alternative method approved by the Department.
- D. In addition to the Notice of Intent to Use Recycled Water for Direct Reuse of Reclaimed Water specified in ~~R18-9-708(B)(2)~~ R18-9-A704(B)(2), the applicant shall provide a list of impoundments, water depth, freeboard, and the liner characteristics and the method chosen from the list in subsection (C)(2).
- E. The permittee shall post signs or provide notification, or both, as specified in ~~R18-9-704(H)~~ R18-9-B702(I).

R18-9-B706. Type 2 Reclaimed Recycled Water General Permit for Direct Reuse of Class B+ Reclaimed Water

- A. A Type 2 Reclaimed Recycled Water General Permit for Direct Reuse of Class B+ Reclaimed Water allows any direct reuse application of Class B and Class C reclaimed water listed in 18 A.A.C. 11, Article 3, ~~Appendix Table A~~, if the conditions in this Article are met.
- B. A permittee shall comply with the record maintenance and posting requirements established under ~~R18-9-712~~ R18-9-B704 and make records available to the Department upon request.
- C. No lining is required for an impoundment storing Class B+ reclaimed water.

R18-9-B707. Type 2 Reclaimed Recycled Water General Permit for Direct Reuse of Class B Reclaimed Water

- A. A Type 2 Reclaimed Recycled Water General Permit for the Direct Reuse of Class B Reclaimed Water allows the direct reuse application of Class B and Class C reclaimed water listed in 18 A.A.C. 11, Article 3, ~~Appendix Table A~~, if conditions in this Article are met.
- B. A permittee shall comply with the requirements established under ~~R18-9-713(B)~~ R18-9-B705(B), (C), (D), and (E).

R18-9-B708. Type 2 Reclaimed Recycled Water General Permit for Direct Reuse of Class C Reclaimed Water

- A. A Type 2 Reclaimed Recycled Water General Permit for the Direct Reuse of Class C Reclaimed Water allows the direct reuse application of Class C reclaimed water listed in 18 A.A.C. 11, Article 3, ~~Appendix Table A~~, if conditions in this Article are met.
- B. A permittee shall comply with the requirements established under ~~R18-9-713(B)~~ R18-9-B705(B), (C), (D), and (E).

R18-9-B709. Type 3 Reclaimed Recycled Water General Permit for a Reclaimed Water Blending Facility

- A. Permit conditions.
 - 1. A Type 3 Reclaimed Recycled Water General Permit for a Reclaimed Water Blending Facility allows the blending of reclaimed water with other water, if the conditions in this Article are met.
 - 2. Blending reclaimed water with industrial wastewater or with reclaimed water from an industrial wastewater treatment plant is not authorized by this general permit.



- B. A person shall file with the Department a Notice of Intent to Operate a reclaimed water blending facility ~~at least 90 days before the date the proposed activity will start on a form provided by the Department.~~ The Notice of Intent to Operate shall include:
1. The name, address, e-mail address, and telephone number of the applicant;
 2. ~~The social security number of the applicant, if the applicant is an individual;~~
 - 3-2. The name, address, e-mail address, and telephone number of a contact person;
 - 4-3. The source and volume of reclaimed water to be blended;
 - 5-4. The class of reclaimed water to be blended;
 - 6-5. The source, volume, and quality of other water to be blended;
 - 7-6. ~~A legal description of the reclaimed water blending facility, including~~ The latitude and longitude coordinates of the blending facility;
 - 8-7. ~~A description of the reclaimed water blending facility, including a demonstration that the proposed blending methodology will meet the standards established in 18 A.A.C. 11, Article 3 for the class of reclaimed water the facility will produce;~~
 - 9-8. ~~A signature on the notice of intent certifying~~ The applicant's certification that the applicant agrees to comply with the requirements of this Article, 18 A.A.C. 11, Article 3, and the terms of this recycled water general permit; and
 - 10-9. ~~The applicable permit fee specified under 18 A.A.C. 14.~~
- C. A person shall not operate a reclaimed water blending facility until the Department issues a written ~~Verification of General Permit Conformance~~ Recycled Water Authorization under ~~R18-9-708(C) R18-9-A704(C).~~
- D. A permittee shall monitor:
1. The blended water quality for total nitrogen and fecal coliform at frequencies specified by the class of reclaimed water in 18 A.A.C. 11, Article 3.
 - a. If the concentration in the blended water of either total nitrogen or fecal coliform, as applicable, exceeds the limits for the applicable reclaimed water class established in 18 A.A.C. 11, Article 3, within 30 days of the exceedance, the permittee shall submit a report plan to the Department within 30 days with a proposal to change the blending process or to otherwise correct the deficiency. The permittee shall also double the monitoring frequency for the next ~~two~~ four months.
 - b. If another exceedance occurs within the interval of increased monitoring, the permittee shall submit an application within 45 days for a Reclaimed Recycled Water Individual Permit for Reclaimed Water.
 2. The volume of reclaimed water, the volume of the other water, and the total volume of blended water delivered for direct reuse on a monthly basis.
- E. The permittee shall report the results of the monitoring under subsection (D) to the Department ~~on or before the anniversary date of the verification approval~~ by January 31, for the immediately preceding calendar year, and shall make this information available to the end users.

R18-9-B710. Type 3 Reclaimed Recycled Water General Permit for a Reclaimed Water Agent

- A. A Type 3 ~~Reclaimed Recycled Water General Permit for a Reclaimed Water Agent~~ allows a person to operate as a Reclaimed Water Agent if ~~that~~ the conditions of this Article are met, and the following conditions are met for the class of reclaimed water delivered by the Reclaimed Water Agent:
1. Signage and notification requirements specified under ~~R18-9-704(H) R18-9-B702(I)~~, as applicable;
 2. Impoundment liner requirements specified under ~~R18-9-712(D), R18-9-713(C), R18-9-714(C), R18-9-715(B), or R18-9-716(B) R18-9-B704(D), R18-9-B705(C), R18-9-B706(C), R18-9-B707(B) or R18-9-B708(B)~~, as applicable; and
 3. Nitrogen management requirements specified under ~~R18-9-713(C), R18-9-715(B), and R18-9-716(B) R18-9-B705(C), R18-9-B707(B), R18-9-B708(B)~~, as applicable.
- B. A person holding a Type 3 ~~Reclaimed Recycled Water Permit for a Reclaimed Water Agent~~:
1. Is responsible for the direct reuse of reclaimed water by more than one end user instead of direct reuse by the end users under separate Type 2 Recycled Water General Permits, and
 2. Shall maintain a contractual agreement with each end user stipulating any end user responsibilities for the requirements specified under subsection (A).
- C. A person shall file with the Department a Notice of Intent to Operate as a reclaimed water agent ~~at least 90 days before the date the proposed activity will start.~~ The Notice of Intent to Operate shall include:
1. The name, address, e-mail address, and telephone number of the applicant;
 2. ~~The social security number of the applicant, if the applicant is an individual;~~
 - 3-2. The name, address, e-mail address, and telephone number of a contact person;
 - 4-3. The following information for each end user to be supplied reclaimed water by the applicant:
 - a. The name, address, e-mail address, and telephone number of the end user;
 - b. ~~A legal description of each direct reuse site, including~~ A system map showing the locations of the direct reuse sites and the latitude and longitude coordinates of each site; and
 - c. A description of each direct reuse activity, including the type of vegetation, acreage, and annual volume of reclaimed water to be used, unless Class A+ or Class B+ reclaimed water is delivered.
 - 5-4. The source, class, and annual volume of reclaimed water to be delivered by the applicant;
 - 6-5. A description of the contractual arrangement between the applicant and each end user, including any end user responsibilities for the requirements specified under subsection (A); and
 - 7-6. The applicable permit fee specified under 18 A.A.C. 14.
- D. A proposed reclaimed water agent shall not distribute reclaimed water to end users until the Department issues a written ~~Verification of General Permit Conformance~~ Recycled Water Authorization issued under ~~R18-9-708(C) R18-9-A704(C).~~
- E. A reclaimed water agent shall record and annually report the following information to the Department, ~~on or before each anniversary date of the verification approval~~ by January 31, for the immediately preceding year:
1. The total volume of reclaimed water delivered by the reclaimed water agent;
 2. The volume of reclaimed water delivered to each end user for Class A, Class B, and Class C reclaimed water; and



- 3. Any change in the information submitted under subsection (C).
- F. The reclaimed water agent shall notify the Department before the end of each calendar year of any changes in the information submitted under subsection (C).

PART C. RECYCLED INDUSTRIAL WASTEWATER

R18-9-C701. Reclaimed Recycled Water Individual Permit Where for Industrial Wastewater Influences the Characteristics of Reclaimed Water That Is Reused

- A. The following activities are prohibited unless a Reclaimed Recycled Water Individual Permit is obtained under ~~R18-9-705~~ R18-9-A703:
 - 1. ~~Direct reuse~~ Use of reclaimed water from a sewage treatment facility that is combined with industrial wastewater or that is combined with reclaimed water from an industrial wastewater treatment facility.
 - 2. ~~Direct reuse~~ Use of reclaimed water from an industrial wastewater treatment facility for production or processing of a crop or substance that may be used as human or animal food.
- B. In addition to the requirements in ~~R18-9-705(B)~~ R18-A703(A), an application for a Reclaimed Recycled Water Individual Permit shall include:
 - 1. Each source of the industrial wastewater with Standard Industrial Code or North American Industry Classification System Code, and the projected rates and volumes from each source;
 - 2. The chemical, biological, and physical characteristics of the industrial wastewater from each source; and
 - 3. If reclaimed water will be used in the processing of any crop or substance that may be used as human or animal food, the information regarding food safety and any potential adverse health effects of this direct reuse.

PART D. GRAY WATER

R18-9-D701. Type 1 Reclaimed Recycled Water General Permit for Gray Water

- A. A Type 1 Reclaimed Recycled Water General Permit for Gray Water allows private residential ~~direct reuse~~ use of gray water for a flow of less than 400 gallons per day if all the following conditions are met:
 - ~~1. Human contact with gray water and soil irrigated by gray water is avoided;~~
 - ~~2.1. Gray water originating from the residence is used and contained within the property boundary for household gardening, composting, lawn watering, or landscape irrigation watering;~~
 - ~~2. Human contact with gray water and soil watered by gray water is avoided;~~
 - ~~3. Surface application of gray water is not used for irrigation watering of food plants, except for citrus and nut trees and shrubs which have an edible portion that does not come into contact with the gray water;~~
 - ~~4. The gray water does not contain hazardous chemicals derived from activities such as cleaning car parts, washing greasy or oily rags, or disposing of waste solutions from home photo labs or similar hobbyist or home occupational activities;~~
 - ~~5. The gray water does not contain water used to wash diapers or similarly soiled or infectious garments;~~
 - ~~5-6. The application of gray water is managed to minimize standing water on the surface by using measures such as avoiding overwatering, distributing the gray water beneath a mulch or other cover, and using best practices to improve soil condition and increase filtration;~~
 - ~~6-7. The gray water system is constructed so that if If blockage, plugging, or backup, or overload of the system occurs, gray water can be directed into the sewage collection system or on-site wastewater treatment and disposal system, as applicable gray water distribution shall cease until the deficiency is corrected. The gray water system may include a means of filtration components to reduce plugging and blockage and backup and be operated using best practices to extend system lifetime;~~
 - ~~7-8. Any gray Gray water storage tank is surge tanks, if any, are covered to restrict access and to eliminate habitat for mosquitoes or other vectors, and holding time is 24 hours or less to avoid development of anaerobic conditions and odors;~~
 - ~~8-9. The gray water system is sited outside of a floodway;~~
 - ~~9-10. The gray water system is operated to maintain a minimum vertical separation distance of at least five feet from the point of gray water application to the top of the seasonally high groundwater table;~~
 - ~~10-11. For a residencees residence using an on-site wastewater treatment facility for black water treatment and disposal, the use of a gray water system does not change the design, capacity, or reserve area requirements for the on-site wastewater treatment facility at the residence, and ensures that the facility can handle the combined black water and gray water flow if the gray water system fails or is not fully used;~~
 - ~~11-12. Any pressure piping used in a gray water system that may be susceptible to cross connection with a potable water system clearly indicates that the piping does not carry potable water; and~~
 - ~~12. Gray water applied by surface irrigation does not contain water used to wash diapers or similarly soiled or infectious garments unless the gray water is disinfected before irrigation; and~~
 - ~~13. Surface irrigation by application of gray water is only by flood or drip irrigation distribution methods. Flood distribution methods may include containment by horticultural mulch basins and swales.~~
- B. Prohibitions. The following are prohibited:
 - 1. Gray water use for purposes other than irrigation watering and composting, and
 - 2. ~~Spray irrigation.~~ Application of gray water by a spray method.
- C. Towns, cities, or counties may further limit the use of gray water described in this Section by rule or ordinance.

R18-9-D702. Type 3 Reclaimed Recycled Water General Permit for Gray Water

- A. A Type 3 Reclaimed Recycled Water General Permit for Gray Water allows ~~a for the use of~~ gray water irrigation system for landscape irrigation and composting if:
 - 1. The general permit described in ~~R18-9-711~~ R18-9-D701 does not apply,
 - 2. The flow is not more than 3000 gallons per day, and



3. The gray water system satisfies the notification, design, and installation requirements specified in ~~subsection~~ subsections (B) and (C).
- B.** A person shall file a Notice of Intent to Operate a Gray Water Irrigation System with the Department ~~at least 90 days before the date the proposed activity will start on a form provided by the Department.~~ The Notice of Intent to Operate shall include:
1. The name, address, e-mail address, and telephone number of the applicant;
 2. ~~The social security number of the applicant, if the applicant is an individual;~~
 3. ~~A legal description of the direct reuse site, including~~ The latitude and longitude coordinates;
 3. ~~A description of the sources of gray water and calculations demonstrating the flow is not more than 3000 gallons per day;~~
 4. Design plans for the gray water irrigation system;
 5. ~~A signature on the Notice of Intent to Operate certifying~~ The applicant's certification that the applicant agrees to comply with the requirements of this Article and the terms of this Reclaimed Recycled Water General Permit for Gray Water; and
 6. The applicable permit fee specified under 18 A.A.C. 14.
- C.** The following ~~technical~~ requirements apply to the design, ~~and installation, and operation~~ of a gray water irrigation system allowed under this Reclaimed Recycled Water General Permit for Gray Water:
1. ~~Design of the gray water irrigation system shall meet the on-site wastewater treatment facility requirements under R18-9-A312(C), (D)(1), (D)(2), (E)(1), (G), and R18-9-E302(C)(1), except the septic tank specified in R18-9-E302(C)(1) is not required if pretreatment of gray water is not necessary for the intended application;~~
 2. ~~Design of the dispersal trenches for the gray water irrigation system shall meet the on-site wastewater treatment facility requirements for shallow trenches specified in R18-9-E302(C)(2);~~
 3. ~~The depth of the gray water dispersal trenches shall be appropriate for the intended irrigation use but not more than 5 feet below the finished grade of the native soil; and~~
 4. ~~The void space volume of the aggregate fill in the gray water dispersal trench below the bottom of the distribution pipe shall have enough capacity to contain two days of gray water at the design flow.~~
 1. ~~Human contact with gray water and soil irrigated by gray water is avoided;~~
 2. ~~Gray water is not applied to an exposed surface but into a bed or trench of permeable material, through piping installed below the soil surface, or by similar means. Spray irrigation of gray water is not allowed. The application of gray water shall not result in standing water on the surface;~~
 3. ~~The design shall ensure gray water is used and contained within the property boundary for landscape irrigation or composting;~~
 4. ~~Gray water is not used for irrigation of food plants, except for trees and shrubs which have an edible portion that does not come into contact with the gray water;~~
 5. ~~The gray water may contain water from drinking fountains but does not contain hazardous chemicals derived from industrial, hobbyist, or similar activities at the site;~~
 6. ~~Gray water does not contain water used to wash diapers or similarly soiled or infectious garments;~~
 7. ~~The gray water system is constructed so if blockage, plugging, or backup of the system occurs, gray water can be directed into the sewage collection system or on-site wastewater treatment and disposal system, as applicable;~~
 8. ~~Gray water surge tanks, if any, are covered to restrict access and to eliminate habitat for mosquitoes or other vectors, and holding time is 24 hours or less to avoid development of anaerobic conditions and odors;~~
 9. ~~The gray water system is sited outside of a floodway;~~
 10. ~~The gray water system is operated to maintain a minimum vertical separation distance of at least five feet from the point of gray water application to the top of the seasonally high groundwater table;~~
 11. ~~If an on-site wastewater treatment facility is used for black water treatment and disposal, the use of a gray water system does not change the design, capacity, or reserve area requirements for the on-site wastewater treatment facility so the facility may handle the combined black water and gray water flow; and~~
 12. ~~Any piping used in a gray water system susceptible to cross connection with a potable water system clearly indicates the piping does not carry potable water.~~
- D.** ~~The applicant shall not operate the gray water system until the Department issues a written Recycled Water Authorization under R18-9-A704(C).~~
- E.** ~~The Department may review design plans and details and accept a gray water irrigation system~~ issue a Recycled Water Authorization that differs from the requirements specified in subsection (C) if the system provides equivalent performance and protection of human health and water quality.
- F.** ~~In the Recycled Water Authorization, the Department may require a permittee to report data or information for any of the conditions in this section if the Department deems the reporting necessary to protect human health or water quality or both.~~

PART E. PURIFIED WATER FOR POTABLE USE

R18-9-E701. Recycled Water Individual Permit for an Advanced Reclaimed Water Treatment Facility.

- A.** An application for a Recycled Water Individual Permit for an Advanced Reclaimed Water Treatment Facility must be submitted to the Department according to the requirements in R18-9-A703, as applicable.
- B.** Safe Drinking Water Act. For purposes of Safe Drinking Water Act requirements, water produced by an Advanced Reclaimed Water Treatment Facility shall be treated as surface water.
- C.** Design Report. In addition to the information required by subsection (A), the applicant shall submit a design report for the Advanced Reclaimed Water Treatment Facility according to a form prescribed by the Department and certified by an Arizona-registered professional engineer. The design report must include the following information:
1. Characterization of source water quantity and quality, including:
 - a. Average and anticipated minimum and maximum source water flows to the facility;



- b. Concentrations of the source water’s physical, microbiological, and chemical constituents regulated for drinking water Maximum Contaminant Levels under the Safe Drinking Water Act and which the Department determines are appropriate for the particular facility and source water;
- c. Description and concentrations of constituents in the source water used for unit treatment process monitoring and assessment of unit treatment process efficacy, and
- d. A list of unregulated microbial and chemical constituents and corresponding concentrations in the source water a facility proposes to monitor in order to assess the treatment effectiveness of the overall treatment train. The particular constituents will depend on consideration of factors, such as:
 - i. Occurrence of the constituent in source and local waters.
 - ii. Availability of standardized laboratory methods for quantification of the constituent.
 - iii. Usefulness as representatives of or surrogates for larger classes of constituents, and
 - iv. Availability of toxicity data for the constituent.
- 2. Description of, and results from, the pilot water treatment system for the facility or of analogous systems where comparable treatment components are demonstrated as appropriate for treating the particular characteristics of the applicant’s proposed source water;
- 3. Identification and description of the technologies, processes, methodologies, and process control monitoring to be employed for microbial control;
- 4. Logarithmic reduction targets for microbial control, to ensure the product water is free of pathogens and suitable for potable use;
- 5. Identification and description of technologies, processes, methodologies and process control monitoring for chemical control;
- 6. Plan for monitoring the product water for public health protection;
- 7. Commissioning and startup plan, including preoperational and startup testing and monitoring, expected time-frame for meeting full operational performance, and any other special startup condition meriting consideration in the individual permit;
- 8. Operation and maintenance plan including corrective actions for out-of-range monitoring results and contingencies for non-compliant water;
- 9. Operator training plan; and
- 10. Documentation of technical, financial, and management capability.