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A leading voice for a healthy and environmentally sustainable community

December 10, 2013

To: Goldenkey Oil Inc.
From: Braum Barber, Director, Southern Alberta Group for the Environment
Re: Drilling in Lethbridge Municipality (5-14-8-22 W4M, 16-16-8-22 W4M)

The Southern Alberta Group for the Environment (SAGE) appreciates the efforts Goldenkey has made to inform the residents of Lethbridge about the planned drilling for oil within the municipal limits – the public consultations were well organized and informative. We also appreciate that Goldenkey is making an effort to meet and exceed regulations in an effort to reduce the risk of drilling, completion and production processes, and reduce the impact of surface disturbances (traffic, noise, dust and odours) on residents living near the location of proposed operations.

SAGE has many concerns about the safety of oil & gas operations within the municipal limits of Lethbridge – both to its residents and to the natural environment upon which we depend for our health and wellbeing. Goldenkey has purchased rights to drill for oil near expanding residential areas, recreational facilities, and schools in West Lethbridge. We understand that this area is not scheduled to be developed for a number of years depending on residential growth in the city; however, this does not preclude the potential impact on existing municipal developments.

SAGE also understands that there are existing gas wells in the area currently owned and operated by Bonavista Energy Corporation. Many of these wells were drilled before the land was annexed by the City, and before extensive municipal plans were made to develop West Lethbridge. Oil & gas operators voluntarily agreed to cease further development in the area upon the request of the City of Lethbridge. This was a prudent decision by both the City of Lethbridge and Bonavista Energy Corporation at the time. We have not been informed if Goldenkey was aware of this informal agreement, nor do we know if Goldenkey communicated with the City of Lethbridge prior to purchasing the leases. Nonetheless, it would have been sensible to have discussed these precedents prior to purchasing the resource rights and surface leases.

The proposed Goldenkey Penny Project wells are exploratory which, by definition, means that the company does not know what sort of oil production to expect. We simply cannot understand why a junior oil company would drill a financially risky exploratory well at a risky location near a dense population of people. We also do not understand why Goldenkey would drill on land that is expected to be developed for residences and urban amenities. If the wells are prolific, further exploitation of the field would reduce the likelihood of future municipal development and have a greater impact on current residents (with greater traffic, noise, dust and odours).

In the event that drilling, completion and production of oil wells proceeds in West Lethbridge, there are many concerns that must be addressed:

1. The first is the mitigation of surface disturbances including noise, traffic and dust during drilling, stimulation and production. Goldenkey has said that they meet the requirements of the AER, however, we feel that they should greatly exceed these regulations considering the potential to affect a large population. Avoidance would be best, we believe.
2. Secondly, the transportation of hazardous materials through Lethbridge is of concern: including toxic produced water, produced oil, and chemicals used to sweeten the solution gas. This concern includes the storage of hazardous materials on site, which could exacerbate the impact of, say, serious grassfires (of which there have been two in West Lethbridge over the past number of years).
3. Thirdly, fugitive emissions of sour gas and chemicals pose a safety threat for downwind residential areas. These emissions may originate from leaky packing on a pump jack, the venting of tanks, potential leaks in piping systems, safety valves on compressor systems, and possibly during the replacement of sweetening chemicals. We understand that Goldenkey will be monitoring the area for H₂S and that the company must develop an emergency response plan – unfortunately, any emergency response follows the development of an emergency, an emergency that may have significant impacts on the residents of West Lethbridge. A robust emission monitoring program would be expected, with data made available to the public. Incinerator technologies suitable for high wind applications and designed to adequately incinerate chemicals carried over from separation would also be expected.
4. We are concerned about the risks of contaminating groundwater aquifers and surface water from spills, leaks, and unpredictable communication up the wellbore, via offset wells, or through geological formations induced by the hydraulic fracturing of the formation. Baseline samples of groundwater and air quality would be expected, with a long-term monitoring plan to indicate negative trends due to industrial activity.
5. And, finally, we are concerned that the reclamation/restoration will be inadequate for the purpose of using the land for residential development, parks and schools. We understand that there are financial mechanisms for restoration/reclamation of the sites (such as AER Licensee Liability Rating program, and the orphan well fund), however, we would expect a commitment for reclamation to a higher standard. Recommendations, like the *Recovery Strategies for Industrial Development in Native Prairie*, which seem to exceed the AER directives in outcome, might be considered.

There is clearly a gap in regulatory processes and government oversight that would allow oil exploration to occur within the municipal limits of a city and near dense populations. We understand the Goldenkey is working well within the expectations of AER regulations, and we appreciate that the company does not believe there is significant risk in their operations. Our apprehensions reflect the concerns of any group of people being exposed to (what we consider unnecessary) risk; and we are concerned about the impacts on our environment - the clean air, clean land, and clean water we rely on for our collective wellbeing. The cumulative impacts of industrial and agricultural development in southern Alberta are becoming more evident.

With respect, SAGE believes that the Penny Project is not an appropriate industrial activity within the municipality of Lethbridge. We have asked our MLAs to address the issue of drilling near dense populations, and we hope that Goldenkey will be fairly compensated if the project is declined.

Sincerely,

Braum Barber
SAGE

cc. Mayor Chris Spearman, City of Lethbridge
Hon. Robin Campbell, Minister of Environment and Sustainable Resource Development