



Water Quality Division RULE CLARIFICATION

RC#: 012A	Title: 18	Chapter: 9	Article: 3	Rule Citation: A.A.C. R18-9-701(4); R18-9-E303
Date Issued: 4/27/05			Supersedes Rule Clarification # 12, dated 5/11/01	
<p>Topic of Rule Needing Clarification: Kitchen sink wastewater disposal for a single family dwelling using composting toilet technology for managing all human excreta generated on the property.</p>				
<p>Text of Rule Needing Clarification: A.A.C. R18-9-701(4) “Gray water” means wastewater collected separately from a sewage flow that originates from a clothes washer, bathtub, shower, and sink, but does not include wastewater from a kitchen sink, dishwasher, or toilet.”</p>				
<p>Questions Needing Clarification: If a composting toilet and gray water system is proposed for installation to serve a single family dwelling, how can the discharge from the dishwasher and/or kitchen sink be handled?</p>				
<p>Clarification of Rule: In some instances, a single family dwelling may be proposed for use with a composting toilet and a gray water system. Since the definition of gray water does not include the wastewater from a dishwasher and/or kitchen sink, additional treatment of this wastewater is required. However, the current general permit rule for composting toilets, A.A.C. R18-9-E303, does not address the management of wastewater containing flows from a dishwasher and/or a kitchen sink. One method of acceptable treatment is to route dishwasher and/or kitchen sink wastewater through an interceptor to trap grease and solids, followed by routing to a subsurface disposal works. This rule clarification provides criteria for two situations in which dishwasher and/or kitchen sink wastewater is routed through an interceptor into a subsurface disposal works: 1) Gray water is used at the property in accordance with the Type 1 Reclaimed Water General Permit for gray water (A.A.C. R18-9-711), therefore only dishwasher and/or kitchen sink flows are routed through the interceptor to subsurface disposal and 2) all non-toilet wastewater is combined and routed through the interceptor to subsurface disposal (that is, gray water is not separately collected and reused under A.A.C. R18-9-711). Review of the treatment and disposal works for the dishwasher and/or kitchen sink wastewater will be done as part of the overall review of the Notice of Intent to Discharge for the 4.03 composting toilet general permit. The following applies.</p> <p>A. Notice of Intent to Discharge. In addition to the Notice of Intent to Discharge requirements specified in A.A.C. R18-9-A301(B), R18-9-A309(B), and R18-9-E303(D), the applicant shall submit the following information:</p> <ol style="list-style-type: none"> 1. The number of bedrooms in the dwelling or persons served on a daily basis, as applicable, and the corresponding design flow of the disposal works for the wastewater; 2. The results from soil evaluation or percolation testing that adequately characterize the soils into which the wastewater will be dispersed and the locations of soil evaluation and percolation testing on the site plan; and 3. The design for the disposal works per subsection (B) of this rule clarification including the location of the interceptor, the location and configuration of the trench or bed used for wastewater dispersal, the location of connecting wastewater pipelines, and the location of the reserve area. 				
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- B. Design requirements for the wastewater disposal works.
1. Interceptor. An applicant shall ensure that the design complies with the following:
 - a. Wastewater passes into an interceptor before it is conducted to the subsurface for dispersal;
 - b. The interceptor is designed to remove grease, oil, fibers, and solids to ensure long-term performance of the trench or bed used for subsurface dispersal;
 - c. The interceptor is covered to restrict access and eliminate habitat for mosquitoes and other vectors; and
 - d. Minimum interceptor size is based on design flow.
 - i. For a dwelling, the following apply:

No. of Bedrooms	Design Flow (gallons Per day)	Minimum Interceptor Size (gallons)	
		Kitchen Wastewater Only (All gray water sources are collected and reused)	Combined Non-Toilet Wastewater (Gray water is not separated and reused)
1 (7 fixture units or less)	90	42	200
1-2 (greater than 7 fixture units)	180	84	400
3	270	125	600
4	330	150	700
5	380	175	800
6	420	200	900
7	460	225	1000

- ii. For other than a dwelling, minimum interceptor size in gallons is 2.1 times the design flow from *Table 1, Unit Design Flows*.
 2. Dispersal of wastewater. An applicant shall ensure that the design complies with the following:
 - a. Wastewater is disposed into the subsurface to prevent any wastewater from surfacing.
 - b. A trench or bed is used to disperse the wastewater into the subsurface;
 - c. Sizing of the trench or bed is based on the design flow of wastewater as determined in subsection (B)(1)(d) and an SAR determined under A.A.C. R18-9-A312(D);
 - d. The minimum vertical separation from the bottom of the trench or bed to a limiting subsurface condition is at least 5 feet; and
 - e. Other aspects of trench or bed design follow A.A.C. R18-9-E302, as applicable.
 3. Setback distances. Setback distances are no less than 1/4 of the setback distances specified in A.A.C. R18-9-A312(C), but not less than 5 feet, except the setback distance from wells is 100 feet.
- C. Operation and maintenance requirements. For a wastewater disposal works, a permittee shall:
1. Ensure that the interceptor is maintained regularly according to manufacturer's instructions to prevent grease and solid wastes from impairing performance of the trench or bed used for dispersal of wastewater, and
 2. Protect the area of the trench or bed from soil compaction or other activity that will impair dispersal performance.
- D. Information submittal, design, and operation and maintenance requirements for the composting toilet portion of the facility are as specified in A.A.C. R18-9-E303.
- E. If a flush toilet is installed on the property, a new Notice of Intent must be submitted per the provisions of A.A.C. R18-9-A305(B).