



File Code: 1950/2860

Date:

Dear Friends of the Ozark-St. Francis National Forests:

I am considering authorizing SEECO, Inc. to conduct subsurface geophysical exploration on the Big Piney Ranger District, Ozark-St. Francis National Forest. This proposed exploration project, known as the ***Ozark 3D Project***, would consist of seismic lines spaced 800 feet apart over 89,700 acres. The proposed lines for this project are located in the Arkansas counties of Conway, Pope, and Van Buren. The legal descriptions of the line locations are as follows: T9N R16W sections 5-8, T9N R17W sections 1-12, T9N R18W sections 1-4 & 9-12, T10N R16W sections 5-8, 17-20 & 29-32, T10N R17W sections 1-36, T10N R18W sections 1-28 & 33-36, T10N R19W sections 1-4, 9-16 & 21-24, T11N R16W sections 30-32, T11N R17W sections 19-20 & 25-36, T11N R18W sections 31-34, T11N R19W sections 33-36.

The 3D subsurface geophysical exploration activities proposed for the ***Ozark 3D Project*** in the Notice of Intent (NOI) are as follows:

- 1) Survey crews would lay out the exploration lines including shot hole sites and receiver points. This survey operation would use hand tools to trim a path through the understory vegetation in order to facilitate line-of-sight survey instruments.
- 2) Small vibrator units would be used on existing roads and open areas along with accelerated weight drop buggies/trucks to minimize impact to the forest. Small buggy-mounted drills and portable drills would be used where there is no road access. The buggies would approach the individual sites via the existing road system and then meander around the larger vegetation until it reaches the shot hole location. They would then drill a 3-inch hole, 20-feet deep, every 311 feet along the exploration lines. After the hole is drilled, a 1.1 lb. explosive charge would be placed at the bottom of the hole and then the hole would be plugged with the dirt and rock produced by the drilling operation. All flagging and other site identifiers would then be removed and the area raked so it would be difficult for anyone to find the shot point. The electronic detonators used are intelligent devices that do not allow the charge to be detonated without using a specially encoded safety approved shooting box. This type of detonator is much more secure than those previously used.
- 3) Seismic crews would then position the seismic recording equipment at the receiver points by hand and, possibly in some cases, by use of an ATV. Geophones and cables would be attached to special sensor boxes which, in turn, are connected to the recording system by way of a rubber-coated cable. Geophones are small electro-mechanical devices that rest on the ground surface and can sense the tiniest of earth vibrations created by the seismic shots. These impulses travel through the connecting geophone lines to the sensor box



where they are amplified and transmitted along the connecting cables to the recording truck. Recording is done by swaths which are approximately eighteen receiver lines spaced 440 feet apart. As a swath is completed, one receiver line on the backside of the swath is dropped and a new receiver line in the front is added creating a new swath.

- 4) Up to five teams of dedicated seismic personnel equipped with special encoded safety approved shooting boxes would be used to detonate seismic sources one at a time spread out at predetermined locations in the swath. An electronic log would be kept for each shot point that is detonated.
- 5) Finally, a cleanup operation would occur following all recording operations. A crew would be sent down all survey lines to pick up any trash, geophones, cables, survey markers, stakes, and other leftover survey/operational materials.
- 6) This project would be done in stages. As soon as a swath of charges is put in place, the drilling crew will move on to the next swath while the receivers are placed and single detonations are set off on the first swath. This project is expected to take approximately one year to complete.

Shot hole locations would be offset to avoid any environmentally sensitive areas. This permit would not authorize access to privately owned property within the project area.

Additional protection measures outlined in the Notice of Intent (NOI) by SEECO are:

- *Protection of any survey monuments in the area;
- *Avoidance of uprooting or cutting of large trees;
- *Avoidance of conflict with recreational users and other members of the general public;
- *No powder magazine will be located on National Forest lands;
- *No source points will be placed within 200 feet of roads designated as: Suitable for Passenger Cars, Moderate Degree of User Comfort, or High Degree of User Comfort;
- *No work would be done in designated Wilderness Areas or on scenic highways;
- *Accountability by Operator for activities of all contractors and subcontractors;
- *Removal of any trash or debris and general clean-up of the project area during and upon completion of the project;
- *Reclamation of any ground disturbance such as the hole locations and any vehicular ruts created will be done during the project as well as a final reclamation at end of project.

All operations would be performed by trained personnel who are experienced in the performance of these tasks in a safe and workmanlike manner. In addition, a qualified supervisor would be on the scene at all times.

If no extraordinary circumstances are identified, this project would be categorically excluded from an environmental assessment or environmental impact statement, 36 CFR 220.6(e)(8). Category (8) is for: *Short-term (1 year or less) mineral, energy, or geophysical investigations and their incidental support activities that may require cross-country travel by vehicles and equipment such as gathering geophysical data using shot hole, vibroseis, or surface charges.*

Comments must be postmarked or received within 14 days beginning the day after publication of this notice in *The Courier* to the following address: Bruce Davenport, Big Piney Ranger District, 12000 SR 27, Hector, AR 72843. Oral or hand-delivered comments must be received within our normal business hours of 8:00 a.m. to 4:30 p.m. Comments may be mailed electronically to our office, in a common digital format, at: comments-southern-ozark-stfrancis-bayou@fs.fed.us.

Additional information or maps may be viewed by contacting Roger Gunter at the district office in Hector, AR phone: 479-284-3150 ext3159.

Sincerely,

BRUCE DAVENPORT
District Ranger