

Summary Crosswalk for 18 AAC 72
Amended through October 1, 2023
Prior Version November 7, 2017

Introduction

The amended 18 AAC 72 Wastewater Treatment and Disposal Regulations effective October 1, 2023 were significantly reorganized, including a major expansion in permit-by-rule or authorization-by-rule processes which allows more wastewater systems to be installed without prior approval from the department as compared to the prior version amendments through November 7, 2017.

This document includes broad summaries of the overall changes, and detailed descriptions of new or revised regulations, as well as providing references in current regulations for comparison. The intent of this document is to help stakeholders navigate in the amended regulations.

Overall

The organization of 18 AAC 72 was revised in order to understand approval requirements by system type. The previous version of the regulations were not structured in a linear manner which had created ambiguity and confusion. The revised regulations will also concentrate department resources on issues and systems of broad concern to public health and the environment at large.

In the tables under “Detailed Changes”, a regulation reference in **bold** type corresponds to the amended regulations effective October 1, 2023.

Article I: General Standards, Requirements, and Limitations

Summary of Major Changes

This article was rewritten to better encompass the overall, broad requirements for both domestic and nondomestic wastewater systems and private water systems. Previously it applied to only domestic wastewater systems and included separation distance requirements for private water systems. Some system specific requirements were moved to different sections of the regulations to better group requirements by system types. Editor’s notes should be clear where material for repealed sections were relocated.

Detailed Changes

2023	2017	Notes on changes and Intent
72.005	72.005	Purpose and applicability: Clarifying language to broadly describe the scope of the regulations and to whom it applies. Eliminated more specific references to specific sections.
72.007	72.007	Technical review committee: Expands scope of potential committee agenda to address larger regulation revisions.
72.010	72.010(a), 72.215	Permit and plan approval required: Intent is the same but allows DEC to not to require certain plan approvals for those facilities issued discharge permits under 18 AAC 15 and 18 AAC 83.
72.015	72.015(a), NEW	Restrictions on use and modification: Expanded to include additional out of date system types and clarify that all existing system components must be brought into compliance with current regs when any part of the system is modified. Removed reference to who can install a system.

72.030	72.030	Pit privies: Revised to include minimum construction and decommissioning standards, and separation distance requirements currently contained in 72.020.
72.035 (repealed)	72.035	Conventional onsite systems: repealed, contents relocated to Article 5 that covers all things for conventional wastewater systems.
72.040 (repealed)	72.040	Discharge to sewers: repealed, contents relocated and addressed at 72.200-275, mostly at 72.270 which covers collection and pumping systems.
72.050	72.050	Minimum treatment: Revised for clarity and current practices. Many of the requirements under this section are now addressed under different section specific to system or discharge type. Moved waiver language to 72.060. Added a subsection specific for nondomestic wastewater.
72.055	72.055, 72.510	Septage, sewage, and sludge disposal: Revised to better clarify the regulation applies to all untreated or separated wastewater.
72.060	72.060	Waiver: General waiver requirements and expands authority to grant a waiver of any provision at the discretion of the department or upon request by an engineer. Some waiver language previously located in other sections is all covered here. Other sections specifically address waivers for system type.
72.065	72.065	Certified operator requirement: removed reference to domestic so applies to all wastewater systems
72.070	72.070	Reference materials: Revised language to make more generic; no specific dated references adopted so can keep up with what is most current without a regulation change. Eliminated OWSIM adoption by reference but will still be used as the “department published approved best management practices”.
72.080	NEW	Validity of approvals: Added language to clarify an approval or registration is voided when a wastewater system is no longer operated as designed or is modified without a new approval or documentation.
72.090	NEW	System failures and spills: Added language to clarifies what is considered a failure and clean up requirements for spills
72.100	72.020, OWSIM, NEW	Private water systems: Includes existing separation distance requirements for private water systems. References construction standards for protection of groundwater.
72.110	72.280	Delegation of authority: Clarifying language; relocated to apply to all wastewater systems but does not apply to APDES permits.

Article 2: Wastewater System Plan Review

Summary of Major Changes

Article 2 language has been expanded to apply to both domestic and nondomestic wastewater systems to establish the same process for reviews of these systems. Article contains similar language but is reorganized to align requirements by system type. System type may have specific requirements for approval to operate in addition to the general requirements. Clarifying language addresses what things do not require plan approval, based on current common practice, and expanding into what could be considered “low risk”. For example, the expansion of a collection system by a regulated utility is considered “low risk” when standard sanitary engineering practice is followed.

Detailed Changes

2023	2017	Notes on changes and/or Intent of new regulations
72.200	72.200	Application for department approval: Clarifying language and included revised and new references to permit/authorization by rule processes.
72.201(a) to (d)	72.200(b), NEW	Exceptions to prior written approval of engineering plans: new section to clarify and expand on what actions do not require approval. Added “replacement in kind” and further clarified emergency repair and routine maintenance. These terms also have definitions in 72.990 . Officially excludes service lines when connected to a POTW or utility.
72.201(e)	NEW	New language creates a process for utilities to replace or extend sewer mains without prior approval.
72.205	72.205	General submittal requirements: Revised to reorganize references specific to a treatment or disposal system type to relevant section in reorganized regulations
72.210	72.210	Domestic wastewater fees: previously repealed, included for continuity
72.215	72.215	Permit required: Repealed, all permit requirements located at 72.010 or referenced at 72.501 and 72.601.
72.220(a) to 72.220(e)	72.220(a) to 72.220(e)	Plan review: Clarifying language; no substantive changes to intent of existing 72.220(a) – (d). Existing 72.220(e) for fees moved to general submittal requirements.
72.220(f)	NEW	New language creates a deadline for a response to requests for additional information. The intent is to address plans that sit idle with no follow up by applicants for long periods of time.
72.225(a) to (c)	72.225(a) to (d)	Approval to Construct: Clarifying language; no substantive change to intent.
72.225(d)	NEW	<i>ATC extension:</i> New language creates a process for granting an extension of a construction approval beyond the 2-year time limit.
72.230	72.230	Revisions to approved plans: Clarifying language; no substantive change to intent
72.235	72.235	Construction certification: repealed, combined with 72.240 for clarity
72.240	72.235, 72.240	Construction certification and approval to operate: Revised to combine two existing sections. Retains intent but clarifies when 90-day interim approval starts and remains effective; clarifies when final documents are due to the department.
72.245	72.245, 72.020	Treatment works: Revised to consolidate general requirements for all system types and for wastewater treatment plants. Removes duplicative references.
72.250	72.250	Utilidors: Repealed, addressed with collection systems at 72.270
72.255	72.255, 72.205(c), 72.205(d)	Stabilization ponds: Revised to consolidate and clarify design criteria specific to this system type. Clarifies operational approval requirements specific to this system type. [it was an oversight not to

		include the 4 ft and 6 ft vertical separation distance requirement for percolating ponds which the Department will still expect]
72.260	72.260	Alternative wastewater systems: Repealed, alternative wastewater systems are address in new Article 6
72.263	72.263	Package plants: Repealed, alternative wastewater systems are address in new Article 6
72.265	72.265	Soils analysis and report: Clarifying language; no substantive changes to intent. Moved requirements specific to conventional systems to new Article 5
72.270	72.270, 72.040, 72.205(a)(10), 72.250	Collection and pumping systems: Revised to clarify existing requirements and authority. Consolidated collection system requirements to this section.
72.275	72.275, 72.205(b)(6), 72.205(f)	Disposal systems: Clarifying language; removed specific reference to marine and replaced with “surface water”. Added more detail to facilitate more complete submittals.
72.280	72.280	Delegation of domestic wastewater system plan review: Repealed, relocated to 72.110, not limited to just plan reviews
72.290	NEW	After-the-fact approval of systems: New language provides a regulatory pathway for obtaining approval for a system that was constructed or has been operating without approval.

Article 3: remains fully repealed

Article 4: Certified Installer Program

Summary of Changes

Article 4 covers Certified Installers and approval of homeowners to install conventional onsite wastewater systems. The sections were reorganized to relocate items not specifically related to certification of installers or approval of homeowners. Major changes included modifying the requirements to be exempt from taking the exam and the ability to suspend a certification.

Detailed Summary

2023	2017	Notes on changes and/or Intent of new regulations
72.400	72.400	General provisions: Clarifying language, updated references
72.405	72.405	Certification of installers: Revision clarifies requirements; minor rewording and reorganization did not change intent
72.410	72.410	Approval of homeowners: Revision clarifies requirements; minor rewording and reorganization did not change the intent. The current (d) and (e) were moved to the requirements for approved homeowners under Article 5.
72.415	72.415	Training and examination requirements: Revision clarifies requirements. Clarifies that a lapse in certification requires they become certified as if they are doing it for the first time. For recertification, they can attend department training or we can allow them to substitute 3 rd party training.

72.420	72.420	Certification term: Revision updates references
72.425	72.425	Certification renewal: Revision clarifies what allows a certified installer to be exempt from the exam in a department offered training course. Currently 72.425(b) required a department inspection but we were not equally able to provide these inspections. Now allows CEU's or PDH's to be exempt from examination. However, this does not exempt them from exams to satisfy 3 rd party training if they opt for that under the new 72.415(b)(2)
72.430	72.430	Suspension of revocation of certification; hearing for revoked certification: Revision includes the ability to suspend a certification if they are not submitting their documentations or there are major issues with construction. A certified installer cannot appeal this; a suspension will be lifted when they get caught up on their paperwork and resolve any issues. Otherwise minor clarifying language and eliminates separate appeal process (now references appeal procedures in 18 AAC 15).
72.435	72.435	Installation notification and inspection: Repealed, relocated to Article 5
72.440	72.440	Fees: Repealed, fees relocated to 72.954

Article 5: Conventional Wastewater Systems

Summary of Major Changes

This article previously covered permit requirements for nondomestic wastewater systems. Article 5 has been renamed and now contains all requirements for conventional wastewater systems, both big and small. Most of the construction requirements were previously adopted by reference in the Onsite Wastewater System Installation Manual (OWSIM). The department will continue to publish a similar technical manual to be used in conjunction with these regulations which will become the “department published approved best management practices”. The technical guidance will explain the intent and purpose of the regulatory requirements as well as provide guidance on how best to conduct site evaluations and other factors to consider when designing a system that complies with regulations.

Detailed Changes

Any changes from current standards in the OWSIM or regulations are called out in table individually. Note that an OWSIM reference is listed as Dx Sx or Ax.x which refers to Division number, Section number (if appropriate), or Article number.

2023	2017	Notes on changes and/or Intent of new regulations
72.500	72.500	Permit required: Repealed, permit requirements for all wastewater systems contained at 72.010
72.501	72.010	Permit and operational requirements: Includes broad requirements for conventional systems and refers to the specific sections that covers those requirements
72.510	72.510	Sludge disposal: Repealed, sludge disposal for all wastewater types is covered under 72.055

72.511	72.015, D10 S10, 72.035, 72.405(d)	Conventional wastewater systems not requiring plan approval: revision expands on who can install what without prior approval under a permit-by-rule or authorization-by-rule process.
<i>72.511(a)</i>	72.015(c), 72.035(d), NEW	Revision slightly expands authorization-by-rule to allow certified installers to construct systems on a single lot with total <u>on lot daily flow not exceeding 1500 gpd</u> . Systems serving a multi-family dwelling or small commercial are limited to a single building.
<i>72.511(b)</i>	72.015(b), 72.035(d), NEW	Revision allows engineers to design and oversee construction of systems on a single lot with total <u>on lot or facility wide design flow no exceeding 2500 gpd</u> .
<i>72.511(c)</i>	72.015(d), 72.035(d), 72.410(d) – (e)	Approved homeowners can still only install systems for the owner occupied private residence. Site evaluation requirements are now located in this subsection.
72.515	72.200, 72.260	Conventional wastewater systems requiring plan approval: Establishes prior approval is still required for any system serving a single lot or facility with daily flow greater than 2500 gpd. Also requires approval for systems serving buildings/lots not under common ownership (we currently require this).
72.520	72.020, 72.035, OWSIM Table, UPC	Separation distances: this section applies to those horizontal and vertical separation distances specific to conventional wastewater system components including to surface water or groundwater; references 72.100 for private water systems and 18 AAC 80 for public water system sources. Clarifies that all components must meet separation distance requirements or needs a waiver.
72.530	OWSIM, 72.035, 72.260	Construction requirements: Consolidates all construction requirements for all conventional wastewater systems regardless whether it serves an individual home or a community. Topics in this section were covered in more depth in the OWSIM which was previously adopted by reference.
<i>(e) Table</i>	NEW 72.035(a), D20 A2.6	Minimum Septic Tank Size: Created a table for easier reference, some minor changes to minimum tank size, mostly affecting commercial systems.
<i>(e)(3)</i>	D20 A3.1B	Revised to require manhole risers based on tank size rather than community system
<i>(f)</i>	D40	Revised to clarify minimum/maximum dimensions for different leach field types
<i>(f)(3)</i> <i>(f) Table</i>	72.260 Table B, D20 A5.4	Soils and sizing: Revised to include application rate/bedroom to the existing table B. Clarifies the rating of the soil is based on the more conservative value determined from soil texture, USCS, or percolation test
<i>(g)</i>	72.270(6), D20, A2.6, D30 A1.6	Revised to include lift station construction standards based on current standards and practices. NOTE: requires an increase in tank size if lift station is located before or in the septic tank.

72.540	72.020, 72.060	Waiver: Revision consolidates and clarifies waiver requirements into one area for conventional wastewater systems for both separation distances or construction requirements. Provides more detail to facilitate more complete submittals.
72.550	72.010(c), 72.435, 72.440, D10 S10.03	Notification and documentation requirements for systems not requiring plan approval: Revised to require engineers to provide DEC with 24 hour notice and include pictures with the documentation. 72.550(c) Revised to clarify responsibility for submitting paperwork (and fee) to department resides with the qualified person responsible for ensuring the systems meets the regulations and BMP's (engineer, certified installer, approved homeowner)
72.560	NEW (current practice)	After-the-fact registration or approval: New language that provides a regulatory pathway to register or obtain approval for a conventional wastewater system that was constructed or has been operating without documentation or approval.

Article 6: Alternative Wastewater Systems

Summary of Changes

This article previously included plan approval requirements for nondomestic wastewater systems; these are now included with Article 2. Article 6 now covers the department's first step into an "authorization by rule" process for alternative onsite wastewater systems (currently all alternative wastewater systems require plan approval under Article 2).

This regulation revision will allow alternative wastewater systems with onsite disposal (no direct conveyance off property) to be installed without prior approval as long as the design conforms to prescriptive standards. After construction, the system would be registered with the department similar to the existing process for conventional onsite wastewater systems. This change significantly reduces the regulatory burden for these small systems and relatively common installations.

Detailed Summary

The current references in this section are from sections in the regulations that previously applied to all types of alternative wastewater systems. Article 6 only covers specified types of facilities and disposal, all other alternative systems must still obtain plan approval under 18 AAC 72.200 - 290, as applicable.

2023	2017	Notes on changes and/or Intent of new regulations
72.600	72.600	Application for department approval: Repealed, plan review requirements for all types of wastewater systems are covered under the same process in 72.200-72.290
72.601	NEW	Permit and operational requirements: Regulation establishes global requirements for alternative wastewater systems similar to other articles
72.610	72.610	Plan review and permit fees: previously repealed, included for continuity
72.611	NEW	Alternative wastewater systems not requiring plan approval: Regulation establishes limits for authorization by rule installations to lots

		developed with a total design flow of 1500 gpd or less and mobile holding tank modules commonly used for oil & gas camps. Systems must still be designed by and installed under the supervision of an engineer but will not require prior plan approval.
72.615	NEW	Alternative wastewater systems requiring plan approval: Establishes submittal process and references 72.205 and 72.245 as well as operational approval requirements of 72.240. Includes items to be included in a submittal specific to alternative wastewater systems.
72.620	72.020	Separation distance requirements: this section applies to those horizontal and vertical separation distances specific to alternative onsite wastewater system components including to surface water or groundwater; references 72.100 for private water systems and 18 AAC 80 for public water system sources.
72.630	72.025, 72.245, 72.260, 72.263, 72.275	Construction requirements for alternative onsite systems: Section is similar to current standards under which alternative systems are approved through plan approval. For this initial step, regulatory requirements were left somewhat broad so there was not an unanticipated regulatory burden. Standards published in the updated Onsite Wastewater System Installation Manual must be followed or engineer can choose to go through plan approval for something different.
72.640	72.060	Waiver: Establishes a process to obtain a waiver of separation distance or construction requirements.
72.550	NEW	Notification and documentation requirements: Regulation establishes a registration process similar to that established for conventional wastewater systems in Article 5
72.660	NEW	After-the-fact registration: establishes a process to register or approve an alternative wastewater system similar to processes proposed for other systems under 72.290 and 72.560. We already do this on a regular basis and this establishes a clear regulatory path for consistency.

Article 7: General Provisions

Summary of Changes

This article is the only one that was not completely repealed and replaced. There were minor modifications and fees previously contained in other sections were moved here. The definitions were reorganized to put in alphabetical order. Repetitive definitions were removed and more details added for terms used in specific requirements throughout the chapter.

Detailed Summary

2023	2017	Notes on changes and/or Intent of new regulations
72.945	72.945	Revision removes reference to inspections the department conducted to allow a certified installer to be exempt from the exam.
72.954	NEW	Revision relocates certified installer and approved homeowner fees language currently included in Article 4, the fee amount did not change.

72.955(a)	72.955(a)	Revision updates references
72.955 Table	Table C	Table of fees was amended to be consistent with other proposed regulation changes and removed references to prior year fee increases. Fees did not change from those in effect since January 1, 2019. Fees for plan reviews for a nondomestic wastewater are now the same as for domestic systems since the process will be the same. Notes to Table were amended to update references.
72.956 Table	Table D	General permit authorization fee table repealed and replaced to remove columns with prior year fee increases. Fees did not change from those effective January 1, 2019.
72.956(e)	72.956(e)	Amended to state a later fee <u>may be</u> charged rather than “is” charged.
72.957 Table	Table	Individual permit authorization fee table repealed and replaced to remove columns with prior year fee increases. Fees did not change from those effective January 1, 2019.
72.990	72.990	Definitions and abbreviations: reorganized to put definitions in alphabetical order, added some new definitions and removed some terms that aren’t commonly used for clarity

Definitions in 18 AAC 72.990 and 18 AAC 80.1990

Definitions are important in regulations. Some definitions have changed to clarify intent and some commonly used terms not previously defined have been added. The following table outlines some key definitions that are critical to fully understanding how certain sections of the regulations were intended to be implemented. This table is intentionally not in alphabetical order.

Term	Definition	Intent and Important References
private water system	(70) points to 18 AAC 80.1990(110) – means a potable water system that is not a public water system	Important for implementation of the new 72.100 for private water systems. We will interpret this definition to exclude portions of water systems that are connected to a public water system (ex. water service line).
private water line	(69) points to 18 AAC 80.1990(109) – means a line, pipe, or conduit used to carry water as part of a private water system	72.100(b) defines separation distance requirements for private water lines and private water holding tanks (can be viewed as a bulge in a water line). These separation distance requirements do not apply to water service lines.
(water) service line	80.1990(138) – means the pipe works that extend from a water distribution main line to a single service connection	Both water distribution main and service connection as defined in 18 AAC 80 are clearly associated with a public water system only. This means there are no “water mains” or “water service lines” associated with a private water system.

<p>private sewer line</p>	<p>(68) – means a pipeline or conduit carrying wastewater from a service connection to a community sewer line or treatment works</p>	<p>This term is mostly intended to be used with onsite wastewater systems. For connections to utilities or POTW’s, the term “sewer service line” is more appropriate. Additional service connections to an onsite system must be approved or registered.</p>
<p>sewer service line</p>	<p>(88) “sewer service line” means a pipeline or conduit that services a single service connection and carries sewage to a sewer main</p>	<p>In general, we do not regulate sewer service lines. The main concern we might have is capacity of the treatment works but that would be considered as part of a larger collection system expansion. NOTE: 72.205(d) clarifies plan reviews are not required for service line connections to a utility or POTW.</p>
<p>community sewer line</p>	<p>(14) "community sewer line" means that portion of a collection system serving two or more (A) private residences; (B) mobile homes, trailer park spaces, or recreational vehicle connection points; (C) buildings not associated with a private residence; or (D) any combination of two or more structures listed in A – C;</p>	<p>Like private sewer lines, this term is intended to be used more with onsite wastewater systems and smaller privately owned WWTF’s.</p>
<p>sewer main</p>	<p>(87) “sewer main” means a sewer line that is used as a common receiver of sewage from more than one sewer service line and carries wastewater to a treatment works;</p>	<p>This is a term that has not been previously defined in regulations but is commonly used. Intended to be used mostly with utilities and POTW’s. NOTE: 72.205(e) will allow utilities to install sewer mains without plan approval. Instead we would approve standards of construction.</p>
<p>sewer line</p>	<p>(86) "sewer" or "sewer line" (A) means a pipeline, conduit, or other constructed conveyance that carries domestic or nondomestic wastewater; (B) does not include (i) a private sewer line or sewer service line; (ii) an open ended culvert or unlined ditch that conveys stormwater only;</p>	<p>This is a generic term and the definition has not significantly changed with the exception of adding sewer service line exclusion, and clarifying culverts and ditches are not included (separation distance requirement doesn’t apply) This term could be used interchangeably with community sewer line or sewer main.</p>

<p>service connection</p>	<p>(84) “service connection” means a private residence or a single building not associated with a private residence, including a single structure designed to accept or collect sewage for conveyance through a sewer service line</p>	<p>This is a term that has not been previously defined in WW regulations but is commonly used. The second part of this definition covers stormwater catch basins. This definition is intended to be used similarly to the way the drinking water program uses the term.</p>
<p>onsite wastewater system</p>	<p>(4) “alternative onsite wastewater system” (17) “conventional onsite wastewater system”</p>	<p>“onsite” is a key term that is included in these two new definitions. It refers to the system receiving domestic wastewater only and being located on the same property for the facility it serves under ownership of a single entity. These terms are used at 72.511 and 72.611 for what can be installed without plan approval.</p>

Any questions on the intent or interpretation of amended regulations should be directed to Tonya Bear at tonya.bear@alaska.gov or by calling 907-451-2177.