

US EPA ARCHIVE DOCUMENT

EPA ANNOUNCES STUDIES TO DEVELOP AND EVALUATE RAPID WATER QUALITY TESTS TO PROTECT BEACH GOERS

The U.S. Environmental Protection Agency (EPA) announces the selection of two beach sites for health studies in the summer of 2009 to improve the safety of swimming at beaches. The studies will be conducted at Surfside Beach, South Carolina, and Boquerón Beach, Puerto Rico, where beach goers will have an opportunity to participate.

The research is part of EPA's Beaches Program to protect swimmers from illness due to exposure to pathogens in recreational waters. This study, along with other research activities, will allow EPA to build a strong foundation for up-to-date recreational water quality criteria.

The science is directed at developing new ways of measuring water quality that will provide faster results and reduce the risk of waterborne illness from swimming at beaches. The results from these tests will be used by EPA in the development of new or revised water quality criteria for protection of recreational waters in 2012.

The 2009 studies are part of ongoing research that has been



conducted at fresh water beaches on the Great Lakes in the summers of 2003 and 2004 and marine (salt water) beaches in the temperate zone during the summers of 2005 and 2007.

At Surfside Beach, researchers will evaluate the predictive ability of the tests at a beach where the dominant pollution source is a mixture of contaminants being washed into beach waters from rain fall in urban areas.

The study in Boquerón Beach, Puerto Rico, will provide an opportunity to evaluate the performance of the tests in tropical waters impacted by treated waste water.

Together these studies will provide information on how broadly the tests can be

applied by health officials and beach managers to determine the risk of illness from swimming at beaches.

Swimming in recreational waters can occasionally result in mild illnesses, such as earaches, eye infections, skin infections, sore throats and diarrhea.

These studies are made possible through the cooperation of the beach communities, the managers at the beaches, and the citizens who agree to participate in the studies.

Approximately 6,000 volunteers at each beach will be recruited on weekends in the summer. Volunteers will be asked to provide information about their beach recreational activities and

health status after beach visits. In addition, EPA will monitor beach water quality on the beach throughout the days of the studies.

Site Selection

EPA selected Surfside Beach after a scientific evaluation of sites nationwide and in state territories. To the best of EPA's knowledge the beach is impacted by urban sources of pollution, including possible discharges of storm water or storm water run-off.

Selection criteria included :

- Sufficient beach-going population
- Variable water quality

In addition, the site could not be impacted by discharges from treated waste water or by run-off resulting from combined sewer overflows (CSOs) or sanitary sewer overflows (SSOs). The beach also had to have at least one rain event per month to ensure the site reflects urban sources of pollution, including possible discharges of storm water or storm water run-off. The surrounding area had to have a population density greater than 100 per square mile.

EPA selected Boquerón Beach after a scientific evaluation of sites located in a "tropical region" which includes waters in Puerto Rico, Hawaii, Guam, the Virgin Islands and south Florida. Site selection

requirements for the study included:

- Sufficient beach-going population
- Variable water quality
- Influence by effluent from a waste water treatment plant

The 2009 studies are being conducted by the EPA in coordination with the Centers for Disease Control and Prevention as part of the multi-year study entitled the National Epidemiological and Environmental Assessment of Recreational Water Study (NEEAR).

For more information visit :

<http://www.epa.gov/waterscience/criteria/recreation/>

www.epa.gov/nheerl/near/

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