



**Microtox<sup>®</sup>**

## **The Case for Water Security Monitoring in Food Production**

### **What would one day's disruption in water quality cost your facility?**

The subject Company is a leading food producer, innovator in Hazard Analysis and Critical Control Point (HACCP) process improvement, and a recipient of numerous industry and customer awards for outstanding product quality. They operate a busy, high-throughput production facility in a major metropolitan area, 24 hours a day and six days a week.

Every minute of production is critical. The time between production and consumer consumption of products averages just over four days, and there is no storage available for finished products, except for a transportation staging area. Their customers are very demanding, often expecting just in time (JIT) delivery of product that is always fit for use. *One day of lost production could translate into significant customer dissatisfaction and a potential loss of more than \$200,000 in revenue.*

In 2004, the Company recognized that water was its most precious raw material, comprising more than 60% of its finished product. Until this time, the Company hadn't considered water to be a critical control point in its production process; water was simply a public utility. Once the Company realized that the city's water utility could not ensure the quality of this essential raw material, they decided to take action.

Recognizing that current quality control standards for water had to be significantly improved, the Company purchased Microtox water security technology. By implementing the Microtox system's application of routine testing of basic water chemistry and broad-spectrum screening for water contamination, *the Company made a wise investment in monitoring and protecting its most vital raw material.*

### **What would it be worth to your facility not to have to worry about it?**

Approximately one year after the Company initiated its routine water security monitoring program, a nearby industrial facility was destroyed by an explosion of an unknown

origin. Immediately, the event created significant safety concerns. There were city warnings that the water distribution system may have been contaminated by organic chemicals originating from the explosion site.

Because of its foresight, the Company had all the tools required to ensure that its water quality was not compromised. Routine testing with the Microtox system had already established a quantitative record of baseline water toxicity readings over the past year. Because Microtox can detect more than 2,600 chemicals and compounds, they were assured that analysis would identify any contaminants of concern. The Company simply increased testing frequency until it received a “system–all clear” from the city.

*The Company was able to continue operation and meet its quality requirements without disrupting its production or customer fulfillment.*

### **The Microtox Water Security Technology**

Microtox is certified by the Department of Homeland Security as an Anti-Terrorism Technology for use in the prevention, response, and recovery from a deliberate or accidental contamination of water by a toxic substance. In the event of an act of terrorism, users of this technology are protected from associated liabilities, other than business interruption, under the Security Act of 2002.

Microtox is a method-defined bioassay technology. A proprietary reagent uses a living organism that diverts a percentage of its metabolism to the production of light. Exposure to toxins reduces light output with all measurements conducted on a sensitive instrument platform.

The Microtox Water Security System is a comprehensive program for sampling, testing, reporting, and responding to water contamination. In less than 30 minutes a day, with little training, users ensure that all process water consumed remains fit for use in their production processes. Strategic Diagnostics Inc. supports the customer’s application with comprehensive operator training, testing, and analytical support services.

**Contact Strategic Diagnostics Inc. at (800) 544-8881 or visit our website at [www.sdix.com](http://www.sdix.com) for information on water security monitoring.**