

DISTRICT OF HUDSON'S HOPE
SPECIAL MEETING
HELD IN THE COUNCIL CHAMBERS
MONDAY, NOVEMBER 24, 2008 AT 12:00 P.M.

Present **Council:** Mayor Harwood; Councillors Quibell, Johansson Kosolowsky, Anderson, and Webster
 Staff: C. Bonnick, Administrator; and B. Mercereau, Deputy Clerk
 Other: Mike Doyle, and B. Bach

CALL TO ORDER

Canadian Association of Geophysical Contractors Meeting

The Council met with Mike Doyle, President of the Canadian Association of Geophysical Contractors to learn more about seismic activity and processes. The following information was provided:

- the association has 250 member companies, of which 15 of those are seismic land companies;
- basic seismic activity consist of a shot, meaning vibrations, and a geophone, meaning the receiver;
- the company will drill and then set a charge that will cause vibrations or will use a vibration truck, these vibrations are then measured by the geophones;
- a detailed graph is then produced using the information from the geophones;
- from these graphs and information drilling companies are able to see what the geophysical area looks like; however, water and natural gas do look the same on this graph;
- 2D seismic consists of the receiver and source points on the same line which causes the company to create long straight lines through forests;
- 3D seismic consists of receiver points and source points on different lines at different intervals;
- 4D seismic uses the same technique as 3D seismic but is done each year for a specified time period;
- micro-seismic is used for monitoring one well, especially during the fracing process and geophones are used;
- tilt meters are used to monitor the subsurface movements of the earth;
- seismic information can be collected as far done as a company could drill, but the average maximum depth 3.5 to 4 kilometres;
- the seismic information that is collected is then sold to multiple companies that are interested in the subsurface rights to that particular part of land;
- the Crown does require seismic companies to file the information they collect, but it is keep confidential;
- the seismic frequency used is low and usually does not cause any damage;
- landowners are allowed to say no to seismic activity on their land and the company has no right to appeal and must obey the landowners wishes;
- if a landowner does allow seismic activity to occur on their land the main concerns to consider are whether helicopters will be used for the project and if they will be working 24 hours a day;
- the main landowner concerns that are negotiated with companies are fire, well loss,

- club root, access, and garbage;
- discussed the different types of explosives used in the program and advised that if an explosive fails to detonate the company must file reports with the OGC and Worksafe BC;
- if the explosive failed to detonate on private land the company would be required to remove the explosive;
- if the explosive failed to detonate on crown land in a remote area the company may be able to leave it in the ground with the appropriate precautions completed;
- line cutting can be done by hand, by cat or by mulching, with mulching being the preferred method;
- helicopters are used to bring in equipment to remote areas to decrease access routes being developed;
- chips and shards from the mulcher have not been a concern with farmers, but if a farmer does find that they have not been done properly and left sharp shards then they should contact the Oil and Gas Commission and make a report;
- if a flowing hole occurs it is the responsibility of the company to remedy;
- in some cases a landowner wants to keep a flowing hole and this can be negotiated with the company, but the landowner needs to report it either way;
- companies will test water wells pre and post activity for both quality and flow which is a benefit to both the landowner and company if any problems were to arise;
- if a landowner decides not to allow an seismic company onto their land the company can still use vibration trucks along the road allowances to acquire the majority of the information they require;
- pre and post inspections should be done when road allowances are being used;
- the District should inquire with the OGC about what rights they have on road allowances within the municipality.

ADJOURNMENT

The special meeting of the Council adjourned. (2:15 pm)

Certified Correct:

Clerk

Mayor