



**BENCHMARKS FOR EVALUATING
ASSESSMENT REPORTS UNDER THE
*CLEAN WATER ACT***

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- SPC's across Ontario are now preparing & consulting upon Assessment Reports (AR's) in accordance with procedural & substantive requirements set out in:
 - the *Clean Water Act* (CWA);
 - the regulations (i.e., O.Reg.287/07);
 - the approved Terms of Reference; and
 - MOE's detailed Technical Rules for AR's
- Most SPC's will be submitting their proposed AR's to MOE for approval in early to mid-2010



- the overall purpose of the AR is to:
 - identify/evaluate the vulnerability of groundwater & surface water
 - identify/evaluate activities/conditions that pose risks to quality/quantity of drinking water sources
 - rank these threats as significant, moderate or low
- these findings will then form the technical & scientific basis for developing policies within the forthcoming Source Protection Plan



- s.15 of the CWA sets out nine minimum content requirements for AR's:
 1. Identify all watersheds within the SP area or region
 2. Characterize water quality/quantity within each watershed
 3. Set out water budgets for each watershed
 4. Identify significant groundwater recharge areas (SGRA) and highly vulnerable aquifers (HVA)
 5. Identify surface water intake protection zones (IPZ) and wellhead protection areas (WHPA) for existing/planned municipal drinking water systems (or “elevated” systems)



6. Describe issues affecting drinking water quality/quantity in IPZs and WHPAs
 7. List activities/conditions that are or would be drinking water threats in the above-noted vulnerable areas
 8. Describe areas in the above-noted vulnerable areas where these activities/conditions are or would be “significant” drinking water threats
 9. Contain other information prescribed by regulation
- Once the AR has been submitted & approved, SPC’s are obliged to update it if the SPC becomes aware that the AR is no longer accurate or complete (s.19, CWA)



- In addition to meeting CWA requirements, AR's must also address various other matters prescribed by regulation (O.Reg.287/07), such as:
 - Characterization of physical & human geography of the watershed, & the interactions between them
 - Identification of areas in SGRA's, HVA's, IPZ's & WHPA's where activities/conditions are (or would be) moderate or low drinking water threats, & description of the circumstances in which they pose such threats
 - Summary of how AR conclusions are likely to be affected by climate change over the next 25 years



- In addition to meeting legislative & regulatory requirements, AR's must also satisfy the MOE's Technical Rules (amended Nov.16, 2009)
- In essence, the Technical Rules provide prescriptive detail & standard methodology for meeting AR content requirements (subject to local variation), such as:
 - Preparing water budgets at the conceptual & subwatershed levels (Tiers 1, 2 & 3, if required)
 - Delineating SGRAs, HVAs, IPZs & WHPAs, & assessing their vulnerability
 - Identifying & assessing drinking water threats & issues within vulnerable areas



- When examining draft AR's, there are a number of general considerations & questions to take into account in order to assess the adequacy of AR content, such as:
 - Does the AR address all mandatory content requirements at a sufficient level of detail?
 - Is there sufficient data/evidence to support the factual, technical or scientific conclusions?
 - Does the AR include uncertainty analysis & adequately reflect the precautionary principle?
 - Does the AR identify relevant data gaps/limitations & commit to address them where needed?



- Were the conclusions reached in a clear, logical & traceable manner?
- Is the text readable & are the maps/figures legible?
- Did the SPC obtain local knowledge & landowner information to verify/supplement the technical work of staff or consultants? Were relevant databases used?
- Does the AR reflect Great Lakes agreements where applicable, & credibly address climate change impacts?
- Does the AR identify & evaluate all actual or potential threats (i.e. activities/conditions) to municipal drinking water quality/quantity?



- www.ontario.ca/cleanwater
- www.conservationontario.ca
- www.cela.ca