

INTERIM CHANGE NOTICE  
(ICN)

<p><b>A. Document No.:</b> PNNL-13023                      <b>Revision No:</b> 1</p> <p><b>Document Title:</b> RCRA Groundwater Monitoring Plan for Single-Shell Tank Waste Management Area A-AX at the Hanford Site</p> <p><b>Document's Original Author:</b> S. M. Narbutovskih and D. G. Horton</p>	<p><b>Effective Date of ICN:</b></p> <p>December 10, 2004</p> <hr/> <p><b>Change Requested By:</b> S. M. Narbutovskih</p>
<p><b>B. Action:</b> Make changes in the monitoring plan as described below in Section D. Attach this ICN to the front of the document just before the title page.</p>	
<p><b>C. Effect of Change:</b> This ICN documents a change in the critical mean values used for statistical upgradient/downgradient comparisons in FY2005.</p>	
<p><b>D. Reason for Change/Description of Change:</b></p> <p><b>Reason for Change:</b> Update groundwater quality monitoring plan at WMA A-AX (PNNL-13023) to document the new critical means used for statistical upgradient/downgradient comparisons beginning October 1, FY2004.</p> <p><b>Description of Change:</b></p> <p>(1) Draw a line through Table 4.2 on page 4.8 and attach the new Table 4.2 to that page to update the critical means used for statistical upgradient/downgradient comparisons in FY2005.</p>	
<p><b>E. Document Management Decisions:</b> Original reviewers are retired, and thus, not available to review changes in the document.</p>	
<p><b>F. Approval Signatures</b> (Please Sign and Date)</p>	<p><b>Type of Change: (Check one):</b></p> <p><input checked="" type="checkbox"/> Minor    <input type="checkbox"/> Major</p>

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Date: Dec 8, 04

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**Table 4.2.** Critical Means Values for Waste Management Area A-AX for Fiscal Year 2005 Comparisons<sup>(a)</sup>

<u>Constituent, unit</u>	<u>n</u>	<u>df</u>	<u>t<sub>c</sub></u>	<u>Average Background</u>	<u>Standard Deviation</u>	<u>Critical Mean</u>	<u>Upgradient/ Downgradient Comparison Value</u>
Specific conductance, $\mu\text{S}/\text{cm}$	8	7	5.7282	378.6	23.6	522	522
Field pH	8	7	6.4295	8.078	0.070	[7.60, 8.55]	[7.60, 8.55]
Total organic carbon, $\mu\text{g}/\text{L}$	6 <sup>(b)</sup>	5	7.3884	401.875	146.210	1,568	1,570 <sup>(c)</sup>
Total organic halides, <sup>(d)</sup> $\mu\text{g}/\text{L}$	8	7	5.7282	4.15	3.115	23.1	23.1

(a) Based on semiannual sampling events from December 2002 to June 2004 for upgradient well 299-E24-20 and from quarterly sampling events from January 2004 to September 2004 for upgradient well 299-E24-22.

(b) Excluded suspected TOC values collected in June 2003 from well 299-E24-20 and in September 2004 from well 299-E24-22.

(c) Rounded to the nearest tens.

(d) Critical mean calculated from values reported below vendor's specified method detection limit.

df = Degrees of freedom (n-1).

n = Number of background replicate averages.

t<sub>c</sub> = Bonferroni critical t-value for appropriate df and 28 comparisons.

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