



## **BEST OPERATING PRACTICES: Hydraulic Fracturing**

### **OBJECTIVE**

The West Central Stakeholders (WCS) group is committed to sharing information and creating understanding about oil and gas development in Clearwater County in an effort to foster mutual respect among community, industry and regulatory stakeholders. WCS best practices were developed to communicate community interests to industry working in the region and promote a consistent standard for industry to use when planning and conducting operations in Clearwater communities.

WCS encourages industry to adopt these Best Operating Practices when working in Clearwater County. This is a living document and can be refined through discussion at WCS monthly meetings.

**“Lead by example, set a high standard, create expectation and others will follow.”**

*In respectful memory of Cal Broadhurst, a dedicated member of the West Central Stakeholders Group and Best Practices Sub-Committee, who was committed to resolving differences by working together in a respectful and honest manner. Cal believed that using responsible best practices would demonstrate leadership, setting a high standard and expectation for others to follow.*

### **FOUNDATION**

- WCS best practices and landowner awareness documents are separate and apart from regulatory and legal guidelines for development. Industry should follow and strive to exceed industry guidelines, laws and regulations.
- Values of honesty, integrity and mutual respect are top priorities and an expected standard of conduct for all oil and gas companies operating within the West Central Stakeholders area.
- Companies and community members should deal fairly, ethically, openly and honestly with each other.
- Companies must comply with all applicable environmental regulations to demonstrate respect of environment and public/private land and to minimize and mitigate environmental impacts. Companies are encouraged to apply responsible standards where laws or regulations do not exist.

## BACKGROUND

Hydraulic fracturing is a controlled operation that pumps fluid and a propping agent through the wellbore to the target geological formation at high pressure in multiple intervals or stages, in order to create fractures in the formation and facilitate production of hydrocarbons. The process breaks up the target formation to create pathways that allow the gas to flow from the very low permeability reservoir toward the wellbore.

Fracturing fluids are comprised primarily of water and sand. Additives are used to improve the process. The make-up of fracturing fluid varies from one geological basin or formation to another. The number of additives used in a typical fracture treatment also varies, depending on the conditions of the well being fractured. Each component serves a specific, engineered purpose.

*~From the Canadian Association of Petroleum Producers  
Guiding Principles for Hydraulic Fracturing.*

## GROUNDWATER/AQUIFERS

### FRACTURING FLUID

**Additive Disclosure:** Industry will provide, upon request, the disclosure of fracturing chemical additives on a well-by-well basis to residents and/or landowners consistent with the Canadian Association of Petroleum Producers (CAPP) Hydraulic Fracturing Operating Practice: Fracturing Fluid Additive Disclosure and the Alberta Energy Regulator's (AER) Directive 59: Well Drilling and Completion Data Filing Requirements amended in late 2012 to require submission and public disclosure of chemical and water use information for hydraulic fracturing operations in Alberta. Public access to data is also available through [www.fracfocus.ca](http://www.fracfocus.ca)

**Green Products:** Industry will commit to moving towards using greener products as outlined in the CAPP Hydraulic Fracturing Operating Practice: Fracturing Fluid Additive Risk Assessment and Management.

### LANDOWNER WATER WELLS

**Water Well Testing:** Industry members will follow the CAPP Hydraulic Fracturing Operating Practice: Baseline Groundwater Testing, whereby Industry will test as a minimum all water wells within a 250- meter radius. Industry will also commit to reviewing requests

Outside the 250-metre radius from surface location on a well-by-well basis if requested by a potentially impacted resident.

**Farmers' Advocate:** WCS will provide links to the Farmers' Advocate's website for information on their Water Well Restoration Program.

## **WELL COMMUNICATION & CEMENT**

**Risk Assessment:** When other oil and gas wells are present in the area, industry will complete a Risk Assessment Plan for inter- wellbore communications as per AER Directive 83 Hydraulic Fracturing: Subsurface Integrity. Industry will collaborate with neighboring licensees on their Risk Assessment Plan to have open communication between Industry members and will also share pertinent Risk Assessment information if requested by a resident. Industry commits to using appropriate language and terminology so that residents can clearly understand the risk mitigation measures.

**Shared Learnings:** Industry and the regulators will share outcomes upon completion of investigations, if there are potential learnings from operating practices or incidents as appropriate.

**Education:** WCS, industry and the regulator will assist and educate residents regarding wellbore construction and cement integrity when required including accessing the Regulator's Surveillance Program.

## **WATER USE**

### **SOURCE, FLOWBACK, DISPOSAL WELLS, SURFACE WATER CONTAMINATION**

**Consumption:** Industry will make efforts to share area beneficial practices such as pipelining of water, sharing of fracturing fluids and look for ways to reduce water consumption through water recycling opportunities and NEW technologies.

**Shared Learnings:** WCS and its members will commit to sharing any beneficial practices such as new technologies to reduce water consumption and innovative recycling measures.

## **INFORMATION AND TRANSPARENCY**

**Social License:** Industry recognizes it is both a guest and a long-term entity in the communities it operates in. Industry understands the importance of not only the regulatory license to operate, but also the social license to operate and commits to treat its communities as neighbours and demonstrate respect, openness and transparency in its operations.

### **Communications/expectations:**

WCS community residents have asked industry to:

- Build the relationship...not just the agreement
- Foster two-way communication (not just notification)
- Have visible company reps in the community

- Face-to-face communications where possible. Consider other options in addition to in-person to meet the needs of all stakeholders.
- Meet with the community early and consider concerns in project planning.
- Where possible communicate the scope of the project, not just one well or facility
- Co-ordinate activities (share infrastructure, better plan large hauls)
- Better communication within each company and from company to contractors
- Use local synergy group to help inform landowners and provide opportunity for input
- Ensure communication channels are known and easily accessed
- Follow up on any concerns or complaints (close the loop)
- Show respect: for time, quality of life, livelihood, community

**Adjacent Neighbours:** In the spirit of respect, transparency, and being a good neighbour, industry will consider landowners and residents who may be impacted by industry operations, from traffic, noise, visibility, light pollution, and communicate the company's plans to area stakeholders. In many cases, this will include adjacent landowners or residents within proximity of activities and/or on access roads to the activity or those who may be contacted during completions with flaring notifications. Each case is unique, so the company and its land agents, consultation teams and contractors must always attempt to "walk in the shoes" of its neighbours and be cognizant of how their activities could impact others.

The method of communication to parties outside of regulatory requirements is at the discretion and best judgment of the company. The company will consider the geography and demographics of the area, the number of residents, cumulative activity including other industry activity in the area and their current and future plans. The company may communicate its plans by mail, telephone, public meeting, in person, or what is deemed appropriate.

**Plain Language:** The company's Project Description Package will cover the required AER Directive 056 material, and be written in appropriate language and terminology, in the spirit of respect and clarity. The company will communicate using plain language in any informal communication that is above and beyond regulatory requirements.

**Company Contact Information:** Industry will provide, in addition to contact information of third-party contractors such as land agents, contact information for a company employee for the area.

(Industry will provide company direct contact information outside the land agent or broker if the consultation for the project is completed by a third party land agent or broker.)

**Contractors:** WCS encourages its member companies to share this document and other WCS Best Operating Practices with third-party contractors to help them understand the community expectations. This may include expectations around speeding and other traffic concerns among other things. The Petroleum Services Association of Canada (PSAC) code of conduct released in late 2013 called Community Partners: The oil and gas industry's commitment to communities.

**Light Pollution:** Industry will work with neighbours to address potential concerns regarding light pollution, which may include the positioning of lights on site to reduce impacts on homes and roadways.

**Footprint:** Communities and/or individuals may have concerns regarding footprint or long-term visibility impacts of a facility. Industry will collaboratively work with community members to address concerns regarding wellsite locations as appropriate. Companies will benefit from proactive communication with community members early in project design to determine the scope of a project, broader surface development and play- based\* development plans.

\*play is a term used in the regulator's Unconventional Regulatory Framework discussion paper defined as: an area of oil and gas development that is determined mainly by geology, geographic area, the properties of the resource, and the technology required to develop that resource.

**Beneficial Practices:** Industry will be aware of and follow, to the best of their ability, all beneficial management practices adopted in the WCS boundary such as Road Use, Noise, Pipelines and Understanding Landowner Rights.

**Community Communication:** Strong relationships and trust are based on communication. Industry will provide open communication and transparency with regards to industry development forecasts and activities in the communities in which they operate. Industry will use available tools, such as: newsletters, open houses, information packages, monthly WCS meetings, and WCS information nights.

## REFERENCES AND ADDITIONAL RESOURCES

### **CAPP (Canadian Association for Petroleum Producers)**

Guiding Principles for Hydraulic Fracturing

[www.capp.ca](http://www.capp.ca) (then click Publications followed by Environment and Stewardship publications)

### **Alberta Energy Regulator**

[www.aer.ca](http://www.aer.ca)

Red Deer Field Centre

24 hour emergency #: 1-800-222-6514

Direct: (403) 340-5454

Directive 83: Hydraulic Fracturing: Subsurface Integrity

<http://www.aer.ca/rules-and-regulations/directives/directive-083>

Directive 59: Well Drilling and Completion Data Filing Requirements  
<http://www.aer.ca/rules-and-regulations/directives/directive-059>

**Petroleum Services Association of Canada (PSAC)**

[www.psac.ca](http://www.psac.ca)

or for the Guiding Principles:

[www.communitypartners.ca/all-principles/](http://www.communitypartners.ca/all-principles/)

**Sundre Petroleum Operators Group (SPOG)**

Hydraulic Fracturing Beneficial Practices March 2013.

[www.spog.ab.ca](http://www.spog.ab.ca)

**Farmer's Advocate Office**

[www.farmersadvocate.gov.ab.ca](http://www.farmersadvocate.gov.ab.ca)

310-FARM (3276)

Email: [farmers.advocate@gov.ab.ca](mailto:farmers.advocate@gov.ab.ca)

**Surface Rights Board**

[www.surfacerights.gov.ab.ca](http://www.surfacerights.gov.ab.ca)

Phone: (780) 427-2444

Email: [srb.lcb@gov.ab.ca](mailto:srb.lcb@gov.ab.ca) Fax: (780) 427-5798

**Frac Focus**

[www.fracfocus.ca](http://www.fracfocus.ca)

**West Central Stakeholders**

[www.westcentralsh.com](http://www.westcentralsh.com)

[wcs@westcentralsh.com](mailto:wcs@westcentralsh.com)

*If you are unable to find the above listed resources on the Internet please contact West Central to obtain paper copies.*