

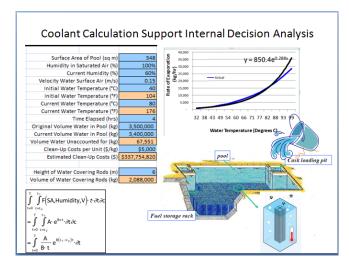
## **Emergency Preparedness Algorithm**

## What if we all could be emergency responders?

With so many complicated issues facing natural-event-triggered disasters – such as the challenges of saving lives, protecting assets, and/or containing pollutants – simply having emergency responders present may not be the answer. Rather, *enabling emergency responders to understand the big picture might make the difference between company bankruptcy and survival*. Secured Environment provides clients with just such a tool, an innovative emergency management approach that allows all emergency responders to better understand the big picture as it emerges.

First responders all too often undertake short-terms actions that end up exacerbating the long term consequences of the situation, due to their insufficient awareness about what to do in emergency situations.

For example, responders in the 2011 Japanese nuclear disaster decided to douse the reactors in seawater in an attempt to cool the reactor cores. However, in so doing, they ended up



both creating radioactive steam, as well as contaminating the runoff. As a result, this response action might end up causing significant environmental damage for years to come, including contamination of local water supplies, crops, and marine life.

Take another example from the same nuclear reactor disaster. Automobile, electronics, and other key parts manufacturers in the area of the nuclear reactors might have shut down production in anticipation that their parts may have become contaminated with radiation. If they did, then there will be repercussions (e.g., shortages of parts) that ripple through the entire global supply chain. If, on the other hand, they continued production, then there might come a time in the future when the shipped parts are determined to be contaminated. This situation will have different supply chain effects (e.g., parts recalls, contamination of whole inventories).

In either of these two examples, did the emergency responders anticipate the consequences? Perhaps. But if not, then had they known before-hand, they very well might have chosen alternative actions with less dire long term consequences.

Secured Environment offers clients unparalleled senior leadership and domain expertise in better understanding the costs of preparing for and responding to emergencies, such as earthquakes. Our emergency response assessments are tailored to each client's situation by incorporating regional conditions, supply chain management data, and private company data (which clients may choose to be entered only by authorized personnel). Also, unlike standard emergency response assessments, our algorithms enable the client's emergency response management to understand the socio-economic ramifications associated with various catastrophic conditions. Thus, our algorithms become unique assets to clients, providing them with the information-based decision tool that will afford them the ability to determine the optimal preparedness (valuation) and/or emergency response (financial liability) to earthquakes in California.



Eddie Leung, Principal Consultant specializes in risk prevention options analysis. He is a former environmental strategist with GE Nuclear Energy and a three-time recipient of the GE General Manager Award for creative solutions and contributions in emergency preparedness and risk avoidance.



Dr. Ruth Fisher, Economist, develops economic models to measure and value pollutant emissions and releases under different circumstances, including sudden releases of biological, chemical and radioactive materials, together with their impacts on global supply chains.

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