

OKLAHOMA DEPARTMENT OF AGRICULTURE, FOOD, AND FORESTRY

2800 N. LINCOLN BLVD., OKLAHOMA CITY, OK 73105

November 7, 2008

MACHINE HELPS SPOT SOIL AND GROUND WATER CONTAMINATION

For More Information Contact: Jack Carson (405) 522-4575

Oklahoma City—Inspectors with the Oklahoma Department of Agriculture, Food, and Forestry have a new tool that can give them a worm’s eye view of what lies beneath the soil’s surface. They expect this new technology will be able to locate contaminants from agricultural operations or storage sites and provide information to help clean up the area afterwards.

The machine is called a Geoprobe and it is capable of not only providing soil samples from up to 60 feet deep, it also keeps the soil profile intact. ODAFF hydrologist, Dr. G.A. “Jim” Shirazi, said the soil profile it provides enhances the ability to determine how to prevent groundwater from being affected if a contaminant is found.

“The soil profile provided by the Geoprobe can help us to build a computer profile of water movement in the area,” he said. “By knowing the exact composition of the soil we are much better equipped to form a solution to prevent further spread of any contamination and form a plan for remediation.”

Temporary monitoring wells can also be created by the machine and it can be used to take groundwater samples as well.

The \$50,000 machine drives probes into the ground with percussive force—think of a jack-hammer driving a steel tube into the ground—in minutes as compared to hours for manual soil sampling methods. Kenny Naylor, ODAFF fertilizer supervisor, said in the past a team of two inspectors might be able to take three soil samples in a day using a hand-powered auger.

“With the Geoprobe we can take that many samples in an hour,” he said. “This isn’t just more cost-effective, it’s going to allow us to take more samples and will mean even better detection of contaminants.”

State Secretary of Agriculture, Terry Peach, said the agriculture department was thrilled to be able to purchase the Geoprobe to enhance his agency’s environmental regulatory work.

“This is the newest example of our commitment to protecting our state’s resources and monitoring our agricultural industry,” he said. “We are always looking for ways to increase our ability to monitor soil and groundwater health and take any actions needed if we find anything amiss.”

Naylor and three other ODAFF inspectors have become licensed to operate the new machine. It will be shared by two divisions of the state agriculture department: Agricultural Environmental Management Services and Consumer Protection Services.

#####

