

# Thames – Sydenham and Region Drinking Water Source Protection Source Protection Committee Discussion Paper

**Report to** Chair and members  
Thames – Sydenham and Region  
Source Protection Committee

**Agenda #** 2014.10.6a(ii)

**Cc** SP Management Committee

**Date** September 25, 2014

**Prepared By** Chris Tasker, Source Protection Project Manager  
Michelle Fletcher, Policy Advisor

**Re:** Wheatley Microcystin Monitoring Policy

---

## Background

1. At the previous Source Protection Committee (SPC) meeting it was determined that Microcystin was to be identified at the Wheatley and Chatham/South Kent intakes as an issue under the Clean Water Act (CWA) (as per rule 115.1). Work has proceeded to document this in the Assessment Report (AR) for the Lower Thames Valley Source Protection Authority (LTVSPA).
2. A discussion paper was provided to the SPC at the July meeting with the background and discussion on this subject which included policy concepts.
3. This discussion paper is intended to finalize policy related to the microcystin issue.

## Discussion

1. In the previous discussion paper it was recommended that policy be developed supporting monitoring of microcystin and phosphorous (P) at the intakes based on the following concepts:
  - o The monitoring be in a coordinated manner
  - o Maximize the use of existing data and monitoring programs and expand or develop new programs where appropriate
  - o Promoting research which would better understand the local contributions to what is a western basin issue
  - o Consider event based monitoring (both blooms and runoff events)
  - o The monitoring be flexible and based on appropriate funding levels being available
2. The proposed policy provided below was largely based on the policy developed for the Wallaceburg nitrate issue.
3. Education and Outreach promoting best management practices for activities which may contribute to an issue has also been incorporated into the general education and outreach policy in the Source Protection Plan (SPP).

## Proposed Policy Concept for Discussion

1. In accordance with Section 22(2)-[7] of the Clean Water Act further monitoring and research of Microcystin is required for the Wheatley and Chatham/South Kent Surface Water Intakes to:
  - assist in the delineation of the issue contributing area if required and advisable in the future;
  - assist with future identification activities contributing to the issue (via the release of Phosphorous);
  - and,
  - assess whether Microcystin continues to be an issue.
2. The Chatham-Kent PUC and Lower Thames Valley Conservation Authority, in collaboration with the Province (Ministry of Environment), Essex Region Conservation Authority and other bodies where possible,

should continue the support of existing water quality monitoring programs where they relate to the assessment and understanding of the microcystin issue.

3. Opportunities to better coordinate monitoring efforts during events and provide insight into areas contributing to the issue under the event should be considered.
4. Where it is appropriate, additional water quality monitoring should be incorporated into existing programs or developed as new programs.
5. These monitoring efforts should be directed at such things as, but not limited to:
  - event based water quality monitoring (both blooms and runoff events),
  - correlation between the various monitoring programs (locally and within the western Basin of Lake Erie), and
  - contributions through transport pathways.
6. Participation in these monitoring programs is dependent on adequate resources (including funding and staff capacity) being available.