



Water Quality Division RULE CLARIFICATION

RC #: 006.1	Title: 18	Chapter: 9	Article: 3	Rule Citation: R18-9-A314(D)(1)
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Date Issued: 11/15/01 (replaces RC #006)	Withdrawn or Superseded? No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Date:
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Topic of Rule Needing Clarification: Selecting the Proper Septic Tank Size and System Design Flow

Text of Rule Needing Clarification: R18-9-A314(D)(1): For a single residence, the design liquid capacity of a septic tank is governed by the following table:

<u>No. of Bedrooms</u>	<u>No. of Occupants</u>	<u>No. of Baths</u>	<u>Max. Fixture Count</u>	<u>Minimum Septic Tank Size (gallons)</u>
2	4	1-2	18	1000
3	6	1-2	18	1000
4	8	2-3	25	1250
5	10	2-4	32	1500
6	12	3-5	39	2000
7	14	3-5	42	2000

For computing system design flow per R18-9-A312(B)(3), Table 1 (AAC Title 18, Chapter 9, Article 3) indicates a design flow of 150 gallons per day per residential dwelling bedroom and 25 gallons per day per residential dwelling fixture unit.

Question Needing Clarification: What minimum septic tank size and system design flow should be used for a single residence if two columns in the table give conflicting answers?

Clarification of Rule: The rule does not specify how to determine minimum septic tank size for a single residence if two columns in the table (e.g., 3 bedrooms but 19 fixtures) give conflicting answers. Likewise, determination of daily design flow using Table 1 in the rule is not clear. The following table resolves these uncertainties. As this table indicates, the bedroom count is the primary determinant of minimum septic tank size and daily design flow. For a specific bedroom count, the minimum septic tank size and the daily design flow (which governs disposal field sizing), depend on whether a threshold fixture count is exceeded or not exceeded. The daily design flow listed in the table also is specified by the reviewing agency in the Verification of General Permit Conformance per R18-9-A309(C)(3)(a) and serves as an operational constraint of the permit.

<u>No. of Bedrooms*</u>	<u>Fixture Count</u>	<u>Minimum Septic Tank Size (gallons)</u>	<u>System Daily Design Flow (gallons per day)</u>
2 - 3	21 or less	1000	450
	more than 21	1250	600
4	28 or less	1250	600
	more than 28	1500	750
5	35 or less	1500	750
	more than 35	2000	900
6	41 or less	2000	900
	more than 41	2000	1050
7	45 or less	2000	1050
	more than 45	2500	1200

**For a single residence with more than 7 bedrooms, use R18-9-A314(D)(2) as the basis for determining minimum septic tank size and system design flow.*

Fixture counts for single residence use in the above table should be determined as follows:

<u>Residential Fixture Type</u>	<u>Fixture Units</u>	<u>Residential Fixture Type</u>	<u>Fixture Units</u>
Bathtub	2	Sink, bar	1
Bidet	2	Sink, service	3
Clothes washer (with or without laundry tub)	2	Lavatory, single	1
Dishwasher, service	2	Lavatory, double in master bedroom	1
Utility tub or sink separate from clothes washer	2	Water closet, # 1.6 gallons per flush	3
Shower, single stall	2	Water closet, >1.6 to #3.2 gpf	4
Sink, kitchen (with or without dishwasher)	2	Water closet, greater than 3.2 gpf	6

