

News Release

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Contact: Douglas Yeskis 217-328-9706

djyeskis@usgs.gov

Chicago Sanitary and Ship Canal Will Turn Red for Study

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.

The dye study is aimed at obtaining information on the dispersion and travel times of waterborne contaminants in the canal and characterizing leakage to adjacent water bodies such as the Des Plaines River and I & M Canal. Such information is used by Federal, state, and local agencies for various engineering applications, especially water-quality monitoring and control and invasive species management.

The red dye—known as Rhodamine WT—will be injected in the west side of the canal just north of Romeoville Road and may be visible for several miles downstream to the Lockport Lock and Dam. The dye, which has been used in hydrologic studies for decades, has been approved for use as a water tracer by the U.S. Environmental Protection Agency and is harmless to people, fish and plants at the concentrations used.

The dye concentration will be measured at several points along the canal by bank- and boat-mounted fluorometer -- equipment that can detect and measure fluorescence. Scientists will measure the adjacent sections of the Des Plaines River, Deep Run Creek, and I & M canal to investigate leakage from the canal.

The dye solution will be slowly and steadily injected into the canal for 8 hours at the injection site. Scientists will make Fluorometric measurements starting near the injection point and continuing downstream to Joliet. The red dye may be visible from just north of Romeoville Road down to the Lockport Lock and Dam (about 5 miles) for the entire first day of the study (November 10), and possibly early the next day.

The study will be done at a relatively constant flow, with a target discharge of 2,400 cubic feet per second at Lockport Lock and Dam. The inability of Lockport to maintain this flowrate for the duration of the study due to precipitation or unforeseen circumstances will force postponement of the study.

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