

Sour Gas, Set Back Restrictions and Injurious Affection

by John P. Kerkhoven, SR/WA

A Senior Professional Landman with the firm of Amerada Hess Canada, Ltd., John Kerkhoven is a member of IRWA's Prairie Chapter 48. He is also Chairman of the publicity committee for the 39th Annual International Education Seminar, June 20-24, 1993, in Calgary, Alberta.

The province of Alberta, Canada is rich in petroleum and natural gas. One facet of these resources which has somewhat mixed blessings is hydrogen sulphide (H₂S), most commonly referred to as sour gas.

H₂S can exist in either oil or gas and, due to its toxicity, is subject to stringent regulations both in the drilling of the respective wells and the transportation of the oil or gas to processing facilities (i.e., gas plants). The degree of toxicity is determined by a combination of level of H₂S concentration, the volume of gas involved and the pressure under which it could escape to atmosphere in the event of an accidental release. Regulations dictate classification levels (1 through 4) and the precautions required in each case.

Once the oil or gas arrives at the processing facility, the H₂S gas is either removed from the oil or the sulphur and related by-products removed from the gas. At this stage, the products are shipped to market and the precautions noted above are no longer required.

The effects of these classification levels are far reaching in what types of land use are permitted within clearly established limits of the pipeline rights of way. The level designation of the pipeline dictates how far it must be set back from residences, country residential developments, public facilities and urban centers. The flip side to this is how far those same types of developments must be set back from such pipelines once they are in place.

Set-back requirements are as follows:

Level 1 facilities

- 100 meters (330 feet) from occupied residences

Level 2 facilities

- 100 meters from occupied residents
- 500 meters (1,650 feet) from a public facilities (i.e., school, hospital) or urban center (more than 50 homes in a common setting—i.e., cities, towns, villages, etc.)

Level 3 facilities

- 100 meters from occupied residences
- 500 meters from a country residential development (more than eight homes on one quarter section of land)
- 1.5 kms (slightly less than a mile) from a public facilities or urban center

Level 4 facilities

- same set-backs as Level 3

Aside from the obvious problems such factors would have in regards to pipeline route selection, the larger issue is the premise of "injurious affection" whereby the land use is effectively sterilized by way of development restrictions. Whether compensation is payable for the restrictions imposed is a matter of dispute between pipeline operators and landowners and developers.

In cases where the land is agriculturally zoned, the matter of development restrictions is not usually a problem. However, where recreational use, country residential development or urban encroachment is possible, problems are fairly common.

Areas of oil and gas activity which were traditionally agricultural in use and presumed to be "safe" from residential, commercial, and industrial encroachment are becoming more



and more exposed to the problems which can develop due to sterilization of land use. Industry's position on such matters is often predicated on the idea of "grandfathering"—i.e., the facilities were here first and land users/developers must operate on the premise of "buyer beware."

Developers or landowners anticipating the economic benefits of development, are (as can be expected) of a different mind. If no other reason, such as municipal by-laws, can be found to preclude their proposed use of a parcel of land, animosity and possibly litigation can be expected. In situations where land is purchased with development in mind and the set back restrictions are not found to be in existence until later on, it has been suggested that a caveat or restrictive covenant should have been put on the title. The primary opponent of such a measure would presumably be the vendor of the property in question. Acquisition of new rights of way or re-entry of existing rights of way for installation of Level 2 (or higher) pipelines can become a real exercise in the powers of negotiation and diplomacy if and when such issues are either prevalent or anticipated.

Legal precedents on the matter of injurious affection are insufficient to date to establish where exactly the courts stand on the issue. It is reasonable to assume, however, that with the everexpanding urban demands on the rural land base, precedents will begin to accumulate over the next few years. 