

Ferret
Exploration
Company, Inc.



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OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

Secretary of the Commission
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attn: Docketing and Service Branch

Dear Sirs:

This letter is in response to proposed new regulations governing the use of sealed radioactive sources. The proposed regulations would prohibit the use of radioactive sources in geophysical logging operations where fresh water aquifers are encountered unless these aquifers are isolated by casing the drillhole. These regulations would, at the very least, greatly increase exploration costs and in some cases make exploration programs cost prohibitive.

The mineral industry, especially the coal sector, relies heavily upon the information gained by source logging of exploration boreholes. Most mineral exploration drilling is directed at shallow (less than 1,000') targets and usually penetrates what would be considered fresh water aquifers. The increased costs involved in casing these exploration holes would in effect eliminate the option of using sealed radioactive sources in mineral exploration drilling. Per hole costs would be increased by at least a factor of three times and likely much more. These costs do not include intangibles such as the increased time involved in drilling holes suitable to accept casing or the significant decrease in the quality of the geophysical logs through casing. Many electrical logs cannot be run through casing.

Currently, sealed radioactive sources are used extensively in coal exploration. The logs provide valuable information concerning ash and moisture content, B.T.U. output, density and other information necessary to evaluate the economics of a coal seam. In uranium exploration the logs provide information concerning the density, porosity and permeability of the various units encountered by the drillholes along with information on the character of the ore bearing unit. In fact, this information is provided to the Nuclear Regulatory Commission when applications are filed for the various permits required to mine uranium. The sector that would least feel the impact of these regulations would be the oil and gas industry where setting surface casing is a standard and in most cases a necessary part of the drilling operation.

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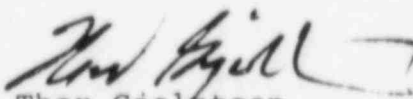
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The sources utilized in most mineral exploration programs are less than 1 Curie alpha, neutron, or gamma emitters where those used in the oil industry are much stronger, generally in the 20 Curie range. Based upon measurements made by Century Geophysical Corporation, an exposed source (in air) of the type used in mineral exploration emits higher than background level radiation out to a distance of about 25 feet. The same source, when in the ground, irradiates a sphere with less than a 4 foot radius. During normal logging operations the use of a radioactive source causes no damage to the environment. The potential for such minor damage could occur if a source were ruptured releasing the small amount of radioactive material. The likelihood of this occurring is extremely remote. Personnel of Ferret Exploration have over 100 years combined experience in mineral exploration and none have been involved with or know of a ruptured source occurrence. The sources are encased in multiple layers of stainless steel. To rupture these casings would require an almost deliberate act such as drilling down on the logging tool with a carbide or diamond tipped drilling bit.

In summary, it is apparent that the effects of these regulations upon the mineral industry were not adequately considered when they were drafted. Further, the regulations are an overreaction. Better and more prudent measures for protecting fresh water aquifers could be developed by a forum of concerned parties including representatives of the mineral industry.

Very truly yours,


Thor Gjølsteen
President

TG:md