

Below is a list of changed made to DHWM's Closure Plan Review Guidance. If you have questions or need more information contact Marie Jarden at marie.jarden@epa.state.oh.us.

Table 1: Changes made between the May 2006 version and the March 2008 version		
Page/Location	Current Page/Location	Change
Throughout document	Same	Removal of references to CQC and closure coordinators in response to new internal administrative process for closures. Will not affect how closure plans should be submitted.
Ch 1	Page 1-12 to 1-14 Section 1.5	Text added about the new internal administrative process to closures
Ch 1	Page 1-24 Section 1.10	Removal of reference to 1998 Generator Closure Guidance, addition of information on CRO
Ch1	Chapter 1 - Multiple Pages Reference to ERAC case Page 1-1	Changes to reflect that all closure plans must be done under orders or permits after the Textileleather ERAC case
Ch1	Page 1-17 Section 1.7	Clarification that modifications can be significant in type and number (as the rules does not spell out what an approval with "modifications" exactly means).
Ch3 Page 3-32	Page 3-36	Misspelling - ASTM not "ATSM".
Ch 3, Decontamination	Pages 3-7 to 3-13 Section 3.10	Section revised to include, information on decontamination pads and a drawing of the decontamination pads
Ch 3, Decontamination	Pages 3-7 to 3-13 Section 3.10	Rearranging of section to make it flow better, additional information on decontamination techniques, clarification on wipe samples, removal of language that "contaminants must be at least 5% soluble in the detergent solution" (difficult to calculate, no history of where it came from), removal of language indicating a detergent is a chemical extraction (extraction generally refers to acids/bases/ionic solutions), more information on what to expect in the decontamination portion of a plan
Addition to Ch 3	Page 3-16 Section 3.11	Addition of information on Closure Confirmation Sampling
Ch 3	Page 3-17 to 3-19 Section 3.11	Sample Acquisition Methods portion revised to include more information on composite vs. discrete sampling
Addition to Ch 3	Page 3-38 to 3-42 Section 3.19	Addition of section on Use of Historical Data

Table 6-2	Page 6-11 Table 6-2	Inhalation Rate exposure parameter units changed from g ³ /day to m ³ /day.
Table 6-2	Page 6-11 Table 6-2	CAs exposure parameter changed from CAs=(CS(PEF*VF)) to CAs=(CS/(PEF*VF))
Ch 7	Page 7-19 Section 7.2	Section entitled "Exposure point concentration for soil" now includes a sentence indicating DHWM expects the recommended value from ProUCL be used or an explanation given
Section 7.2	Page 7-8 Section 7.2	Added African-American to sensitive sub-population info
Equation 7-2	Page 7-25 Equation 7-2	Changed from 1000 ug/kg to 1000 ug/mg.
Glossary	Page 9-9 Glossary	Weight of Evidence definition updated
Old App A	Appendix Removed	Removal of App A - CQC has been dissolved
App M and A	Appendix A	Appendices re-lettered
Old App M, now App A	Appendix A Multiple pages	Text changes to reflect MCL and risk GCNs
Old App M, now App A	Page A-1 1.0 Introduction	Appendix M referenced chapters 4-5 changed to 6-7 instead
App C, Page C-11	Page C-11 t-test example	The tables in t test example were switched
Appendix H	Page H-4, Fig H-1 Page H-5, Fig H-2 Page H-8, Fig H-3 Page H-17, Fig H-8 Page H-19, Fig H-9	Figures in the soil permeability guidance rewritten so they can be read easier
App J, K, L (now removed appendices)	Removed, electronic version still available: http://epa.ohio.gov/portals/32/pdf/Removed CPRG Appendices.pdf	Removal of US EPA documents from Appendices J, K and L. All are found on-line in a new link on web-site.
Appendix L (now in Removed Appendices)	Removed, electronic version still available: http://epa.ohio.gov/portals/32/pdf/Removed CPRG Appendices.pdf	The last page (page 28) of USEPA's document (Appendix L: Supplemental Guidance to RAGS: Standard Default Exposure Assumptions) was not copied into the CPRG. It has been added to the document.

Table 2: Changes made between the June 2005 version and the May 2006 version

Page/Location	Current Page/Location	Change
General	Same	Footnote numbering has been corrected, the number 106 was skipped, but content has stayed the same.
Map of Districts	Same	Address change to CDO to reflect move to Lazarus government center
Table of Contents	Same	This has been changed to just have the page numbers rather than the entire section name and the page numbers.
1-3	Same	The caption on Figure 1-1 goes onto the next page, this was changed to keep it all on one page.
Page 4-8 Section 4.4	Page 4-7 Section 4.4	Section 4.4 says that temporary staging on the ground may constitute a waste pile - the rules now allow temporary staging under specific conditions - sentences about OAC Rule 3745-57-74 added
Section 5.2	Same	Changed Section 5.2 from Components for Post-closure Plans to Components of Closure Certification
Section 5.3	Same	Components of Post-closure Plans moved to Section 5.3, text in this section was also added to expand on the topic
Section 5.4	Same	Post-closure certification section added as Section 5.4
Section 6.2	Page 6-9 to 6-12 Section 6.2	Addition of sub-section "Outdoor worker exposure scenario" which included the construction worker information.
7-13	Foot note numbering has been changed, see footnote on page 7-12	Foot note #56 went onto the next page, changed so it's all on one page
Page 7-29	Page 7-25 Equation 7-2	Equation 7-2 (Conversion of Air Unit Risk to Inhalation Slope Factor) SF has been changed to AirUnitRisk (in the numerator) and 1000 ug/m ³ has been changed to 1000 ug/kg [Changed to 1000 ug/mg in a later version]
10-7	Page 10-8 Chapter 10	Added reference to USEPA's 2001 document on Supplemental Guidance for Developing Soil Screening Levels...
Multiple	Same	MCL vs risk changes to wording to show change in the policy. It has been changed from whichever was lower to whichever is more appropriate for the site
C-10	Page C-11 Equation C-6	Equation C-6 (Comparison of 95% Upper Confidence Limit to the Background Remediation Standard (BRS) through the t-test) $s_y \sqrt{m}$ changed to $\frac{s_y}{\sqrt{m}}$

C-12	Page C-12 Exhibit C-3	Exhibit C-1: (Comparision of 95% Upper Confidence Limit to the Background Remediation Standard (BRS) through the t-test) [Exhibit C-1 was changed to C-3 in a later version] $S_y\sqrt{m}$ changed to $\frac{S_y}{\sqrt{m}}$
Appendix E	Pages E-8, E-9, E-10 Appendix E	Added the ground water flow charts from the ground water plan review forms to the end of the appendix.
Appendix H	Appendices H, I, J, K, L, M, N	Added "Soil Permeability Data Evaluation" as Appendix H, changed the rest of the Appendix letters to match [Appendices I, J, K, L were removed in a later version and can be found on-line at: http://epa.ohio.gov/portals/32/pdf/Removed_CPRG_Appendices.pdf , Appendices M and N were combined and changed to Appendix A in a later version]
L-11	Page A-11 Equation A-11	Equation L-11 remove the "has" that follows the "that", simple grammar mistake
L-11	Page A-11 Equations A-9 and A-11	In equations L-9 and L-11 IWA changed to IWc
L-17	Page A-17 Equation A-19	Equation L-19: Changed EDc-EDa to EDa-EDc
L-20	Page A-20 Equation A-23	Equation L-23 the Q/C term changed from 68.18 to 68.81
L-25	Page A-25 Equation A-36	Equation L-36: Changed CA to CAs
L-32 to L-35, Section 8.0	Removed, Current Section 8.0 found on Page A-33 to A- 35	The multiple chemical adjustment language was removed from this section.
Appendix M	Appendix A Tables A-3, A-4 and A-5	GCN Table 2, Removed Henry's Law Constant Updated both GCN Table 1 and Table 2 [The GCN tables were added to Appendix A in a later version]
Appendix N (old M)	Appendix A Tables A-3, A-4 and A-5	Changed Appendix M to Appendix N [Appendix N (GCN Tables) was added to Appendix A in later version]