

## **Ailment: Radioactive Fallout Cure: Blue Goop**

Carting away large chunks of radioactive waste from a disaster area like Japan's Fukushima Daiichi nuclear plant is bad enough. But disposing of radioactive fallout that clings to walls, seeps into crevices, and coats rescue vehicles is an altogether more vexing problem.

You can wash off the contamination with soap and water—the traditional method—but that creates sizable reservoirs of radioactive runoff, which in turn has to be trapped, treated, and stored away for centuries.

CBI Polymers, a Hawaii-based manufacturer of decontamination products, has developed another option called DeconGel, which can be sprayed, troweled, or painted onto any surface. The blue liquid (which is 95 percent water and 5 percent proprietary chemicals) oozes into microscopic pores and bonds with loose material. When it hardens, it shrinks by about 20 percent, sucking up fine radioactive particles and encapsulating them in its folds.

“Our gel helps regain control of the radioactive material and produces 90 percent less waste than water,” claims Shaun McCabe, president of Asia-Pacific systems for CBI Polymers, which recently donated 100 five-gallon pails of its cleaner to the Fukushima cleanup effort and hopes to sell hundreds more there. “You can either compact that waste and dispose of it in a landfill, incinerate it and reduce its volume to ash residue, or dissolve the gel in water and then treat the water.”

Scientists working for CBI's parent company, Skai Ventures, originally had their eye on an entirely different product when they discovered the sticky gel. While researching corneal implants, a careless lab tech accidentally dribbled an experimental compound on the floor. After it dried, workers peeled it off and discovered the floor was cleaner than they had ever seen it before. Amazed at the compound's cleaning abilities, they pursued the science. CBI has since enhanced the compound with chelants, additives that bind to lead dust, radioisotopes, and other hazardous materials. The company now markets the product for everything from crime-scene cleanup to decontamination of meth labs and Department of Defense sites.

—Adam Piore

