

DEQ says flawed formula hasn't resulted in pollution

By DUSTIN BLEIZEFFER
Star-Tribune energy reporter

Monday, April 20, 2009 11:16 PM MDT

The Wyoming Department of Environmental Quality apparently issued several water discharge permits to coal-bed methane producers based on a flawed formula and bogus science, according to soil scientists at the University of Wyoming and from New Mexico.

Now a Wyoming landowners group is asking DEQ to recall those permits and adjust pollution limits to protect agricultural production in the Powder River Basin.

The Powder River Basin Resource Council has also asked the U.S. Environmental Protection Agency to make sure, this time, the science is applied correctly.

"We are requesting EPA's immediate oversight of this critical issue, in the hope that we can stop the destruction of our soils and vegetation and bring Wyoming's regulatory regime into compliance with the Clean Water Act," PRBRC Chairman Robert LeResche said in a letter to EPA's Region 8 office in Denver.

Wyoming DEQ has primacy concerning the Clean Water Act, which means it -- not EPA -- is responsible for enforcing the federal law in Wyoming.

DEQ officials said this week that ongoing monitoring has shown the miscalculations have not resulted in any pollution of soil.

"Any of those permits that show discharges where water quality exceeds the new formula, then we will go ahead and take a hard look at those permits and determine if corrective action is needed," said DEQ Water Quality Division administrator John Wagner.

Since 2005 DEQ's governing body, the Wyoming Environmental Quality Council, has wrestled with the "agricultural use protection" rule-making. It's an attempt to establish a clear policy about how the agency determines pollution limits in permits for water discharges -- a mainstay of the coal-bed methane industry.

In order to produce methane gas from coal, the industry pumps nearly 2 million barrels of water per day from coal aquifers and dumps it on the surface. The concern is whether the coal-bed methane water will load soil with sodium, which can inhibit crop and herd production.

In gathering evidence and testimony in the council's rule-making process, it was discovered that DEQ had based salinity pollution limits on a miscalculation. In addition, DEQ's "Tier II" soil sampling method of determining background water quality was proven to be scientifically flawed.

"They (DEQ) could be more sophisticated in their evaluation of science. They want to think this is simple, and it is not," said Larry C. Munn, professor of renewable resources at the University of Wyoming.

Munn and other UW scientists alerted the council to the flawed science in testimony last year. The council then hired soil consultants Bruce Buchanan and Jan M.H. Hendrickx of New Mexico to study DEQ's scientific rationale. In a preliminary report earlier this month, Buchanan and Hendrickx gave the same assessment.

"There seems to be a lack of intention to monitor these systems -- that Wyoming can set limits in a permit and walk away and the system will work," Buchanan said in a teleconference with council members on April 9.

DEQ Director John Corra said it's unlikely his agency will have to recall any of the permits based on the flawed science. The water discharges are being monitored, he said, and pollution limits in the permits can be adjusted at any time.

Corra estimated about 12 permits were issued using the flawed science. Others estimate the actual number is much higher.

"So since December 2008 we've been using a correct formula," Corra said. "Prior to that -- the incorrect formula -- we are keeping track of those permits."

Buchanan and Hendrickx suggested that the council's proposed "Tier II" rule would require much more monitoring and

soil sampling to be effective. They said with proper monitoring and sampling, the basic Tier II model is a good approach to safeguarding agricultural production while still discharging coal-bed methane water on Wyoming's landscape.

Munn said he hopes the council takes the advice of Buchanan and Hendrickx.

"It is interesting to me that we'd been giving them (state regulators) advice for free," Munn said in a phone interview. "We'd like to try to help them. I'd like to see DEQ have such good science that they never lose a court case."

The council still awaits Buchanan and Hendrickx's written report.

Contact energy reporter Dustin Bleizeffer at 307-577-6069 or dustin.bleizeffer@trib.com. Check out Dustin's blog at tribtown.trib.com/DustinBleizeffer/blog.