

UPDATES AND AMENDMENTS TO THE APPROVED ST. CLAIR REGION AMENDED PROPOSED ASSESSMENT REPORT
 (as per MOE letter dated Dec. 20, 2010, on the SCRSPA Updated Workplan)

No.	Update	Description of Change Made	Sections Changed
1	IPZ-3 for the Wallaceburg, Petrolia and LAWSS intakes	The Intake Protection Zone-3s (IPZ-3s) were delineated for the Wallaceburg, Petrolia and LAWSS intakes through events based modeling. The modeling simulated fuel spills, from different fixed locations, reaching the intakes. Storm scenarios of upto a hundred year combined probability. The methodology and delineation are now described in the AR. Additional threats and risk assessment for the delineated IPZ-3s is yet to be completed and would be part of a subsequent AR.	Sections 4.2.5, 4.2.5.1, 4.2.5.2, 4.2.5.3, 4.2.5.4, 4.2.5.5, 4.2.7, 7.4, 9.1 Appendix 12 (list of references). Maps 4-1, 4.2b, 4.3b, 4.4b, System Summaries, Section Summaries 4.0, 7.0, 9.0
2	Modelling of extension of the Lake St. Clair IPZ-3 up the Thames River into the Lower Thames Valley SPA	The work on modeling the Lake St. Clair IPZ-3s up the Thames River is anticipated to be completed by the end of May 2011. The results will be part of a subsequent AR for the Lower Thames Valley SPA.	Not applicable (work will be described in a subsequent Lower Thames Valley SPA AR)
3	IPZ-1 and IPZ-2 for Kettle and Stony Point First Nations	HCCL (Hall and Coastal Consulting Limited), with Riggs Engineering as sub-contractor, has been engaged to complete this technical study. The modeling of the intake has now begun. Water quality data is being obtained from beach water samples and raw water samples taken at the water treatment plant. It is anticipated that the work will be completed by the end of 2011, and would be part of a subsequent AR.	Section 4.7: Table 4-4, Section 5.7: Table 5-7, Section 6.3, Section 7.4, Section 8.4, Section 9.1: Table 9-1, section summary 9

No.	Amendment	Description of Change Made	Sections Changed
1	Update the Significant Groundwater Recharge Area (SGRA) delineated based on surficial geology mapping that was used for Tier 2 water budgets for the Upper Thames Valley SPA	The original recharge calculations used County soil maps as one of the inputs, and these maps are not continuous across county lines and were not completed in urban areas. Through the Tier 2 Water Budget in the UTRSPA, it was identified that the Surficial Geology would provide a better representation of recharge and a continuous surface to base recharge calculations on. A new recharge map was created using surficial geology. As well, it is noted in the AR that overlaying the groundwater vulnerability onto the SGRAs creates “overlay artifacts” or “sliver polygons”. This occurs where the boundary of a contiguous groundwater vulnerability area falls close to the boundary of the SGRA. Since the datasets do not perfectly align to each other, the slight gaps and overlaps between the boundaries create small, uniquely valued polygons. In some cases, these polygons will be assigned a Vulnerability Score of 6 (i.e. potential for Low Threats) but have areas less than 1 square meter in size. This should be considered in policy development and implementation.	Section 3.4.2, Section 3.5, Section 4.5, Map 4-7, 4-8, 7-1c, 7-5, 7-7, Section summary 4: Fig. 4.
2	Indicate that planned work for a local tier 2 risk assessment has not taken place for this AR version since significant drinking water threats will be verified when the source protection plan is being developed. Relevant references include statements on page 7-16, 7-40, and 9-3.	This comment was made related to the UTR AR and is relevant to the SCR AR as well. The AR is revised to indicate that the tier 2 (site specific) risk assessment, to confirm significant threats, would be conducted while developing source protection plans (2012) if needed.	Section 7.1.5, Section 7.3, Section 9: Table 9-1, Section Summary 7: data gaps, Section Summary 9: Table 1, All system summaries

3	Pasture and outdoor confinement area threats	<p>From the MOE table of drinking water threats, the pasture and outdoor confinement area threats can result in potential significant threats (chemical) in IPZs of scores 9 or 10. In the SCR SPA, only the Wallaceburg IPZ-1 has a vulnerability score of 9 (the other IPZs have lower scores). It has been determined through an examination of MPAC property information and confirmed by examining 2006 aerial photograph, that there are no animal operations within the Wallaceburg IPZ-1 and therefore no threats of this type to be evaluated within the SCR SPA. This analysis was reported in the Amended Proposed AR and further detail in methodology is provided in this updated AR.</p>	Section 7.2.1, Appendix 12
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4	<p>The statement in section 7.1.4 on page 7-15, "According to Rule 131, activities in vulnerable areas that contribute to drinking water quality issues are deemed significant drinking water threats regardless of assigned vulnerability scores", can be misleading to the reader. It will help clarify the Technical Rules by indicating that this statement only applies to issues in WHPA and IPZ vulnerable areas for systems in the Terms of Reference (ToR). It may also be helpful to indicate that issues are considered moderate drinking water threats when they are linked to a system not identified in the ToR or are located in a HVA/SGRA area.</p>	<p>This comment was made by MOE on the UTR AR and is relevant to the SCR AR as well. These clarifications are provided in the AR: According to Rules 114, 115, 131 and 141, activities or conditions that contribute to drinking water quality issues (known to be partially or wholly due to anthropogenic sources), are deemed significant drinking water threats regardless of assigned vulnerability scores. This applies to intake protection zones and wellhead protection areas only, for drinking water systems identified in the Source Protection Area Terms of Reference. Further, issues in HVAs or SGRAs or those linked to a system not identified in the Terms of Reference may lead to the identification of moderate drinking water threats (not significant threats). Systems not identified in the Terms of Reference may be those included in the source protection planning process through municipal council resolution or by the Minister (MOE).</p>	<p>Section 7.1.4, Section 5.2. Appendix 2: Section Summary 5: Impact of Identifying an Issue, Section Summary 7: Threats Arising from Issues.</p>
No.	Other	Description of Change Made	Sections Changed
1	Minor editorial	Minor editorial changes throughout the AR	Throughout the AR