

# A Carbon Storage Leak? Not So Fast, Experts Caution

John Collins Rudolf, *New York Times*, 1-22-11

Has the world's largest carbon-capture project sprung a leak?

That was the explosive charge leveled this month by Jane and Cameron Kerr, a Canadian couple who live near the Weyburn oil field in Saskatchewan, where since 2000 nearly 16 million metric tons of compressed carbon dioxide have been pumped into a reservoir deep underground for permanent storage.

At a news conference, the couple revealed a report by a geological consulting firm that appeared to conclusively link elevated levels of carbon dioxide on their property to gas from the reservoir.

Addressing the Canadian news media, they described a pond on their property "fizzing like soda pop," mysterious late-night explosions and the discovery of dead animals that appeared to be asphyxiated. They declared that they had abandoned the property out of fear for their health.

News outlets and blogs quickly speculated on whether the problems on the Kerrs' farm might mean something more: that the entire prospect of storing carbon dioxide underground — considered by many scientists and policy makers as a potential solution to corralling the leading gas emissions that contribute to global warming — was unworkable.

"What started as a series of worrisome problems on a rural Saskatchewan property has now raised serious questions about the safety of carbon sequestration and storage, a technology that has drawn billions in spending from governments and industry, which have promoted it as a salve to Canada's growth in greenhouse-gas emissions," an article in *The Globe and Mail* newspaper declared.

Not so fast, some top geologists say.

Sally Benson, a geologist at Stanford University, described the report, by Paul Lafleur, president of Petro-Find Geochem, a Saskatoon-based geological consulting firm, as far from comprehensive and said that other causes unconnected to the Weyburn project could be the source of the Kerrs' problems.

"It's a very short report and it's a very complex issue," Dr. Benson said.

Susan D. Hovorka, a geologist at the University of Texas at Austin, went further, saying that Mr. Fleur's declarations that a firm link had been found between carbon dioxide on the Kerrs' property and the storage project were "misleading."

"He may be certain, but he's wrong about his certainty," Dr. Hovorka said. "His confidence is not justified by the data."

The Petroleum Research Technology Center, a Saskatchewan-based research group overseeing the Weyburn project, has also issued a report strongly rebutting the consultant's report.

Scientists also questioned the conclusion that the type of leakage allegedly occurring on the Kerrs' property — even if it were confirmed — undermined the case for carbon capture and storage as a climate-change solution.

“That’s ridiculous — people have been saying from the beginning that there are things that could go wrong of this nature,” Dr. Benson said. “This is nothing radically out of the range of expectations.”

“Does this mean that carbon dioxide storage projects will leak back enough carbon into the atmosphere that they would cease to be effective? Absolutely not,” she added.

An independent investigation of the Kerr property has already been proposed by IPAC-CO<sub>2</sub>, a carbon-storage research institute, and both Cenovus and a lawyer for the Kerr family have signaled their approval.

“It certainly warrants looking into,” Dr. Benson said. “If there’s damage occurring, a remedy should be made.”