



# Water Quality Division RULE CLARIFICATION

<b>RC #:</b> 009	<b>Title:</b> 18	<b>Chapter:</b> 9	<b>Article:</b> 3	<b>Rule Citation:</b> R18-9-E302(C)(2)(a)
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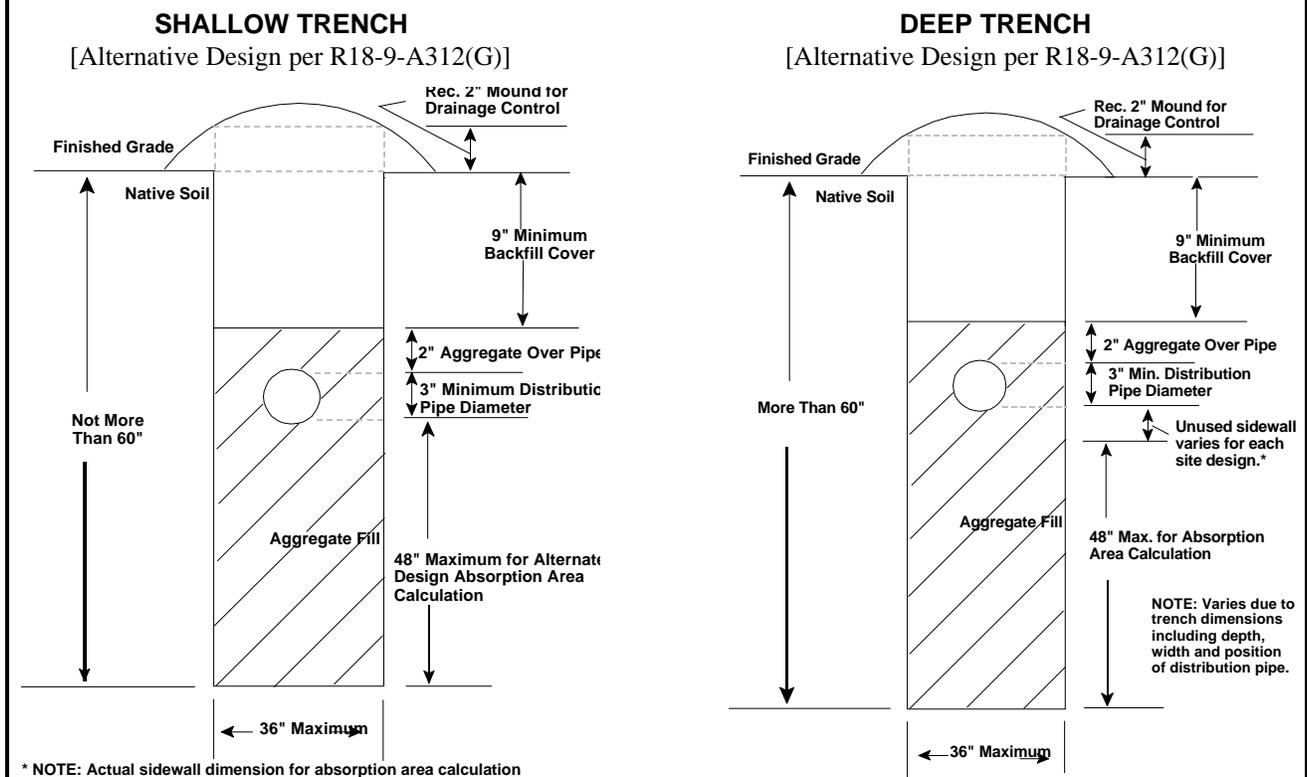
<b>Date Issued:</b> 3/9/01	<b>Withdrawn or Superseded?</b> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> <b>Date:</b>
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**Topic of Rule Needing Clarification:** Design criteria for calculating absorption area for shallow and deep trenches

**Text of Rule Needing Clarification:** R18-9-E302(C)(2)(a): "The applicant may, in computing the trench bottom absorption, include a sidewall area between 12 and 36 inches below the distribution line."

**Question Needing Clarification:** Please clarify the allowable sidewall area criteria. May other configurations be used in computing trench absorption area?

**Clarification of Rule:** The Department interprets this rule to mean that a trench must have at least 12 inches and may have as much as 36 inches of sidewall depth extending below the bottom of the distribution pipe. Thus, up to 9 square feet (ft<sup>2</sup>) of sidewall area per linear foot of trench (up to 3 ft<sup>2</sup> for each sidewall and 3 ft<sup>2</sup> for the trench bottom) may be used in the design without submitting an alternative design under the procedure described in R18-9-A312(G). An applicant may propose an alternative design under R18-9-A312(G), in areas where seasonal saturation of surface soils does not occur, that includes up to a nominal 11 ft<sup>2</sup> of absorption area per linear foot of trench (up to 3 ft<sup>2</sup> for the trench bottom and a nominal 4 ft<sup>2</sup> for each sidewall). For such an alternative design, especially for a shallow trench installation using the maximum sidewall distance shown below (resulting in an absorption area of a nominal 11 ft<sup>2</sup> per linear foot of trench after rounding), the designer must consider the elevations and slopes of the land surface, trench bottom and distribution pipe if approval of the nominal 11 ft<sup>2</sup> is desired. The applicant shall submit a profile drawing of the treatment and disposal components, to scale with critical horizontal and vertical measurements indicated, to allow the reviewing agency to verify absorption area and distribution pipe depth along the entire length of the trench. The reviewing agency may approve the design if the system will operate properly and perform equivalently to similar designs in similar soils and site conditions that the reviewing agency has approved in the past. Sidewall measurement is from the bottom of the distribution pipe (to a maximum of 5 feet below finished grade in a shallow trench). Cross-sections of shallow and deep trenches based on the alternative design procedure are shown below.



NOTE: Varies due to trench dimensions including depth, width and position of distribution pipe.