Secured Environment
*Driving the Standard for Quantification*

September 5, 2018

In coal mining, a caged canary was used as an early warning indicator of harmful gas build-up in mines. Yet, not all the miners could see the canary. Nor did management, located outside of the mine, have information from inside the mine to coordinate a rescue.

What if a process allowed all employees – both inside and outside of the mine – see the canary in real-time?

The modern day canary is a bioassay, sensitive to more than 1,000 pollutants. Our integrated hardware system uses the bioassay to provide instant assessments of hazardous conditions. Our associated pollutant valuation algorithm provides crucial information to exposed individuals, as well as to first responders, so they can better mitigate damages before they occur.
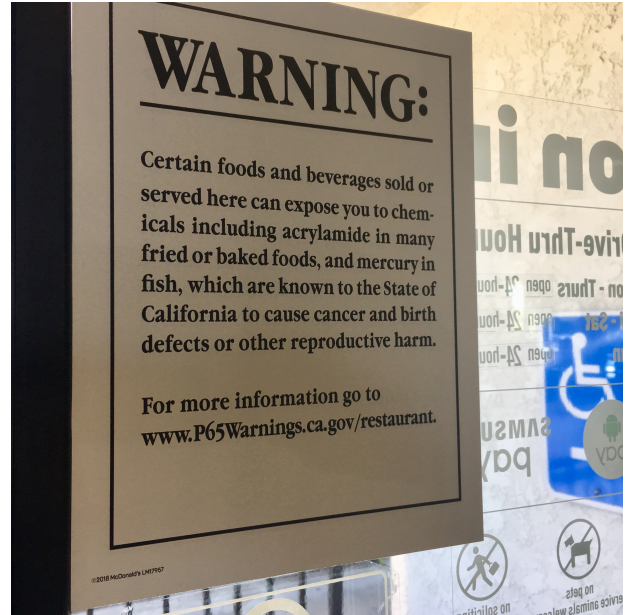
Early Warning Product/Service – Communicating the State of Life Supporting Elements As Is…

The sources we rely upon for our water do not provide us with pure water (H20). There are generally other compounds — both natural and manmade — in our water. Benign compounds include minerals and gases. Less benign compounds include pesticides and other toxins. The specific compounds present depend on the source, processing, storage, and transportation of a particular supply of water. That is, the various infrastructures used to process and deliver water can alter the quality of that water.

Some government entities require water suppliers to inform customers of the presence of certain substances. Examples include The Safe Drinking Water and Toxic Enforcement Act of 1986 in the State of California, the federal Guidelines for Canadian Drinking Water Quality in Canada, and the European Drinking Water Directive in Europe.

When water supplies are found to contain toxic substances by recognized laboratory processes, it is imperative that such information be communicated to consumers.

Our solution helps to integrate and report information on water quality provided by public and private third-party data sources. Our solution utilizes biotech information, data engineering, and Silicon Valley technologies.

Eddie Leung   www.securedenviron.com   415.310.6929

Applications

Changes in water quality are often due to changes in the balance between natural and manmade forces. Either type of force may concentrate or dilute pollutants that eventually end up in lakes or oceans. For example, unintended pollutant byproducts are often created during the process of controlling natural events – such as wildfires – or manmade events – such as unplanned, industrial releases of material. Polluted runoffs released while fighting wildfires or cooling nuclear reactors impact water quality in nearby waterways. Local residents affected by changes in water quality often turn to experts to interpret water quality information and provide assurances of safety. Our solution helps businesses and property owners openly and transparently communicate the information consumers need to know about water quality.

1. Wildfire retardant/water data: Our solution provides real-time water quality information about major tributaries on a digital platform that enables all stakeholders to better evaluate emergency and remedial actions.
2. Stored water data: Our solution provides continual, real-time information available to all, enabling open and transparent decision-making.
3. Water data: Silicon Valley companies have built new facilities situated on or near remediated sites. A continual, real-time monitoring program will help inform nearby residential and industrial inhabitants of any water quality impacts.

Eddie Leung   www.securedenviron.com   415.310.6929