

# Seismic testing leaseholder worries about live explosives left idle in holes

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SPRINGHILL TWP. — When Gerald Medved signed a lease to allow seismic testing on his property, he thought the process would be over in a matter of days.

He was wrong.

Medved, of Springhill Township, Fayette County, said he signed a permit with the Texas-based Cougar Land Services, a contractor for the Texas-based Geokinetics Inc., to allow seismic testing using “shot holes” to be conducted on his 119-acre farm. The seismic testing is part of a 341-square mile 3-D mapping project in Fayette and Greene counties.

“About a year ago, I was approached by an agent from Cougar Land Services,” Medved said. “He was (doing) a seismic reading. I asked him what (that) was. He said that they were going to come in with a small drill and drill a series of holes. They would drill the hole, put in about 3 pounds of explosives, discharge it and move on to the next hole, (which were drilled) in a straight line on our farm.”

These shot holes are usually shafts 30 feet deep and 3 to 4 inches in diameter. Explosives, usually Pentolite, are placed at the bottom of the hole, then covered with gravel or dirt. Then a small charge is set off, which then sends vibrations under the surface, which bounce off the rock layers and travel back upward.

These vibrations are then measured by a receiver and are used to create a map of subterranean rock layers. This information then can be sold to oil and gas companies to help them determine where is best to drill. Pennsylvania Department of Environmental Protection officials confirmed that the company is using Pentolite in the bottom of their 30-foot deep shot holes.

Medved said he was told the seismic testing process would only take days.

“In two days they would be out here,” he said. “That’s what it would take them, about two days if they didn’t run into any troubles.”

So Medved signed.

But two weeks ago, he said, some workers from Cougar came to his farm, drilled a series of holes, packed them with explosives, buried them — then left. Now Cougar officials are telling him it could be anywhere from one to three months before these charges are actually set off, he said.

“I have 10 grandchildren that play on this farm,” he said. “They are all over the place. And they’re going to leave these holes live? If they would have told me that when I signed up I never would have let them. If I have my grandchildren out there playing and they’re around a hole, that’s like a booby trap or a roadside bomb.”

But officials from Geokinetics said Friday that the process isn’t dangerous.

“They’re safe,” said Keith McKay of Geokinetics Inc. and manager of the project of the shot holes. “There’s nothing for (residents) to worry about.”

Accidental detonation can’t happen, he said.

“It takes a special set of electronics to set that charge off,” McKay said. “It can’t just be set off. First off, it’s buried. You would actually have to dig it up to get to it. There’s nothing on top of the ground for anyone to see or mess with.

“Then, when they are detonating it, they have to be dug up, and when they are dug up, it takes a special set of electronics to detonate it,” he continued. “Even if someone did dig it up, they wouldn’t have (the electronics) to detonate it.”

He also said the company is following DEP protocol.

“Everything we’re doing is in line with the DEP,” he said. “We’re doing everything correctly and there’s no danger with these charges.”

DEP spokesman John Poister said that Cougar — and companies like it — have 120 days from the time they pack a hole with explosives until it must be discharged.

Poister did say DEP requires that live holes be monitored.

“Under DEP regulations, the permittee must have a roving guard who checks the holes hourly,” he said. “This is satisfactory to us — because the charges are placed 20 to 30 feet underground and would have to be removed by a backhoe or other large machine. It’s not something that a person with a shovel can just dig up.”

Companies also must obtain a blasting permit from DEP to conduct this method of seismic testing, which Cougar did last May, he said.

Neither Cougar or Geokinetics have seismic testing-related citations in the state, Poister said.

As for Medved, in addition to worrying about his own farm, he now worries about his neighbors not knowing the shot holes could be live.

“There must be holes out there like raindrops all over the place, probably thousands, maybe hundreds of thousands,” he said. “And these holes are all live.”

Workers from Geokinetics will begin detonating the charges in mid-April and the project should take about five months, McKay said.