

Red Dye Studies - Frequently Asked Questions

What is happening?

Weather permitting, U.S. Geological Survey scientists will inject a harmless bright red fluorescent dye into a stretch of the Chicago Sanitary and Ship Canal starting after dawn on Tuesday, November 10, 2009 with a backup date of November 17, 2009.

What is a dye tracing test?

A dye-tracing test is done to collect information on the travel times and dispersion rates in a river or stream by measuring how long it takes for dye to move between predetermined sampling sites. This type of test can be used to model water quality and aquatic life in rivers and streams. It can also be used to understand the movement of contaminants that can be introduced to the stream either by design or as the result of an accidental spill.

Why conduct a dye tracing test on the Chicago Sanitary and Ship Canal?

The dye study will provide information on the dispersion and travel times of waterborne contaminants in the canal as well as characterizing leakage to adjacent water bodies such as the Des Plaines River and I & M Canal.



What kind of dye is being put in the water, and is it harmful?

Rhodamine WT is a fluorescent red dye used in this study and is commonly used in other hydrologic studies. It is non-toxic, safe for the environment and does not stain clothing.

Why is red dye used, and how much is put into the stream? Why red and not purple?

Rhodamine dye is a reddish-pink dye commonly used safely in dye-tracing studies in streams. The color of the dye is not as important as its physical qualities. Rhodamine follows the pathways of water closely and has a low impact on stream-water quality. The dye can be measured at concentrations not visible to the eye by special equipment.

Should people avoid the waterways during these tests?

No. The canal will remain open during the test.

For more information on the Chicago Sanitary and Ship Canal Study, please contact:

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