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BISMARCK, N.D. -- A pipeline that ruptured and spilled more than 900,000 gallons of salt water into a creek in rural northwestern North Dakota did not have equipment that is normally present to detect leaks, a state regulator says.

Lynn Helms, director of the state Industrial Commission's oil and gas division, said the 4-inch Zenergy Inc. pipeline spilled about 22,000 barrels of salt water, which equals about 924,000 gallons.

The water is about 20 times more saline than seawater, and can kill vegetation, make land sterile and hurt livestock, Helms said. Salt water is a normal waste product of oil production, and is typically disposed of by pumping it into deep disposal wells.

Normally, such pipelines have switches that sense a pressure drop and stop the water flow, along with meters to measure the flow at both ends of the pipeline. The pipeline had a meter at only one end, and "the pressure-sensing equipment wasn't there," Helms said.

"They did not have adequate monitoring equipment on this line," Helms told the state Industrial Commission.

The Industrial Commission has no rules to require such equipment, but new regulations may be necessary, Helms said. Some oil production areas are located near the Heart and Souris rivers, he said.

The commission, which regulates oil and gas production in North Dakota, includes Agriculture Commissioner Roger Johnson, Attorney General Wayne Stenehjem and Gov. John Hoeven.

"We'd better look at our requirements, and do an evaluation out there in the field," Hoeven said. Johnson said an emergency rule may be needed.

A spokesman for the pipeline's owner, Zenergy Inc. of Tulsa, Okla., could not be reached for comment.

Zenergy has hired an environmental consultant, Buys & Associates Inc., of Littleton, Colo., to prepare a remediation plan. A spokesman there referred questions to Zenergy.

Zenergy operates just over 100 wells in western North Dakota, and ranks among the state's 10 most-active oil companies. Helms said the saltwater disposal system was less than a year old, and that the underground pipe fractured because of faulty welding.

Most of the water from the pipeline break flowed into an empty livestock watering pond, near Alexander in McKenzie County. It has been pumped out, Helms said. However, about 168,000 gallons overflowed, going over a beaver dam and into Charbonneau Creek, he said.

The accident caused a fish kill, although officials could not estimate how

many died.

Workers dug ditches across a drainage area, and across a creek crossing to stop its water flow. "We've stopped the bleeding, but we do have a salt-water plume that's moving down Charbonneau Creek," Helms said.

David Glatt, the state Health Department's environmental chief, said salt-contaminated soil will have to be replaced, and significant repair work done. The stretch of creek is being monitored, he said.

Charbonneau Creek is fed by springs and is currently flowing. It empties into the Yellowstone River, and Glatt said the springs are helping to dilute the salt water, making it less hazardous.

Roger Johnson said high oil prices have caused a rush to produce.

"You've always got the danger, when you've got markets the way they are, for people to take shortcuts to bring stuff on line as quickly as possible," Johnson said. "That's when you have to be more attentive, I think, as a regulator."