



LAND ADVOCATE

News for Canadians living with oil and gas production

Property Theft

A recent study by Alberta's Energy and Utility Board (AEUB) confirms what many landowners have suspected for decades: that oil and gas facilities can seriously devalue rural property. The study, which according to various AEUB officials wasn't supposed to exist, finally saw the light of day last December, 2003 due to persistent badgering and Freedom of Information Requests from scores of assorted landowners throughout the province.

The 61- page market-based statistical analysis looked at property values in the three key central Alberta municipalities: Rocky View (44) Foothills (31) and Mountain View. Compiled by eight contributors from the AEUB, the federal National Energy Board and academia, the study examined three key factors: the price impact of industrial intensity (the number of wells) industrial proximity (the distance of wells from one's property) and the age of the industrial facilities (those's prone to leakage or grand fathered emission requirements.)

The conclusions basically confirmed what landowners have been reporting for years: that having an oil and gas well in the backyard is not always an enriching experience.

For starters intensity of activity definitely has a subtractive impact on neighbors. The total number of sour or sweet wells, flaring batteries, and pipeline EPZs in an area drastically lowers property values. In fact oil activity within 4 kilometres devalued property by 5 to 10% .

The study offers no conclusions on the impacts of wells within 1 to 2-kilometres of a rural residence because it didn't include enough samples within that range. Explain the study's authors: "Thus, to reach a determination, a larger sample of residences within a 2-kilometre radius of oil and gas facilities would have to be examined to determine the true significance of this factor."

Notes Battle Lake area-landowner and rural resident Tim Belec: "The study is definitely incomplete. If land values are being impacted from facilities just four kilometers away what's happening to landowners with multiple pump jacks several hundred metres from their homes?"

The report noted that adding a well to an "undeveloped rural residential environment" might reduce values by 5% but that adding wells to an area already colonized by industry had less of an impact. Concluded the study:

"The overall impact on property value of a typical oil and gas development scenario with a number of wells and associated facilities, might be up to 10 per cent." Or it might be much higher if the study included wells closer to homes than 4 kilometres. (The study also did not include the impact of sour gas set-backs.)

Unlike previous assessments, largely funded by industry, this comprehensive analysis **"did not find that the net financial impact of the facilities has been neutral or even slightly positive; the net financial impact of wells and flaring batteries in some cases was a 10 percent reduction in price."**

Farmers have reported land devaluation as high as 50% by sour gas wells just 500 metres upwind from the principal residence. And in Colorado coal-bed methane projects have devalued property by as much as 30%.

When Belec asked the AEUB Resource Branch manager Call Hill if the board had any intention of doing more studies on the impact of facilities on property values within a kilometre of rural residences, he got this reply: "The study is available to the AEUB and the public to use at their discretion. However at this time there is no intention to extend the study into other regions."

--Andrew Nikiforuk, Editor

Source: **Impact Of Oil and Gas Activity On Rural Residential Property Values** December 16, 2003 can be obtained by contacting the AEUB at 403-297-8311. Landowners can also contact Call Hill and request further studies land devaluation.

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Our Board:

Don Bester: Butte Action Committee
Gwen Johansson: Hudson's Hope Landowners
Perry Nelson: Alberta Surface Rights Federation
David Schindler: University of Alberta



Not In My Back Yard!

Just about every landowner who has challenged an oil and gas development has been called a NIMBY by government or industry. The term has an ugly connotation: vile Luddite, progress stopper, irrational idiot, stubborn fool Well, the list is endless.

Yet interesting economic research by William Fischel at Dartmouth College in New Hampshire vindicates the NIMBY landowner and says that NIMBYism is actually "a rational response to the uninsured risks of home ownership."

Consider Fischel's economic argument:

- 1.) The vast majority of landowners do not have any savings in anything other than homes and land.
- 2.) Living on the land for a long time creates a personal attachment. Changes in the neighborhood (sour gas wells, pipelines, hog factories, monster recreational projects) are naturally upsetting and value destroying. As Fischel adds "the well-known but often ignored "offer/ask" disparity in economics indicates that people who are already in possession of something need to be paid a great deal more when asked to give it up than those same people would offer to pay for the same entitlement if they did not currently possess it." In short you ask more to give up something you own than you offer to obtain something you don't have.
- 3.) Economists have shown that land values and home values can be directly affected by health hazards, congestion, school quality, crime rates, air pollution and open space.
- 4.) So NIMBYism makes perfectly good sense and is a good thing because "there isn't any way to insure against neighborhood or community-wide decline.....Without neighborhood opposition, some projects that devalue their community and neighborhood would get passed."
- 5.) Who ever thought economists could be so thoughtful?--**Andrew Nikiforuk**

Source: "Why Are There NIMBYs?" by William Fischel in the journal Land Economics, 2001. Bill.fischel@dartmouth or 603-646-2940



Special BSE Report:

What the Federal Government Failed to Tell Cow-Calf Operators in 2000

Four years ago the federal government hired Ontario toxicologist Joan Orr to complete a \$200,000 "Risk Assessment of Transmissible Spongiform Encephalopathies in Canada" for Health Canada. The report was never released. Anthea Archer, a dairy farmer in British Columbia, obtained a copy of the 2,000 page report through Freedom of Information and shared it with the Advocate. Here are some key findings and excerpts: critical information the Liberal government should have been shared with producers four years ago:

"Bovine Spongiform Encephalopathy (BSE) could be incubating in Canadian cows and other livestock, but hasn't resulted in clinical signs because the incubation period is longer than the life span of most cows. The conclusion is based on the following:

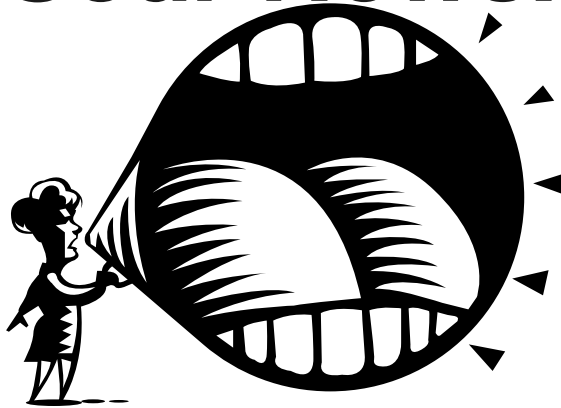
- Livestock and feed potentially infected with the BSE agent were imported from the UK and thus Canadian animals could be exposed to the BSE agent. Cannibalistic feeding practices were used in cattle until 1997 and amplification of the agent could have occurred.
- Feed and feed ingredients potentially infected with BSE continue to be imported from BSE countries other than the UK....
- Animal feed containing bovine blood, tallow and gelatin are exempt from import restrictions and could represent a source of BSE infection from other countries....
- Animal feed containing cattle and sheep derived Meat and Bone Meal and other materials continues to be fed to pigs and poultry in Canada and elsewhere (except the UK). Pig and poultry derived materials can be included in pig and poultry feed representing a direct pathway through which the BSE agent could be recycled and amplified within these species. Feed containing pig products is fed to cattle, representing an indirect recycling pathway for the BSE agent.
- Variant Creutzfeldt-Jakob disease (vCJD) could be incubating in the Canadian population....
- The possibility that a TSE risk exists in Canada must be acknowledged."

Was it? Demand that your MP provide you with a copy.

Economics is extremely useful as a form of employment for economists.

-- John Kenneth Galbraith

Sour News!



China's Sour Gas Disaster

On December 23rd a sour gas well blew-out in southwest China. The incident gives landowners in Western Canada, where 30% of all natural gas contains hydrogen sulfide, a harrowing portrait of what an H₂S accident may look like in a heavily populated community.

The blow-out occurred in the village of Gao Qiao as a crew with China's National Petroleum Company withdrew the drill string from a 400 metre deep well. Few if any safety protocols were being observed. The gas was diverted to a flare pit but no worker ignited the gas for nearly 23 hours. (Ignition turns the toxic gas into a less lethal substance: sulfur dioxide.) As a result the accident sent a cloud of hydrogen sulfide 30 meters into the air.

The explosion occurred at night in a mountainous region with limited road access while most people were sleeping. The temperature was near freezing. People heard a loud roar, followed by panic and death.

A black mist of hissing gas descended on villages killing people in their homes. The gas clung to the ground. It suffocated the living by choking them, burning their eyes and skin. Bodies were later found by the roadside, in fields, in cars and in valleys, on mountain paths. The gas killed chickens, horses and pigs as well. All in all the toxic cloud turned a 25 square kilometre area into "death zone."

One courageous merchant saved 400 people by piling local residents into his truck and making as many as 20 trips out of the "death zone."

The blow-out killed 243 people (most were children or the elderly) and injured another 9,000 with burnt eyes and damaged lungs. There is no estimate on how many farmers will suffer from permanent neurological damage. Approximately 64,000 people temporarily abandoned the area.

Six members of the drilling crew have been arrested and jailed. CNPC, China's largest and richest state owned corporation, has been charged with negligence. Prosecutors investigating the disaster say local and national officials have done little or nothing to prepare for such disasters.

In 1982 an Amoco sour gas well blew out in northern Alberta killing two workers. Fumes from the poisonous

well killed hundreds of cattle and sickened thousands of people downwind for 67 days.

Words of the Survivors

"If you were higher up on the mountain, then it was disaster because there was no place to run up there."

"Some people thought that they could just close the windows and wait it out, but that was disastrous too. So many people died in their homes." (This is the Calgary strategy if a blow-out were to occur at a Compton well which could affect as many as 250,000 people in the south east end of the city.)

"In this kind of disaster, the township must tell the village and then the village leader must tell the villagers. The result here was that there was no notification at all. It is just chaos. So people died."

Sources: Taipei Times; New York Times, UNEP-APELL

COLD GAS, HOT AIR, AND ENGINEERS

Many oil field workers and farmers with related experience maintain that H₂S from sour gas blow-out events collects in valleys and other low areas. At the same time, some industry types have repeatedly assured the public that sour gas escaping from a sour gas blow-out would go up instead of down, "because sour gas is lighter than air".

Well, sour gas generally is less dense than air when both are at the same temperature and pressure. This is because sour gas generally has a lower molecular weight than air (16 for methane, 34 for H₂S, and about 29 for air). However, when the sour gas is at a very different temperature and/or pressure than the air, the effects of temperature and pressure may dominate. For example, sour gas inside a high-pressure pipeline is obviously much denser than the ambient air outside the pipeline. In fact, the density of a gas is proportional to its absolute temperature (degrees Kelvin) divided by its pressure.

Whenever a high-pressure sour gas pipeline ruptures, or a sour gas well blows out, a plume of very dense sour gas is suddenly released into the air, where it expands rapidly, so that the escaped gas soon approaches atmospheric pressure. The rapid expansion causes rapid cooling, so that the escaped gas becomes very cold and very dense. Soon after emerging from the well or pipeline, the very cold sour gas plume begins to be warmed by mixing with the ambient air. Some of the cold sour gas becomes dispersed into the warm air surrounding the plume, and some of the air becomes incorporated into the plume (air entrainment). Because of this mixing, the plume becomes less cold than it was, and the air immediately surrounding the plume becomes less warm than it was.

The inclusion of increasing amounts of air within the plume (dilution by mixing and air entrainment) also raises the average molecular weight of the plume. Two simultaneous effects result: the temperature of the plume increases until it eventually approaches ambient temperature, and the average molecular weight of the plume increases until it approaches the molecular weight of air. Because these two effects are acting in parallel, the density of the plume will gradually approach the density of the ambient air, but the plume will never be "lighter", or less dense, than the ambient air. More ominous, the density of the plume, and therefore the plume's tendency to settle toward the ground, will be greater while the H₂S concentrations are still high, and less great after the H₂S concentrations have become more diluted.

So where will the sour gas go when a pipeline ruptures

or a well blows out? First, a plume of sour gas will be propelled to a height of a few dozen metres. Second, the plume will settle toward the ground, because it is heavier than air due to its low temperature. Third, on reaching the ground, the plume will flow along the ground. Fourth, if wind speeds are low, the sour gas plume will tend to flow along gullies and stream beds. Fifth, if wind speeds are very low, sour gas from the plume will tend to collect in low areas and depressions in the landscape. This is what happened in China, where the well blow-out killed so many children, and people in low-lying areas. As for the experts who have given assurances that this could not happen "because sour gas is lighter than air", well, they were dead-wrong.

Technical notes: In this discussion, I have relied on basic thermodynamics. For instance, that the density of a gas varies linearly with the molecular weight of the gas is a corollary of Avogadro's Principle. The relationship between density, pressure, and temperature follows from $PV=RT$, the equation of state for an ideal gas. Three factors not discussed are compressibility factors for sour gas mixtures, specific heats of air and sour gas mixtures, and work done on the atmosphere by the sour gas as it expands after emerging from the well or pipeline. These factors were examined, and it was determined that influence of including them would be small, with no material effect on the conclusions.

--By Mitch Bronaugh

Medical Updates:



Sour Gas Fries the Brain

St Luke's Medical Centre in Chicago reported that the long-term effects of occupational exposure to low levels of H₂S are significant. A team of doctors examined four workers exposed to H₂S at a construction site. None of the men had lost consciousness. Although the workers showed no obvious physical injury all met diagnostic criteria for at least three and up to eight H₂S induced neuropsychiatric clinical disorders. **"Our data indicate that exposures to even relatively low concentrations of H₂S are hazardous.** A rigorous epidemiologic investigation of persons who work with H₂S is warranted." In other words workers in the sour gas industry should be monitored for brain damage. Source: Toxicology and Industrial Health: 2002 March, 18(2): 51-61

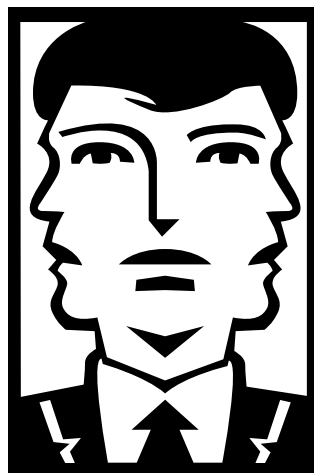
The Keck School of Medicine in Los Angeles examined patients who had been "knocked down" by H₂S and bystanders who had not been knocked down. Both groups suffered similar neurological damage including impaired colour discrimination, verbal recall, hearing, visual performance and reaction time. **Source: Southern Medical Journal, 2003 July, 96 (7): 639-46**
Health Effects of Hydrogen Sulphide

Last year Alberta Environment released a detailed examination of reports and scientific papers published on H₂S over the last decade. Key findings by researchers Dr. Sheldon Roth and Verona Goodwin include the following:

- A few studies suggested but did not confirm that H₂S has carcinogenic potential.
- Studies of workers have shown slight increased risks for cardiovascular disease.
- Research on how H₂S affects the endocrine system is lacking.

"There is evidence that cumulative health effects of repeated low-level H₂S exposure exist, which does not support earlier claims that H₂S is only an acute toxicant due to its rapid metabolism to non-toxic products."

Copies of the report, "Health Effects of Hydrogen Sulphide: Knowledge Gaps," can be obtained by phoning Alberta Environment: 780-944-0313 or env.infocent@gov.ab.ca



Boreal Update: Who's In Charge?

A decade ago there was a growing recognition that our forests were in trouble. Our "sustained yield" approach to forest management, unchanged since the 1950s, was out of synch with current realities and in dire need of an overhaul.

One of the main problems was that the forest lacked an effective manager. Instead, we had departments of energy, forestry, agriculture, and so forth, all managing their respective industries within their respective silos. And all with mandates for growth. The department of the environment, at the bottom of the political totem pole, did not have the mandate or resources to do anything more than document a steady deterioration in wildlife habitat and suggest mitigative measures. An ecological train wreck was in the offing.

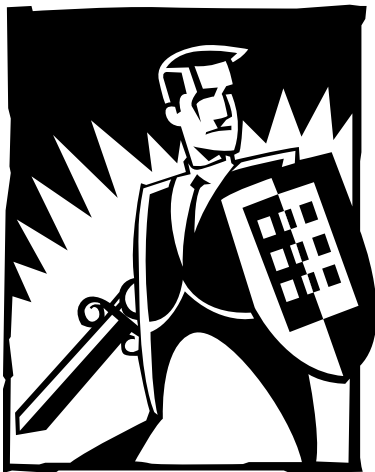
In response to these concerns more than 800 representatives from a broad range of forest interests convened over a three-year period in the mid-1990s to develop the Alberta Forest Conservation Strategy. The Strategy embodies the vision that Albertans hold for their forested lands and presents a blueprint for how that vision can be achieved. At its heart is the concept that forests must be managed as ecosystems and that maintaining the health and integrity of these ecosystems is a prerequisite to maintaining the flow of benefits that we as a society desire. Crafting a workable compromise that balanced ecological and economic objectives proved difficult, but a consensus was eventually achieved and the Alberta Forest Products Association, the Canadian Association of Petroleum Producers, and the Alberta government all signed on.

Fast forward to 2004. The Alberta Forest Conservation Strategy gathers dust on a shelf, promises to update the Forests Act have long since been abandoned, and government departments remain ensconced in their respective silos. Instead of integrated resource planning that recognizes the inherent limits of forest ecosystems, we continue to treat the forest as an industrial “all you can eat” buffet. Some notable examples include:

- No requirement for resource companies operating on the same land base to do joint planning (e.g., leading to duplicate road construction). A framework for managing cumulative industrial impacts is still lacking.
- No requirement for forestry companies to maintain ecosystem integrity (e.g., liquidation of old-growth stands remains standard practice).
- No limits on the rate of cutting by petroleum companies and no requirement for the reforestation of cleared areas. Petroleum companies now clear almost the same area of forest as forestry companies do.
- Protected areas serving as ecological benchmarks are still lacking in many ecoregions and the few remaining areas of intact forest are rapidly disappearing.

As a consequence of our failure to act, the ecological crisis predicted a decade ago is now coming to pass. Caribou herds, a bellwether for the health of the forest, are now in serious decline. Recent studies have shown that the abundance of many forest birds and fish have also declined significantly in townships transformed by cumulative industrial impacts. Fortunately, no species have yet been lost, so the opportunity to act still exists. Moreover, market forces demanding sustainable forest management and protection of endangered forests have now begun to stimulate progress. There is hope that the vision laid out in the Conservation Strategy may yet be achieved.

-- Richard Schneider, Executive Director: CPAWS
Edmonton



Coalbed Methane Update

The Surface/Air Working Group of Alberta's Multi-stakeholder Advisory Committee held its first meeting on March 1 and 2nd at Red Deer Lodge. The group has been charged with identifying key issues and making recommendations to the government by Oct 1, 2004. Jane Pederson of the Pekisko Group provides these observations and notes:

Participants included representatives from government (AEUB, Alberta Energy and Environment and Agriculture, Alberta Resources, Alberta Research Council); industry (energy, forestry, coal and beef) and landowners (RAPID, Alberta Surface Rights and RADCAP)
Ratio of government and Industry to Landowners: 5 to one

Purpose: “CBM development will happen. There will be impacts. The Minister wants this groups' input to help minimize the footprint.” Dave Bartesko, Alberta Energy

Method: We divided into 2 groups –air and surface, each with a facilitator in order to identify key issues; regroup and find common issues and then prioritize.

Some Observations:

- Government and Industry appear to be trying to deal with land and pollution issues in a vacuum-just the way they do business
- They did not intend and/or have the know-how to integrate into the larger context (translation: no land use planning)
- Mandate of meeting was not to put surface/air issues into larger context
- Water issues are being dealt with by another committee at another time –silo approach
- This working group was discouraged from discussing water impacts-even in context of our surface/air discussion eg. Gas migration impacts on surface water

Economic Observations:

- All attendees with the exception of the landowners were paid for the two days as part of their salary. The advisory group from Energy had discussed and decided not to pay the landowners an honorarium for their time. The working group is scheduled to meet for 8 days. There is a real lack of understanding of the true economic issues by government and industry:

1. pushing the risk off to landowner and public in favour of industry
2. putting onus on landowner
3. lack of understanding of economic issues to landowners such as property devaluation, collateral issues, liens, pollution and contamination, lack of monitoring

--Jane Pedersen for the Pekisko Group

CBM Threats

The Alberta Surface Rights Federation has identified the following concerns about coalbed methane based on the US experience:

- It is a new technology with many unknowns.
- It is a land fragmenter: hundreds of thousands of wells must be drilled to access the gas.
- It is a water abuser. It removes great quantities of water and may cause surface ground area to sink.
- It can deplete local aquifers. Widespread water well losses and aquifer draw downs have been predicted by the US Bureau of Land Management in the southwest.
- It is an air and noise polluter thanks to numerous compressor stations.
- Disposal of produced saline water has been a major controversy in Wyoming, Colorado and Montana. In Wyoming alone 43 million barrels of water are being pumped and dumped onto the surface.
- To learn about the US experience log onto:

www.powderriverbasin.com



Important CBM Meetings

Mounting pressure by landowners has forced the Alberta government to hold public meetings to determine if regulatory changes are needed for coal-bed methane development. Due to the destructive and controversial nature of Coalbed Methane (CBM) development in the United States, the Alberta government now refers to CBM as "natural gas in coal." (BC calls it coalbed gas) Don't be fooled. These CBM meetings will take place in March and April 2004 and in communities already affected by one of the 1,000 CBM wells drilled in the province. All sessions will be held from 6:30 p.m. to 9:30 p.m. Bring your concerns!

Rocky Mountain House
March 30, 2004
 Rocky Community Centre
 47 Street, Kamikawa Drive

Wetaskiwin
March 31, 2004
 Memorial Arts Centre
 5003 - 52 Avenue

Stettler
April 1, 2004
 Stettler Community Hall
 5101 - 46 Avenue

Barrhead
April 6, 2004
 Royal Canadian Legion
 5024 - 51 Street

Strathmore
April 7, 2004
 Strathmore Family Centre
 160 Brent Boulevard

Drayton Valley
April 8, 2004
 Drayton Valley Omniplex
 5737 - 45 Avenue

Pincher Creek
April 15, 2004
 Pincher Creek Heritage Inn
 919 Waterton Avenue, Highway #6

CBM FACTS FOR WESTERN CANADA

- More than 1,000 wells with 200 in production
- Majority of wells are located in south-central Alberta
- Most of commercial production in Horseshoe Canyon and Belly River zones does not have associated water production. Mannville and Ardley coals come with saltwater production or freshwater production.
- Expect widespread land fragmentation. Encana is already requesting up to 16 wells per section while Apache is seeking spacing for wells only 250 m apart.

BC Pipeline Polluter Goes to Trial

On August 1, 2000, a pipeline ruptured and spilled one million litres of crude oil (6,000 barrels) into the Pine River approximately 65 km from Chetwynd, BC, in northeast British Columbia. Alberta-based Pembina Pipelines had purchased the pipeline from Federated Pipelines twelve hours prior to the rupture. The Pine River is a tributary of the Peace and is regarded as one of BC's most endangered waterways due to oil and gas activities.

The oil spill clean-up cost Pembina approximately \$26-million. Chetwynd residents down river were forced to find an alternate water supply; farmers and residents along the river had wells threatened; and fish, birds and animals were reported dead and rotting along the river. Debate on the volume of oil released in the river and the amount recovered continues between the company and government officials. Many of the old timers in the area monitor the health of the land and some have suffered anxiety and fears. No report on the impact of the spill has been forthcoming to the residents.

Pembina Pipelines has been charged with violating at least five federal laws under the Fisheries Act and the Migratory Birds Act. The court case starts on April 22 & 23, 2004 at Chetwynd Provincial Court and from May 3 to July 8 in Prince George. Offenses under the Fisheries Act are punishable on Summary Conviction by a fine not exceeding \$300,000 or imprisonment for a term not exceeding six months or both. Offenses under the Migratory Birds Convention Act and Regulations are punishable on Summary Conviction by a fine not exceeding \$100,000 or to imprisonment for a term not exceeding six months or both. Pembina has pleaded not guilty. No media groups have expressed an interest in the court case.

-- Leo Sabulsky in Chetwynd

Personal Notes From Sabulsky: I am the Emergency Coordinator of the area and was at the scene immediately after it was reported. This put me in a bind since a media person should not be so closely involved and should not be both the reporter and the witness. I am surprised that environmental groups did not descend on us and pursue Pembina & track the spill since the volume was so enormous. I guess I am naive since I trusted the environmentalists to pursue the big guys & tell the story - so far, we are footnotes to people like Suzuki.

I am further naive since I was shocked and amazed at the crude which came out of the pipe: the crude is incredibly heavy, dirty, black and brown and breaks into rotting masses as it progresses down the river and reeks of different horrible smells. What an awful sight! What an awful smell. Further, the men and women who trudged about had no respirators and had very archaic tools for cleanup - it was hours before proper booms came in.

As I understand the welding process of pipelines as officials explained it - the rupture was a classic weld break on the top of the pipe. This type of break can happen to older pipelines such as the Pine Pipeline and others which were put into place prior to 1965. An old oil and gas man said, "The only way you can detect this weakness is when there is a rupture." In the case of this spill - a man from the former Federated Pipelines came from Chetwynd and turned off the pipeline since the sensors were going crazy due to a thunderstorm. Did the engineers fail us again?

Reports From the Field

Caroline's Sour Gas Leak

The Alberta Energy and Utility Board (AEUB) will soon hold a hearing on an application by Compton Petroleum to drill six sour gas wells in the south east of Calgary. This project, if it goes ahead, will overtake the Shell Caroline project with respect to the number of people within an Emergency Response Plan. Shell, I am told, have 3000 people on their computer. (Compton might have to have 250,000 in its plan.)

It may interest the residents of Calgary that the AEUB have just released the investigation into the March 12 Caroline incident. No enforcement is being considered. The Board determined that Shell met all minimum requirements with respect to the leak.

Some issues: Shell received two odour notifications at 3:55 a.m. and 3:58 a.m. respectively and 14 kilometers apart. A plant operator was dispatched to inspect Shell's properties. The AEUB or other operating companies with sour gas in the area were not notified of the findings. No other Shell personnel were asked to report for duty. Approximately 30 minutes later at 4:25 a.m. the plant received an H2S alarm from two permanent air monitors.

At 4:26 a.m. the mutual aide call-down was activated and 18 Shell personnel were called to duty. The AEUB were still not notified at this time. Although the investigation report from here on does not set events in time, the AEUB Red Deer office confirms notification was received at approximately 6 a.m.

The Town of Caroline was asked to prepare for evacuation but school buses were still hauling children including kindergarten from uncontaminated areas into town. This, doubled the population of the small village. No one had notified the Wild Rose School Division before buses were enroute. The buses remained in Caroline on standby. Thank goodness!!

The source of the leak was discovered at 8:21 a.m. I was notified 30 minutes earlier or four hours after the first odour report. The Sundre R.C.M.P., to whom I turn for protection, had no notification until 7:19 a.m. Ron Leaf, with the Clearwater County, received notification at 7:21 a.m. No AEUB regulator was at the command center until the leak had been discovered. Mr. Bill Starling, with the AEUB, was enroute to a Sundre SPOG meeting and was diverted to the command center and reports arriving between 8:30 and 8:45 a.m. Seven hundred residents now have two questions; 1. Why did it take so long to find the leak? and 2. Why weren't residents notified earlier?

I hope the people of Calgary will use this information and question the Board on both their and producing companies abilities to handle emergency responses with high concentrations of H2S and large populations of people. Certainly, the March 12 Caroline incident would indicate that the people of Calgary should be concerned.

-- Stewart Shields

Wellhead Skirt

RADCAP was delighted to recently see an article entitled "Preventing pollution cheaper than cleaning it up" in the Rimbey Review. I called Marty Matthews of Adoil Wellhead Skirt to find out if any local companies were using this simple, effective and cheap method of

preventing oil leaking into the ground from well heads. I learned that he had got good response from U.S.-owned companies, in particular, Conoco-Phillips in Eckville. Also Imperial Oil in Rocky Mountain House. Nothing, in the Rimbey area. But our thanks go out to those two companies that are setting the standard that all should follow. Matthews is very disappointed that no Canadian oil company has shown any interest in being pro-active in incorporating the wellhead skirt.

We would like to encourage landowners to insist that this small but vital piece of equipment be part of the wellhead when drawing up an agreement with an oil company intending to drill on their land. The cost is between \$600 and \$700 installed and includes the 20-litre tank, all hoses and clamps. Matthews informed me that some well sites would fill such a tank in a month - that's a lot of oil that would otherwise be saturating the ground. Most wells would take about a year to fill the tank. The dollar figure is negligible for a company to incorporate in their maintenance budget.

For any sharp-eyed oil company employees reading this make a note of Adoil Wellhead Skirt's phone number: 403-242-2201. Let's hear that the Rimbey operators are leading the way in Alberta to a healthier, cleaner and responsible environment!

Sincerely, Betty Harvey for Rimbey and District Clean Air People

Rural Residential Expansion in South Alberta

The Miistakis Institute For the Rockies at the University of Calgary recently released a detailed report on urban sprawl and residential growth in southwestern Alberta along the Highway 2 corridor. Here are some noteworthy excerpts on land consumption:

On Landscape Transformations: The subdivision of farm and ranchland into residential development alters the physical characteristics of the landscape. The increase in buildings, roads, fences and other human made structures is consuming and fragmenting productive land while also contributing to the loss of open space and scenic amenities. Agricultural land consumed by residential development results in the permanent loss of range land.

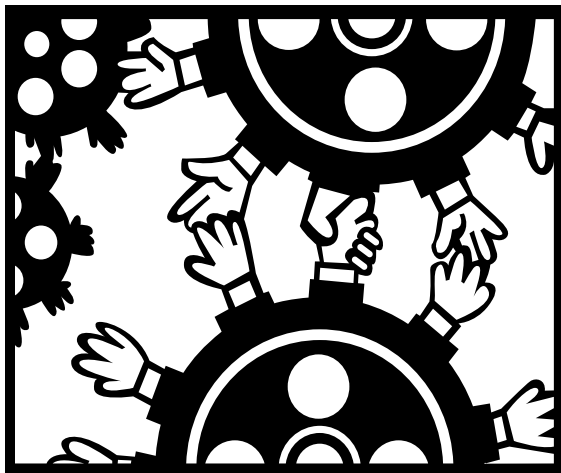
On Wildlife: The new wave of population growth and housing development in the Rocky Mountain West comes with an environmental price tag. The potential impacts of unplanned growth can cause habitat alteration, destruction, fragmentation, the blocking of wildlife movement corridors, and increased interaction between wildlife and humans. Rural residential development can also result in the spread of noxious weeds and exotic species, increase point and non-point source air and water pollution and can cause landscape alterations impeding ecological processes such as water and fire.

On Agriculture: The growth of residential development in Canada's rural landscape is consuming high quality productive land and is threatening the loss and fragmentation of farm and ranchland....In 1998 agriculture contributed \$4.1 billion to Alberta's gross domestic product. Despite the economic importance of agricultural activities, 6.5 million acres of agricultural land was lost to other uses between 1951 and 1986.

The study is available at www.rockies.ca

Board Watch

NEWS FROM THE REGULATORS



Key Flaring Trends:

- Flaring has dropped from 2 billion cubic feet to approximately 1-billion cubic feet since 1999.
- Crude oil and crude bitumen batteries now represent half of all gas flared in Alberta
- Almost as much gas was flared as was vented last year
- The AEUB remains concerned about volume of gas vented (thank God.)
- Flaring from crude bitumen batteries is increasing

Source: AEUB Statistical Series ST 2002-60B

A new AEUB report on sour gas entitled **Nature of Local Benefits to Communities Impacted by Sour Gas Development** was issued on Sept 2003. Here are its key findings:

Sour gas supports 37,000 jobs, generate \$1.3 billion in wages and provides \$1.52 billion in royalties for the province. But only 20% of expenditures remain in local economy

All Albertans benefit but **“those who live near sour gas operations experience costs and are negatively impacted in ways others are not, and suggest that these impacts are not adequately offset by their share of the benefits”**.

The report also notes that the industry dumps 275 tonnes of sulfur a day into the air. **In the year 2000 there were 37 incidents/accidents releasing 827,000 cubic metres of sour gas.** The report makes no mention of 36 deaths; the displacement of more than 100 farmers; the deaths of hundreds of cattle or widespread property devaluation.

National Energy Board

The federal regulator has denied an application to construct an international power line in Abbotsford BC (the Sumas Energy 2 Inc) on the grounds that it “found that the burdens would be borne almost entirely by the local and regional communities, whereas the benefits would be either external to these communities or negligible in

value.” This is an unusual ruling. For a full reading check the NEB’s web site: www.neb-one.gc.ca

BC’s Oil And Gas Commission

An audit of BC’s booming oil and gas industry by the Oil and Gas Commission found that almost one third of stream crossings investigated by the OGC violated regulations. In addition one third of remote exploration sites adopted improper sewage disposal and storage practices. “The compliance rate is not satisfactory,” notes Ben Mitchell Banks, director of compliance and enforcement branch to the Vancouver Sun. No kidding.

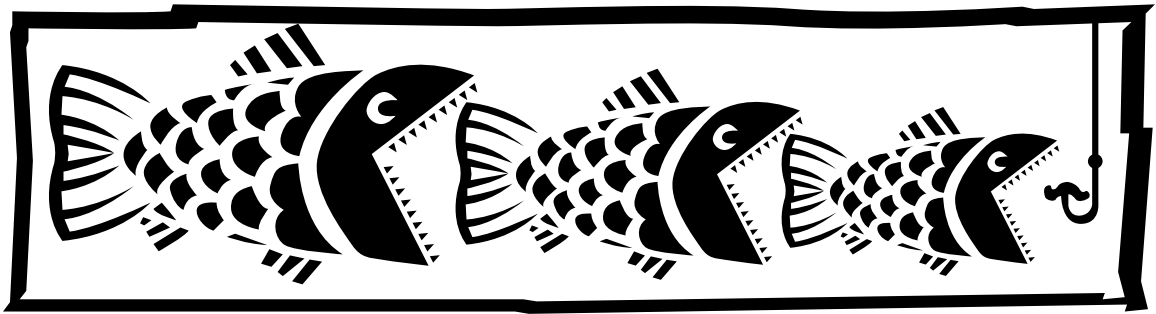
A Bigger Mandate

Albertra’s Energy and Utilities Board (and all its sister agencies such as BC’s Oil and Gas Commission) generally assumes that each and every energy project can be assessed apart from its broader economic, social and environmental impacts on society. Shaun Fluker, a student at the University of Calgary, recently questioned this position in a Thesis entitled “The Alberta Energy and Utilities Board: Ecological Integrity and the Law.” He argues that the AEUB’s government legislation changed in 1993 with the addition of Section 3. It obliges the board to “give consideration to whether the project is in the public interest, having regard to the social and economic effects of the project and the effects of the project on the environment.”

The board, however, has never respected this clause. It still assess the merits of any given project with a reductionist “cost/benefit approach.” Such an approach requires no broader land-use decision making and no serious regard for cumulative effects over time. “ Adds Fluker: “The use of cost/benefit analysis allows the Board to act on unsubstantiated assumptions; such as an assumption that measurable quantities form the only basis of knowledge.”

To date the Alberta Court of Appeal has failed to provide any additional insight on the full meaning or importance of Section 3. **There is a “glaring absence of judicial analysis explaining why it is sufficient for the AEUB to interpret Section 3 mandate solely as cost/benefit calculation.”**

Fluker concludes that Section 3 requires the Board to seriously consider broad socio-ecological concerns when faced with intensive energy development such as coalbed methane. His thesis “offers guidance to those that seek to influence the Court and consequently the AEUB, to adopt his view.” A copy of this thesis is available in PDF format at the landadvocate.org. Paper copies are available at the Courthouse Library in downtown Calgary or at the University of Calgary Law Library. Fluker can be reached at sfluker@nucleus.com.



WATER CURRENTS

The Southern Alberta Environmental Group is appealing another dubious water decision by Alberta Environment in bone-dry southern Alberta.

On March 15, 2003 the St. Mary River Irrigation District, Lethbridge, Alberta applied to have its 1991 water license amended to include "other uses" in addition to irrigation. On October 31, 2003 this amendment was granted by Alberta Environment to the limit of 12,000 acre-feet per year.

Why is there a concern? Because the law states irrigation districts are established to convey and deliver water through irrigation works, not decide how it will be used. The amendment privatizes water by giving decision-making power about its use to a private board. Further, the dams and diversions that enable the water use were funded by provincial tax-payers, not by irrigation districts. Finally, Alberta Environment's decision avoids returning some water back into our dying rivers, in contrast to current policy.

In dry months, flows in the southern tributaries of the Oldman River (the St. Mary, Belly and Waterton rivers) are set by Alberta Environment at "minimum flow", which is an arbitrary, non-science based flow rate. All parties agree that this flow is insufficient for the rivers. Scientists have assessed the riparian and aquatic conditions for these rivers below the dams and diversions and rated them as heavily impacted or degraded. Riparian cottonwoods have died as have most native fish populations. These tributaries have been over-allocated through licenses issued by Alberta Environment.

The Oldman River Basin Advisory Committee recommended closure and transfers of water allocation to remedy situations like these. Indeed, Alberta Environment has placed a moratorium on additional water allocations from the southern tributaries. Alberta Environment also has the power to return 10% of a transferred allocation back to the rivers in an attempt to restore health. Unfortunately, the St. Mary River Irrigation District and Alberta Environment failed to apply this mechanism, contrary to the spirit of what Albertans advised in the recent Water for Life strategy.

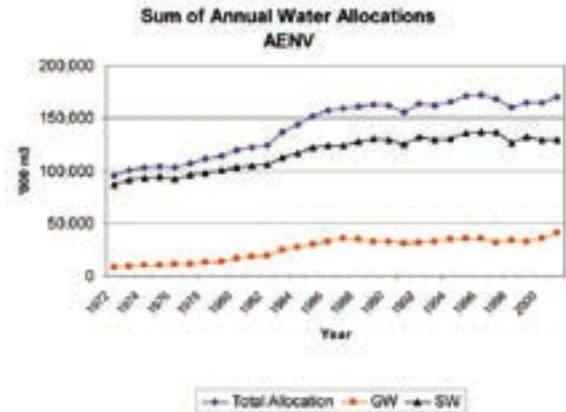
Recently, an expert panel sponsored by Alberta Environment reported the science-based in stream flow requirements for the southern tributaries. The Oldman River Basin Advisory Committee is in the process of establishing Water Conservation Objectives. They almost certainly will require more water be returned to the rivers.

On November 24, 2003 the Southern Alberta Environment Group filed a "Notice of Appeal" with the Alberta

Environmental Appeals Board. **The Group is appealing the license amendment because it sets the precedent of placing the power of water allocation in the hands of a non-government body which serves its members rather than the long-term public interest.** Alberta Environment and the St. Mary River Irrigation District are apparently unwilling to take reasonable measures to restore the aquatic environment.

A Preliminary Meeting of the Alberta Environmental Appeals Board will be held on March 31st to determine the status of the appellants.

For more information contact Cheryl Bradley (403)328-1245:Southern Alberta Environmental Group Box 383, Lethbridge AB T1J 3Y7



Oil Recovery Taskforce

Landowners throughout Western Canada have identified the use of fresh water for enhanced oil recovery (pumping water down holes to produce more oil) as an abuse of a public resource. They regard it as a "permanent loss" to the water cycle or outright theft in a drought prone region. In response to these concerns the Alberta Environment recently set up the Advisory Committee On Water Use Practice and Policy to look at alternatives. The committee will look at needed policy changes and best practices. **The committee includes no members of the Butte Action Group which made this issue a national embarrassment for the oil industry.** This largely government and industry dominated group posts all its proceedings at www.waterforlife.gov.ab.ca

Some findings from recent reports and meetings:

1.) Public objections to oilfield injection have been strongest in Cold Lake, Grande Prairie, Valleyview, Edson and Red Deer. In these areas oilfield injection has been associated with arsenic release in ground water, fractured or failed water wells and concerns about the viability of drinking water supplies.

2.) Alberta Environment acknowledges the need for better well monitoring, better reporting and swift investigations.

3.) The amount of water that can be diverted for injection purposes from both surface and ground water sources has increased from 94.6 million cubic feet in 1972 to 169 million cubic feet in 2001.

4.) In all river basins except the Athabasca (it has experienced a decline), the amount of water being used for oilfield injection has remained steady. Withdrawals from the Churchill River have steadily increased in recent years and are likely unsustainable.

5.) The AEUB admits that its Guide 65 is "currently silent on water use" as well as any water link to Alberta Environment. The data on water source and recycling lacks "functionality and easy retrieval." The EUB may in the future issue a public report on water use by the industry; form a data enhancement team; raise profile of importance of good water data; and work more closely with Alberta Environment.

AGRIUM Expansion in Industrial Heartland Threatens Groundwater

Agrium Products Inc, a global producer and marketer of agricultural nutrients and industrial products, wants to extend its storage area for a phosphate fertilizer manufacturing plant east of Edmonton. At public hearings before the Natural Resources Conservation Board (NRCB), experts hired by down winders raised the following key concerns:

- David Schindler, a University of Alberta professor and one of the world's leading authorities on water, raised concerns about the project's impact on ground water chemistry. Concentrations of nitrates in local wells at all depths already exceed drinking water guidelines by 10, 100 or even 1,000 fold. Concluded Schindler: **"In short the Agrium plant is already in violation of its terms of approval, and there is no possibility of meeting the terms in any meaningful way"**. As currently managed, the site will have a long legacy as a contaminated site, with the potential to significantly contaminate nearby ground and surface waters. These are certainly not circumstances where an expansion of any sort should be considered. In fact, more thought should be given to remediation, if this site and the surrounding area are to be useful to future generations of Albertans."

- A byproduct of phosphate production is fluoride, an environmental contaminant that can cause respiratory problems, skeletal fluorosis, endocrine disruption and kidney stones. Dr. Hardy Limeback, a University of Toronto expert on flouride, found that Agrium had conducted no careful analysis of actual fluoride levels already found in down winders: "I was sent several colour photographs of residents in the area and three of them had mild dental fluorosis; one of them had moderate to severe fluorosis. The (Agrium) submission did not acknowledge that dental fluorosis was possible even as a baseline condition BEFORE the extension of the gypsum stacks were proposed.

- The NRCB will rule on the plant 's expansion request in April.

Natural Gas Trends



If you think natural gas exploration is going to ease off in British Columbia or any other area of Western Canada, think again. Here are the latest conclusions on North America's gas supply crunch by Walter Youngquist, a world renowned geologist. The implications for landowners and frontier regions are chilling:

"Natural gas prices in North America seem to have risen to a new plateau, caused by a demand-supply gap

which cannot be adequately filled at least in the near term. The roller-coaster rides of demand and price volatility are largely behind us. Replacing those times will be a steady strong market with possible price spikes resulting from local shortages. Continued population growth along with advantages which gas has over competing fuels ensure household, industrial, and power-generation rising demand for gas. Eventually liquid natural gas imports may mitigate our supply problem to some degree but that is unlikely to occur for several years.

Access to areas for exploitation will be a continuing problem. But with rising prices will come an increasing public awareness of the fact that, unlike oil, for the next decade at least and probably beyond, we are largely on our own in terms of natural gas supplies. Imports will gradually increase, but domestic sources are our mainstay. Access to them is vital to our economic health. Publicizing these facts along with higher costs of moving into frontier areas, including deeper drilling, should be an essential part of the industry's agenda.

For several years ahead at least the North American gas supply situation would seem to be tight. If economic disruptions are to be avoided, the following matters must be recognized and addressed:

- The days of cheap gas are history.
- Areas now off limits such as portions of the Rocky Mountains, the Gulf of Mexico, and the Arctic Slope must be accessed.
- Investment capital must be raised and employed in exploration and drilling under reasonable tax policies.
- Competent personnel must be identified and trained.
- The number of drill rigs in operation must be increased, especially larger rigs for deeper drilling.
- Pipelines to stranded gas must be constructed.
- Additional liquid natural gas facilities must be built.
- All these elements must begin to come together starting now. There is little "cushion" leeway in matters.

There probably is more gas yet to be discovered than has been produced. But to produce it, drilling activity beyond previous records must occur. Busy times lie immediately ahead for the North American natural gas industry."

Source: North American Natural Gas: Data Show Supply Problems by Walter Youngquist and Richard Duncan, Natural Resources Research, Vol 12, No.4, December 2003

Drilling Stats By Region 2003		
	Development	Exploratory
Northwest Alberta	1473	1115
Northeast Alberta	1833	334
Central Alberta	2019	1020
Southern Alberta	7716	1098
Saskatchewan	3177	1290
British Columbia	1044	
TOTAL	17,262	4,857
* B.C. wells counted as development wells		
source: Canadian Oilfield Service and Supply Directory, Forecast & Almanac 2004		

Problems with Alberta's New Recreation Legislation

The Alberta Recreation Corridors Legislative Review [www.cd.gov.ab.ca] was released by the Government of Alberta last year with public comment ending in February. The report, which appears to be driven by sponsors of the national trail network, raises serious concerns for landowners.

The Possibility of Expropriation:

Although there are currently 17,000 km of trails in Alberta, the report proposes ways to secure more - on both public and private land. While the word "expropriation" is never used, the report recommends:

- 1.) Full ownership of corridors across private land, and the ownership of registered easements across private land [8.2, 7.1]; and,
- 2.) Government of Alberta ownership of recreation corridors when appropriate on private land...where desirable or necessary. [4.2]

The report recommends no additional legislation as the Municipal Government Act "already provides sufficient authority to regulate land use within municipal boundaries". The Municipal Government Act states that land may be expropriated on behalf of an "organization" if it is "a society under the Societies Act" in which "the municipality is a member."

The Alberta Recreation Corridors Committee, if it becomes a society, would be eligible to propose and become the beneficiary of the expropriation of land. It includes two municipal associations, as well as proponents Alberta TrailNet and four Members at Large.

Municipal Role:

Although the report states that "the trail owner/operator must have support and approval from the local municipality prior to submitting an application for designation, the Direction under 4.2 states that designated recreation corridors "will have the support and approval of the municipal authority". [4.2; emphasis added]

At the very least this could put enormous pressure on

Municipal District Councils where proponents want trails, pitting organized, and funded, off-road vehicle users - from anywhere in the province - against landowners, and landowner against landowner.

Landowner's Responsibility for Fencing:

The report reminds the reader that the Line Fence Amendment Act, 2003 "came into force on May 16, 2003, which stipulates the retention of livestock and cost of fencing is the responsibility of the livestock owner". An easement or full title land corridor could be expropriated AND it would be the landowner's responsibility to fence the corridor. [8.2, Potential Implications]

Landowner Access across Corridor:

The report states operators are to "ensure that opportunities to cross trails are provided to landowners who demonstrate they have no other choice in order to access parts of their land". making beggars of landowners who have always had right to access any part of their land.

Where the corridor is separately titled, i.e. fully expropriated, operators are "not obligated to provide access across their property". [8.1]

Restitution for Disturbance of Corridor:

The report advises that in order to protect designated corridors on both public and private land there is a "need to define 'disturbance' (any change that negatively affects trail quality or use) and consider how 'significant' disturbance will be measured so it can be quantified and action taken...to seek restitution".

Equal Rights for Landowners and Corridor Operators:

Points 1 and 13 of the Guiding Principles state that landowners and recreation corridors should be considered equally; and, that legislation needs to support a balance between the rights of landowners and recreation corridor owners/operators. [Appendix 3]

Potential Effects on Landowners:

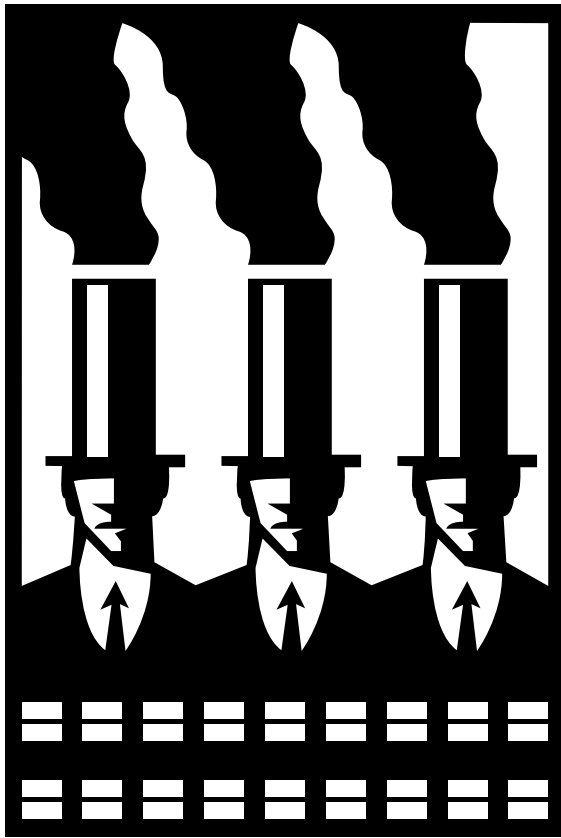
Apart from the issue of expropriation, many landowners may be quite concerned about privacy, peaceful enjoyment of land, security and land values if a corridor were designated on or adjacent to their property.

Land for many rural citizens of Alberta represents their livelihood, their investments and their pension. It is unlikely that the Government of Alberta would consider garnisheeing wages of urban citizens, confiscating a proportion of their investment portfolio or their pension benefits, but this could be seen as analogous to what is proposed here.

Opposition to Corridors Disregarded:

There was opportunity to comment on this proposal before this report was written, and there was significant opposition to this initiative in public meetings and written submissions, but the concerns raised are not recognized in this report.

--Jillian Lawson in the Porcupine Hills



Poor Neighbors: A Record of Enforcement Actions

Shiningback Energy Ltd: Operator of the Berrymor Sour Gas plant was fined \$4,500 for filing air emission and wastewater and runoff reports late

BP Canada Energy Company: Operator of North Carolina gas plant failed to sample its water works system and was given a warning letter

EnerMark Inc: Operator of the Carson Creek sour gas plant broke the law by submitting its air emission and wastewater reports late to government. It was a warning letter.

NCE Petrofund Corp: Operator of Provost sour gas plant failed to report monthly air emissions on time and was issued a warning letter.

Source: Alberta Environment: Enforcement Actions 1 October 2003 to 31 December 2003

Thieving Neighbor

Last November an Alabama jury ordered Exxon Mobil Company to pay \$11.9 billion in damages to the state for cheating it out of natural gas royalties. Exxon apparently bilked the good people of Alabama by deducting too much in well expenses. Now, could that kind of chicanery be happening here in Alberta? Perish the thought.

The Lighter Side: What is Politics

A young boy goes to his father and asks, "What is Politics?"

Dad says, "Well, son, let me explain it this way. I'm the breadwinner of the family, so let's call me The Corporation. Your mom. she's the administrator of the household, so we'll call her The Government. We're here to take care of you, so we'll call you The People. The Nanny, well, she works hard all day for very little money, so we'll call her The Working Class. And your baby brother, we'll call him The Future. Now think about that and see if it makes sense."

So the boy thinks about his father's definitions as he falls asleep. In the night, he hears his little brother crying, so he gets up to see what's wrong. He finds that the baby has severely soiled his diaper.

So, he goes to his parents' room and finds his mother sound asleep. Not wanting to disturb her, he goes to the nanny's room. But the door is locked. Peeping through the keyhole, he sees his dad in bed with the nanny, so he gives up and goes back to bed.

Next morning he tells his father he thinks he understands the meaning of politics.

"Really?" says his dad. "That was quick. Tell me, in your own words, what you think politics is all about."

The young boy replies: "Well, while The Corporation is screwing the Working Class, the Government is sound asleep, The People are being ignored and the Future is in deep shit."

Alberta's Top Ten Flarers and Venters

- 1.) Canadian Natural Resources Ltd
- 2.) Husky Oil Operations Ltd
- 3.) Devon Canada
- 4.) Encana
- 5.) Penn West Petroleum
- 6.) Talisman
- 7.) Enermark Inc
- 8.) Bonavista Petroleum Ltd
- 9.) Apache Canada Ltd
- 10.) Petrovera Resources Ltd

Source: EUB Statistical Series 2002 - 60B

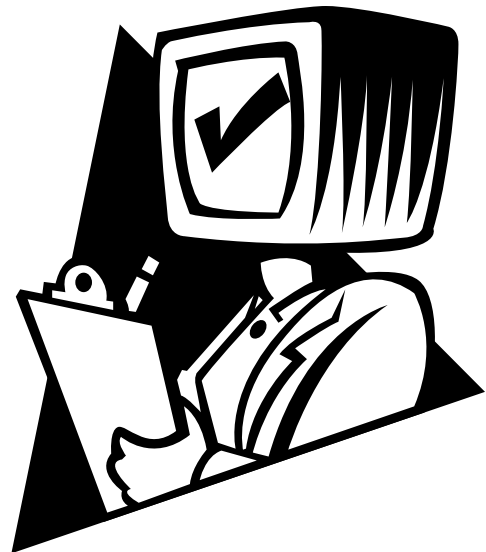
Calendar

Health, Culture and Oil and Gas: Some Human Rights Issues: April 30-May 1st, 2004, University of Calgary: For more information contact Monique Ross: 403-220-3973 or mmross@ucalgary.ca

Water Resources and Energy Development, March 19-20, Radisson Hotel and Conference Centre, Canmore, Alberta Sponsored by the Canadian Society of Petroleum Geologists. For more information check www.cspg.org

Community Forum on Sour Gas Wells in Southeast Calgary, March 23rd South Fish Creek Recreation Centre from 7-9 pm.

Confronting Water Scarcity: Challenges and Choices: July 13-16 University of Lethbridge. For more information visit www.confronting-water-scarcity.ca or call 403-329-2244



Closing the Gate

“After one look at this planet any visitor from outer space would say, ‘I want to see the manager.’”

William S Burroughs

DAMNING CATTLE STUDY

A three year University of Alberta study has found that cattle exposed to sulphur dioxide, a byproduct of flaring and other oil and gas activities, require up to 10% more feed and suffer from weakened immune systems. In the study, financed by Alberta Beef Producers and federal and provincial agricultural departments, 36 cows were exposed to levels of sulphur dioxide ranging from one to 20 parts per million. Author Bob Christopherson, a U of A professor, said the animals showed measurable damage to their lungs and immune systems which made them more vulnerable to disease. The study confirms anecdotal reports from cattle producers for years and once again highlights the need to eliminate flaring in rural areas. (Source: Edmonton Journal, March 4, 2004)

CBM Information Search

There are currently three coal bed methane wells in Alberta producing fresh water. One is in the Livingston Range and is operated by Devon. If you have any information on CBM wells producing water in BC or Alberta and their legal locations please give **Judy Winter at the Butte Action Committee a call: 403-722-3530.**

Lack of consultation and inadequate information also remains a critical problem with CBM issues in Hudson's Hope, British Columbia.

New Links

The Pekisko Group, an advocate for native grasses in the foothills of southern Alberta (and a strong supporter of this newsletter), has launched a highly informative website: www.pekisko.com. It examines such key issues as land fragmentation, sour gas, the economy of fescue grasses and the importance of watersheds.

In its November newsletter the Freehold Owners Association (FHOA) offers a critical discussion of coalbed methane. It can be downloaded from www.fhoa.ca

Unsustainable Inefficiencies: Living On Stored Sunshine

Using published biological, industrial and geochemical data US ecologist Jeff Dukes recently did some neat calculations on the amount of energy needed to generate fossil fuels. Given that fossil fuels come from ancient deposits of organic matter, society is now running on stored sunshine fixed in coal, gas and oil. Dukes found that the process was grossly inefficient.

It takes 23.5 tonnes of ancient buried plants to produce 1 litre of gasoline. That's the equivalent of 16,200 square metres of wheat including the roots and stalk.

Less than 10% of carbon content of plants is converted to coal.

The formation of oil and gas from plankton is less than .01% efficient.

In 1997 the fossil fuels burned by humans were ultimately derived from 400 years worth of primary production from organic material.

To replace those fossil fuels with fuels derived from plants would take up almost a quarter of the earth's primary plant production.

In other words the volume of plant matter that went into fossil fuels burned since the Industrial Revolution equals all the plants ever grown worldwide for 13,300 years.

Concludes Dukes: “This research enables us to picture just how inefficient and unsustainable fossil fuels are.”

Source: Burning Buried Sunshine: Human Consumption of Ancient Solar Energy in Climate Change 61:31-44, 2003

In The Next Issue: June 2004 Protecting Groundwater Land Owner Profile: Zygmund Piebiak More on CBM

LAST WORD



The Landowner's Burden

As we know, we are under increasing pressure to choose caring over not caring. We know that caring will involve us in great effort and discomfort, and we dread to choose it, but we know too that the toils and miseries of not caring are becoming greater by the day. Someday, presumably, it will become easier and less miserable to care than not to care--if by then we still remember how to care, and if the choice is still possible."

--Wendell Berry

Be an Advocate!

It's easy. Visit our website, www.landadvocate.org. Fill out the order form on the left and receive an electronic copy of The Land Advocate.

Although we plan to initially provide this newsletter to landowners for free (corporate subscribers pay a \$350 fee while non-government types pay \$100) we need your help to reach as many rural Canadians as possible. Donations are not tax deductible because we are an advocacy group.

The Land Advocate Society of Western Canada was incorporated 220/03/11. The Land Advocate is committed to complete fiscal transparency. This issue cost approximately \$4,500 to edit, layout and mail to more than 500 subscribers. Your donations help create more Advocates. Members of the Alberta Surface Rights Federation recently donated nearly \$300 last February. Our goal is to reach 2,000 landowners within two years. And to do that we'll need more donations. Each donator (no matter how small or big) will receive a dated receipt. To help create more Advocates send your donation to:

**The Land Advocate Room 203,
1225A Kensington Road NW
Calgary, Alberta, T2N 3P8**

Or share your story with us by sending us an e-mail: news@landadvocate.org
Check out the website: www.landadvocate.org