

ADDENDUM

Request for Proposals

St. Clair River Dye Study

Number 2009-01

For:

The Great Lakes Observing System
440 Church Street, Suite 4044
Ann Arbor, MI 48105

This section replaces Section IX: Scope of Work in the original document released on June 16, 2009. Please use Section IX: Scope of Work (REVISED) below in preparing your proposal.

IX: Scope of Work (REVISED)

Two dye releases, center/west bank St. Clair River and sampling as outlined below. The award for this project will not exceed \$90,000.

- Two dye releases – middle channel and west bank, Within 1 KM up or downstream of the SUNCOR Dock (see attached map)
- Rhodamine WT
- Initial concentration – sufficient dye to be detectable at Algonac. And, per permit stipulation, use of Rhodamine WT Liquid dye shall be in accordance with manufacturer's label restrictions. Further, please be aware that Rhodamine WT liquid dye is an alternative name for Acid Red 388, and that the Final Acute Value (FAV) for Acid Red 388 is limited to **13 mg/l**.
- Initial samples from the boat, prior to each release, to confirm background levels of dye are zero.
- Transects:
 - Three sampling transects per release, one transect approximately 1000 m downstream of the release point, one transect upstream of Stag Island near Marysville, and one transect downstream of Stag Island near St. Clair
 - The transects will include surface samples in 10-15 locations across the channel and at least 3 vertical profiles, evenly spaced w/ GPS coordinates
 - Each transect for each dye release shall be timed for the estimated peak concentration at that point.

- Time Series:
 - Sampling protocol will also include a time series taken at intervals specified below during the period that dye concentrations are measurable, based upon the attached figure of the dye concentration as a function of time as it flows past 5 communities. Provide a U.S. and Canadian sampling point at each of the five locations. Locations preferably at or near US drinking water intake locations, specify locations w/ GPS coordinates.

Location	Frequency of Samples (min)	start time after release (hr)	end time after release (hr)
US 1	10	0	3
Can 1	10	0	3
US 2	10	3	7
Can 2	10	3	7
US 3	20	5	10
Can 3	20	5	10
US 4	20	7	13
Can 4	20	7	13
US 5	20	11	17
Can 5	20	11	17

Data Delivery: Data will be provided in a written report as well as a digital record of all measurements.

Data QA/QC: Please describe your QA/QC plan, e.g., instrument calibration protocol; demonstrate that equipment accurately detects to 0.1 ppb.

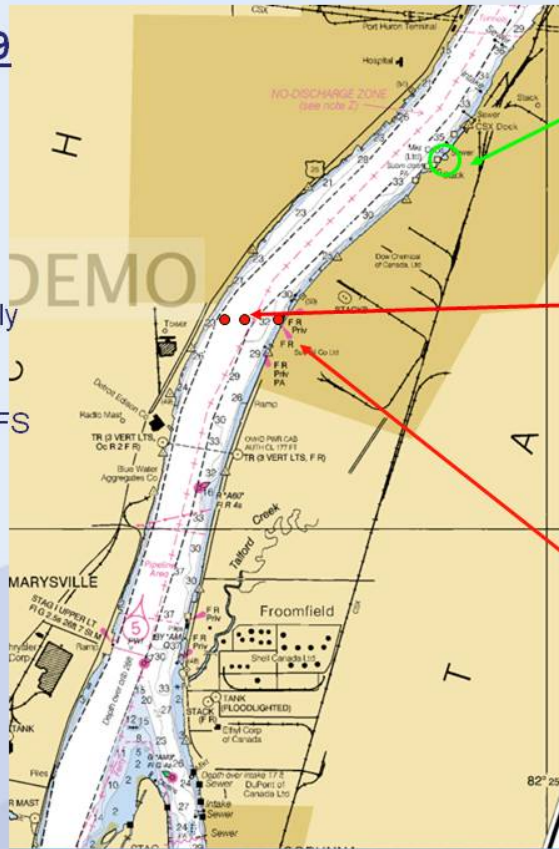
Permits and Permissions: Will be secured by GLOS.

Notification: will be handled by contractor to list supplied by GLOS with both a 48-hour advance notice and a two hour advance day-of notification.

Attachment

Location of 2009 dye releases

- East bank: simulated ballast water discharge
 - Up to 4 releases in July
- Center channel: HECWFS validation
 - 1 release
- West bank: HECWFS validation
 - 1 release



Industrial intake pond – releases must be south of this site

Proposed U.S. release sites
Exact location TBD, no further downstream than Suncor Dock

Proposed ballast release site (**Suncor Dock**)

Center Release

