### Crosswalk for 18 AAC 72 Regulation Amendments

February 5, 2022 Public Notice Document

# Introduction

DEC is proposing revisions to 18 AAC 72 Wastewater Treatment and Disposal Regulations. The wastewater regulations were significantly reorganized, including an expansion in permit-by-rule or authorization-by-rule processes which allows more wastewater systems to be installed without prior approval from the department.

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 for staff to provide informed answers during potential discussions and in response to questions from stakeholders.

# Overall

The organization of 18 AAC 72, last amended November 7, 2017, was revised to better group approval requirements by system type. The existing regulations are 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 by expanding systems that can be installed without prior plan approval. Editor's notes in proposed regulations should be clear where material for repealed sections were relocated.

# 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.

Proposed	Current	Notes on changes and Intent	
72.005	72.005	<b>Purpose and applicability:</b> 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	<b>Technical review committee:</b> Expands scope of potential committee agenda.	
72.010	72.010(a), 72.215	<b>Permit and plan approval required:</b> Intent is the same but allows DEC to not to require certain plan approvals for those permitted under APDES.	
72.015(a), 72.015(b)	72.015(a), NEW	<b>Restrictions on use and modification:</b> Expanded to include additional out of date system types and clarify that all existing system components must be brought into compliance with current regulations when the system is modified.	

#### Detailed Changes

72.020	Repealed	<b>Separation distances:</b> repealed, contents relocated to 72.100 and also to specific sections associated with system type	
72.025	Repealed	Holding Tanks: repealed, addressed with alternative wastewater systems at 72.601-72.660.	
72.030	72.030	<b>Pit privies:</b> Revised to include separation distance requirements currently contained in 72.020 as well as decommissioning requirements.	
72.035	Repealed	<b>Conventional onsite systems:</b> repealed, contents relocated to 72.501- 72.560 that covers all things for conventional wastewater systems.	
72.040	Repealed	<b>Discharge to sewers:</b> repealed, contents relocated and addressed at 72.200-275, mostly at 72.270 which covers collection and pumping systems.	
72.050	72.050	<b>Minimum treatment:</b> Revised for clarity and current practices. Many of the requirements under this section are now addressed under different sections specific to system or discharge type. Moved waiver language to 72.060.	
72.055	72.055, 72.510	<b>Septage, sewage, and sludge disposal:</b> Revised to better clarify the regulation applies to all untreated or separated wastewater.	
72.060	72.060 72.020(e) 72.050(d)	<ul> <li>regulation applies to all untreated or separated wastewater.</li> <li>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 relocated here. Other sections specifically address waivers for system type.</li> </ul>	
72.065	72.065	Certified operator requirement: removed reference to domestic	
72.070	72.070	<b>Reference materials:</b> Revised language to make more generic; no specific dated references adopted so can keep up with what is most current standards 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	<b>Validity of approvals:</b> 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	<ul> <li>Private water systems: Includes existing separation distance requirements for private water systems. References construction standards for protection of groundwater.</li> <li>NOTE: separation distance changes/clarifications:</li> <li>Private well: <ul> <li>to wastewater holding tank = 100' (currently 75'), this makes it consistent with the separation for a septic tank; a wastewater holding tanks poses just as much if not more risk than a septic tank</li> <li>to community sewer line/sewer main = 100' (currently 75'), this makes it consistent with the existing 100' requirement for cleanouts on sewer lines (excludes private sewer lines or sewer service lines)</li> <li>Private water line/holding tank:</li> <li>to private sewer lines = 12" H, and 12" V at crossings, this is the same as in the UPC and most utility construction standards although we</li> </ul> </li> </ul>	
		wouldn't regulate it for sewer service lines or water service lines since they aren't associated with a private system (current practice).	

		to septic tank, lift stations, community sewer lines, leach fields,	
		etc. = 5' H, this is the same as the UPC	
		to fuel tanks/lines = 10', this is currently in the OWSIM but is not	
		currently in 18 AAC 72	
72.110	72.280	<b>Delegation of authority:</b> 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

Proposed	Current	Notes on changes and/or Intent of new regulations	
72.200	72.200	<b>Application for department approval</b> : Clarifying language and included revised and new references to authorization by rule processes.	
72.201(a) to (d)	72.200(b), NEW	<b>Exceptions to prior written approval of engineering plans</b> : new section to clarify and expand on what actions do not require approval. Added in "replacement in kind" and further clarified emergency repair	
		and routine maintenance. These terms also have definitions in <b>72.990</b> . 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	<b>General submittal requirements:</b> Revised to reorganize references specific to a treatment or disposal system type to relevant section in reorganized regulations	
72.210	72.210	<b>Domestic wastewater fees:</b> previously repealed in 2002, included for continuity	
72.215	Repealed	Permit required: Repealed, all permit requirements located at 72.010	
72.220(a) to 72.220(e)	72.220(a) to 72.220(e)	<b>Plan review:</b> 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)	<b>Approval to Construct:</b> Clarifying language; no substantive change to intent. Removes reference to 30-day timeline for decision to eliminate misunderstandings that an applicant can proceed if they do not receive	

		a response from department in that timeframe. The goal is to still provide a response within 30 days or faster.	
72.225(d)	NEW	ATC extension: New language creates a process for granting an extension of a construction approval beyond the 2-year time limit.	
72.230	72.230	<b>Revisions to approved plans:</b> Clarifying language; no change to intent	
72.235	Repealed	<b>Construction certification:</b> repealed, combined with 72.240 for clarity	
72.240	72.235, 72.240	<b>Construction certification and approval to operate:</b> Revised to combine two existing sections. Retains intent but clarifies when 90-day interim approval starts and remains effective; removes 30-day timeline for department decision; clarifies when final documents are due to the department.	
72.245	72.245, 72.020	<b>Treatment works:</b> Revised to consolidate general requirements for all system types and for wastewater treatment plants. Removes duplicative references.	
72.250	Repealed	Utilidors: Repealed, addressed with collection systems at 72.270	
72.255	72.255, 72.205(c), 72.205(d)	<b>Stabilization ponds:</b> Revised to consolidate and clarify design criteria specific to this system type. Clarifies operational approval requirements specific to this system type.	
72.260	72.260	<b>Alternative wastewater systems:</b> Repealed, alternative wastewater systems are addressed in 72.601 – 72.660	
72.263	72.263	<b>Package plants:</b> Repealed, alternative wastewater systems are address in 72.601 – 72.660	
72.265	72.265	<b>Soils analysis and report:</b> Clarifying language; no substantive changes to intent. Moved requirements specific to conventional systems to 72.501 – 72.560	
72.270	72.270, 72.040, 72.205(a)(10), 72.250	<b>Collection and pumping systems:</b> 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)	<b>Disposal systems:</b> Clarifying language; removed specific reference to marine and replaced with "surface water". Added more detail to facilitate more complete submittals.	
72.280	Repealed	<b>Delegation of domestic wastewater system plan review:</b> 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 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.

Proposed Current Notes on changes and/or Intent of new regula		Notes on changes and/or Intent of new regulations	
72.400	72.400	General provisions: Clarifying language, updated references	
72.405	72.405	<b>Certification of installers:</b> 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) was moved to 72.511(c) and (e) was moved to notification requirements at 72.550.	
72.415	72.415	<b>Training and examination requirements:</b> Revision clarifies requirements. Clarifies that a lapse in certification requires a person become certified as if they are doing it for the first time. For recertification, they can attend department training or substitute approved 3 <sup>rd</sup> party training.	
72.420	72.420	Certification term: Revision updates references	
72.425	72.425	<b>Certification renewal:</b> 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 <sup>rd</sup> party training if they opt for that under the new 72.415(b)(2)	
72.430	72.430	<b>Suspension of revocation of certification; hearing for revoked</b> <b>certification:</b> Revision includes the ability to suspend a certification an installer is 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 paperwo and resolve any issues. Otherwise minor clarifying language and eliminates separate appeal process (now references appeal procedur in 18 AAC 15).	
72.435	Repealed	<b>Installation notification and inspection:</b> Repealed, relocated to 72.550	
72.440	Repealed Fees: Repealed, fees relocated to 72.954		

Detailed Summary

# 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 or installing 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.

Proposed Current Notes on changes and/or Intent of new regulation		Notes on changes and/or Intent of new regulations	
72.500	Repealed	<b>Permit required:</b> Repealed, permit requirements for all wastewater systems contained at 72.010	
72.501	72.010	<b>Permit and operational requirements:</b> Includes broad requirements for conventional systems and refers to the specific sections that covers those requirements	
72.510	Repealed	<b>Sludge disposal:</b> Repealed, sludge disposal for all wastewater types is covered under 72.055	
72.511	72.015, D10 S10, 72.035, 72.405(d)	<b>Conventional wastewater systems not requiring plan approval:</b> revision expands on who can install what without prior approval under a permit-by-rule or authorization-by-rule process.	
72.511(a)	72.015(c), 72.035(d), NEW	Revision expands authorization-by-rule to allow certified installers to construct systems on a single lot with total <u>on lot design flow less than</u> <u>1500 gpd</u> .	
72.511(b)	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 less than or</u> <u>equal to 2500 gpd</u> .	
72.511(c)	72.015(d), 72.035(d), 72.410(d)	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	<b>Conventional wastewater systems requiring plan approval:</b> Establishes prior approval is still required for any system serving a single lot or facility with design 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, 72.260	<b>Construction requirements:</b> 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. In addition, sections in regulations are referenced.	

(e) Table 3	NEW 72.035(a), D20 A2.6	Table 3. Minimum Septic Tank Size: Created a table for easierreference, some minor changes to minimum tank size from current useof formulas	
(e)(3)	D20 A3.1B	Revised to require manhole risers based on tank size rather than community system	
(f)	D40	Revised to clarify minimum/maximum dimensions for different leach field types	
(f)(3) (f) Table 4	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	
(g)	72.270(6), D20, A2.6, D30 A1.6	Revised to include lift station construction standards based on current standards and practices. Specified a minimum size of a lift station vault that is intended to provide reserve capacity in the event of pump failure. Instead of a recommendation, specified a required increase in tank capacity when a lift station is located upstream to compensate for smaller particles and higher velocities of wastewater entering the tank.	
72.540			
		waiver for 5% or less of the required distance. Only engineers can request a waiver of a construction requirement.	
72.550	72.010(c), 72.435, 72.440, D10 S10.03	<ul> <li>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.</li> <li>72.550(c) Revised to clarify responsibility for submitting paperwork (and fee) to department resides with the qualified person responsible for installation (ex. engineer or certified installer)</li> </ul>	
72.560	NEW	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 a "permit 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 and department published best management practices. After construction, the system would be registered with the department similar to the existing process for conventional

onsite wastewater systems. This proposed change significantly reduces the regulatory burden for these 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. The proposed Article 6 only covers specified types of facilities and disposal, all other alternative systems must still obtain plan approval under 18 AAC 72.200, as applicable.

Proposed Current Notes on changes and/or Intent of new regular		Notes on changes and/or Intent of new regulations	
72.600 Repealed requirements for nondomestic wastewater systems a		Application for department approval: Repealed, plan review requirements for nondomestic wastewater systems are covered under	
	72.200-72.290         Permit and operational requirements: Regulation established		
72.601	NEW	requirements for alternative wastewater systems similar to other articles	
72.610	Repealed	<b>Plan review and permit fees:</b> previously repealed in 2002, included for continuity	
<b>72.611</b> NEWRegulation establishes limits for authoriz developed with a total design flow of 15 holding tank modules commonly used for		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 would allow installations without prior plan approval.	
72.615	NEW 72.025 72.260 72.263 72.275	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 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 8 for public water system sources.	
72.630	72.025, 72.245, 72.260, 72.263, 72.275	<b>Construction requirements for alternative onsite systems:</b> 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. Department published best management practices will provide more in depth detail and be developed based on current standards and practices and through the use of a technical review committee.	
72.640	72.060	<b>Waiver:</b> 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	

			After-the-fact registration: establishes a process to register or approve
72.660	72 660	NEW	an alternative on alternative wastewater system similar to processes
	12.000		proposed for other systems under 72.290 (which will apply for after the
			fact approvals) and 72.560.

# **Article 7: General Provisions**

### Summary of Changes

This article is the only one that is proposed to not be completely repealed and replaced. If the number is not referenced than there are no proposed amendments to that section. 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

Proposed	Current	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	72.440	Revision relocates certified installer and approved homeowner fees, the fee amount did not change.	
72.955(a)	72.955(a)	Revision updates references	
72.955 Table C	Table C	be the same as for domestic systems since the process will be the same.	
		Notes to Table C were amended to update references.	
72.956 Table D	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 late fee <u>may be</u> charged rather than "is" charged.	
72.957 Table E	Table E	from those effective January 1, 2019.Definitions and abbreviations: reorganized to put definitions in	
72.990	72.990		

Please note the next section that specifically addresses select definitions of key terms.

## 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 80.1990(110) – means a potable water system that is not a public water system	Important for implementation of the new <b>72.100</b> 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 lines).
private water line	(69) points to 18 AAC 80 80.1990(109) – means a line, pipe, or conduit used to carry water as part of a private water system	<b>72.100(b)</b> defines separation distance requirements for private water lines and water holding tanks associated with private water systems.
(water) service line	18 AAC 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.
private sewer line	(68) – means a pipeline or conduit carrying wastewater from a service connection to a community sewer line or treatment works	This term is mostly intended to be used with onsite wastewater systems. For connections to utilities or POTW's, sewer service line is more appropriate to be used. We would want to know about and likely require some sort of approval for additional private sewer line connections to onsite systems or privately owned treatment works.
sewer service line	(88) "sewer service line" means a pipeline or conduit that services a single service connection and carries sewage to a sewer main	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: <b>72.205(d)</b> clarifies plan reviews are not required for service line connections to a utility or POTW.

community sewer line	<ul> <li>(14) "community sewer line" means that portion of a collection system serving two or more</li> <li>(A) private residences;</li> <li>(B) mobile homes, trailer park spaces, or recreational vehicle connection points;</li> <li>(C) buildings not associated with a private residence; or</li> <li>(D) any combination of two or more structures listed in A – C;</li> </ul>	Like private sewer lines, this term is intended to be used more with onsite wastewater systems and privately owned WWTF's.
sewer main	(87) "sewer main" means a sewer line used as a common receiver of sewage from more than one sewer service line and carries wastewater to a treatment works;	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: <b>72.205(e)</b> will allow utilities to install sewer mains without plan approval. Instead we would approve their standards of construction.
sewer line	(86) "sewer" or "sewer line" means a pipeline, conduit, or other constructed conveyance that carries domestic or nondomestic wastewater; "sewer line" does not include a private sewer line or sewer service line	This is a generic term and the intent of the definition has not changed, added sewer service line to the exclusion. This term could be used interchangeably with community sewer line or sewer main.
service connection	(84) "service connection" means a private residence or a single building not associated with a private residence; "service connection" includes a single structure designed to accept or collect sewage for conveyance through a sewer service line	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 similar to the way the drinking water program uses the term.
onsite wastewater system	<ul> <li>(4) "alternative onsite wastewater system</li> <li>(17) "conventional onsite wastewater system</li> </ul>	"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 as the facility it serves under ownership of a single entity. These terms are used at <b>72.511</b> and <b>72.611</b> for what can be installed without plan approval.