

# Technology can protect water supply

January 7 2005

---

A technology to instantly determine a poisoned water supply system has been developed at the Department of Energy's Oak Ridge National Laboratory.

Researcher Eli Greenbaum said the AquaSentinel system can detect toxins in a municipal water supply by analyzing the condition of the algae it contains.

"Depending upon whether the water is healthy or it has been exposed to poison, the fluorescence signature changes," said Greenbaum of ORNL's Chemical Sciences Division. "It is that change in signature that we use as the detection method for detecting the presence of chemical warfare agents."

Greenbaum noted AquaSentinel can monitor a water supply 24 hours a day, seven days a week.

"The way AquaSentinel works is that based on the fluorescence from the algae that are already in the water, and the fact that the algae already live in the neighborhood of the environment that we are trying to protect, we never run out of biosensors," Greenbaum said.

Source: Oak Ridge National Laboratory

Citation: Technology can protect water supply (2005, January 7) retrieved 20 April 2024 from <https://phys.org/news/2005-01-technology.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.