

News Release

Contact: Aaron Sadler, Director's Office
Telephone 501-682-2287 Fax 501-682-0880

For release: April 20, 2009
E-mail sadlera@adeq.state.ar.us

ADEQ RELEASES LANDFARM STUDY REPORT

A study conducted by the Arkansas Department of Environmental Quality (ADEQ) found that fluids used in natural gas production have been improperly applied by landfarms operating in the state, thus endangering the environment.

The study findings were released in a report Monday. The report indicated that existing practices had, in many cases, caused environmental harm. Particularly, all 11 sites that land applied fluids at some point had improperly discharged the fluids so as to cause runoff into the waters of the state. Also, chloride concentrations in soil used for land application were abnormally high.

ADEQ Director Teresa Marks ordered the department's study in November 2008 because of repeated permit violations at some of the sites. At that time, Marks also halted consideration of any new landfarm permit applications until the study was completed.

"With the increase in the number of landfarms and applications for landfarms due to expanded drilling activity in the state, concerns about the resulting environmental impact warranted a closer look at these operations," Marks said.

ADEQ has taken enforcement actions against all 11 landfarms studied and has sought to revoke permits at two of the sites. Additional enforcement actions are pending and other revocations could be forthcoming.

The study supports changes to all existing or new landfarm permits. The changes include requirements that routine soil and water sampling be conducted at specified locations in the presence of an ADEQ inspector and that fencing be erected around all on-site ponds.

“The results of the study have caused us to put additional measures in place to ensure that these facilities are complying with the terms of their permits and are not causing harm to the soils and waters of the state,” Marks said. “We recognize that there is a waste stream created by the drilling practices that must be dealt with, but we want to make sure it is dealt with in a way that will not cause harm to the environment.”

Scientists in ADEQ’s environmental preservation and water divisions prepared the report. ADEQ employees visited the 11 landfarms between November and January.

On many site visits, the department discovered downstream concentrations of chlorides and total dissolved solids that were higher than those taken upstream.

While landfarm permits prohibit land application of any fluid with chloride levels higher than 3,000 milligrams-per-liter, four facilities held fluids with levels over the permitted maximum.

Soil at eight of the sites contained chloride amounts that exceeded permitted limitations.

The study found that the high chloride content at some sites might irrevocably damage the soils there.

In addition, the study found at nine sites concentrations of total petroleum hydrocarbons (TPH) in amounts that suggested that application of oil-based drilling fluids had taken place. ADEQ permits strictly prohibit such application.

The full report is available on the department’s Web site, www.adeg.state.ar.us. A link to the report is located in the “Hot Topics” section on ADEQ’s home page.