

Waterton Advisory Group

Meeting Notes – December 16, 2014

Attendees

Name	Organization
Kim and Pat Hardy	Residents
Phil Hazelton	Resident
Connie Simmons	Oldman Watershed Council
David Green	SASCI
Ron Schmidt	Resident
Dick Hardy	Resident
James Tweedie	Resident
Cliff Elle	Resident
Brent Barbero	Resident
Brian Hammond	Reeve, MD of Pincher Creek No. 9
Fred Schoening	Councillor, MD of Pincher Creek No. 9
Garry Marchuk	Councillor, MD of Pincher Creek No. 9
Terry Yagos	Councillor, MD of Pincher Creek No. 9
Leo Reedyk	MD of Pincher Creek No. 9
Tom McGee	Alberta Energy Regulator
Behn Morris	Alberta Energy Regulator
Steve Polvi	Shell (Development Manager - Greater Foothills)
Glen Sine	Shell (Business Advisor – Greater Foothills)
Peter Argument	Shell (Waterton Plant Operations Manager)
Rod Sinclair	Shell (Waterton Community Affairs)
Emma Guppy	Shell (Waterton Public Consultation)
Karla Reesor	Moving Forward Ltd.

What follows is an informal summary of the topics and perspectives shared at a Waterton Advisory Group (WAG) meeting. WAG meetings are intended to supplement and not replace Shell's obligation to consult directly with affected stakeholders under the Alberta Energy Regulator's Directive 56. These Meeting Notes are a public document and the views shared within are the views of individuals and are not necessarily the consensus views of participants.

1. Introductions and Welcome

- All participants introduced themselves.
- Following are new WAG participants:
 - Steve Polvi – Shell Greater Foothills Development Manager
 - Behn Morris – Alberta Energy Regulator

2. Shell Waterton Development Plans for 2015-2016

- Steve Polvi provided an overview of Shell's plans for the Waterton area. He also noted that Shannon Ouellette has replaced Rick Mykitta as the General Manager for Foothills.

Development Update – Waterton 68	Development Update – Waterton 77
<p>What did we say we would do?</p> <ul style="list-style-type: none"> • Drill & complete a commercial well in Sheet 3/4 • Build a wellsite facility including a test of laser perimeter gas detection • Build a pipeline lateral <p>What did we do?</p> <ul style="list-style-type: none"> • Well on expectation and producing • Continuous air monitoring through completion; permanent monitoring data has been made available to public • Gas detection installed & operational <p>Highlights / Lowlights:</p> <ul style="list-style-type: none"> • Mechanical issues during completion extended plan by ~3 weeks • 3 years between spud & production 	<p>What did we say we would do?</p> <ul style="list-style-type: none"> • Drill & complete a commercial well in Sheet 5 from existing WT-67 lease • Resume suspended pipeline • Install new equipment on wellsite <p>What did we do?</p> <ul style="list-style-type: none"> • Well on expectation and flowing through test equipment • 3 week shut-in & facility construction in January • Cutout, repair, & hydrotest of pipeline <p>Highlights / Lowlights:</p> <ul style="list-style-type: none"> • Regulatory application approved in 1 month • 57 days to drill vs planned 114 days with the use of new technology – Bi-Cone PDC bit • Completions delay due to mechanical issues • ~7 months between spud & production • Driller use of Riviere Road

Surface Casing Vent Flow (SCVF)

- A SCVF can result from several factors including a poor bond between cement and casing or through cracks or fissures in cement.
- For Burmis 2-24 Abandonment (just off Hwy 3 at North Burmis Road) – Shell is continuing to test for and address the SCVF; the test to be met is to have zero bubbles over a 10-minute time span.
- The well was drilled by Canadian 88 1998, and it was identified as a poor completion job at the time. Shell now take gas samples while drilling new wells and performs isotope testing so that in the future SCVF sources can be more accurately identified.
- Shell has “squeezed” the well at different points and also used sonic testing to identify the source of the gas.

- Shell is seeing improvements in the well, but may not have the issue completely resolved yet.
- The gas from this SCVF is from a sweet zone, although it is a sour gas well.
- After 7 squeezes moving up the well, the pressure of the gas reduced significantly with the 6th and 7th squeeze.
- Shell will now monitor to determine whether the SCVF is resolved or not.
- SCVF gas is not flared because there is typically not enough gas and not enough pressure; the objective is to eliminate the gas.
- Key rationale for eliminating the SCVF is safety, as the abandonment will be permanent.
- Q - How can it be assured that there is no leakage below the surface?
A. The path of least resistance is up through the vent and so if there is any leak, it should come up to the surface.
- The leak is below the surface casing and is below the aquifer.
- Shell is also using isotopes to track the depth for different types of gas.

Community Feedback

- WAG participants were invited to share feedback about Shell development work in the area. Comments included:
 - A resident noted that they appreciated a call about the abandonment work at Burmis;
 - Management of traffic has mostly been positive and handled well by Shell;
 - There were minimal issues with cow/calf operations even with the increased truck traffic;
 - Communication about traffic and the crew at the traffic trailer were excellent; and,
 - There was some tension with farm equipment coming back on the plant road.

Shell's Lessons Learned

- Shell provided an overview as follows of its lessons learned from recent development in the area:

Traffic Management <ul style="list-style-type: none"> • Coordination of multiple groups – Wells, Projects, Enersul, Operations, public, grazing association, etc. • Set clear expectations & consequences • Include in early planning 	Air Quality <ul style="list-style-type: none"> • Air monitoring trailer - capture baseline data • Share report – Quality Controlled data; stakeholders can pull raw data online
Early Engagement <ul style="list-style-type: none"> • Speed of delivery 	Regulatory Activities <ul style="list-style-type: none"> • 1 month approval vs many

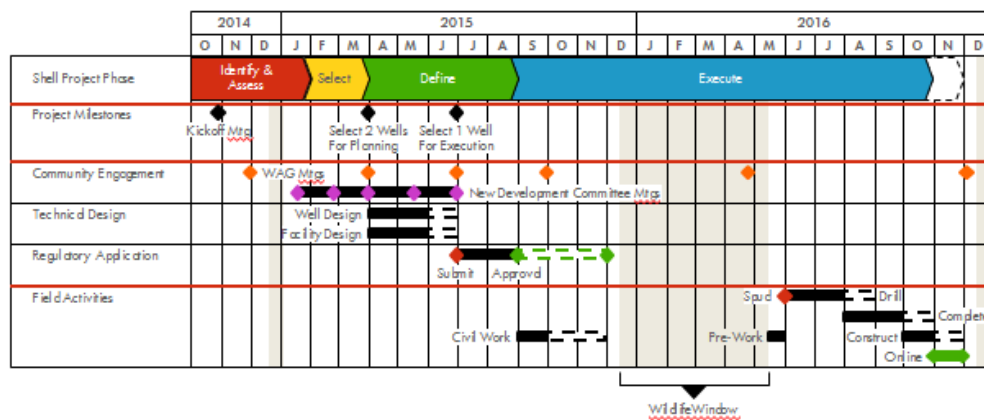
<ul style="list-style-type: none"> • Better understanding of stakeholder interests 	<ul style="list-style-type: none"> • High quality – recognized by AER
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- In addition, Shell appreciated cooperation from the public in having the public tell Shell about their own activities such as moving cattle.

Business Planning

- Shell is assessing options to profitably extend the end of field life in the Waterton area.
- The economic life of the field is dependent on operating costs and the market prices for the products.
- Increasing prices or decreasing costs may extend the economic life of a field and it becomes less certain further into the future.
- Additional drilling may increase the life of the field depending on costs.
- Shell is tentatively planning to drill a well again in 2016 and 2017; Shell will restart the New Development Subcommittee again to discuss the potential locations for the drilling.
- Shell continues to receive questions about cutbacks at the plant; Shell is trying to reduce the costs at the plant (10-15% in the past year) in order to reduce overall costs and extend the life of the field.
- Shell acknowledges the impact on the community and wants to extend the life of operations.
- Shell has met with the MD twice in the past six months to keep the community informed about Shell operations.
- A community member noted that the information would also be helpful for Town Council; Shell would appreciate the opportunity to meet with Town Council.

Waterton Drill 2016 – Notional Planning



Preferences

- Reuse of existing sites / infrastructure – Minimize Footprint
- Testing of wells to pipeline - limit flaring
- Most profitable wells – liquids focus

Considerations

- Resident Input
- Partner Input
- Commitment – No net increase in access

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- Potential locations – some possible locations in the south and north ends of the field; there are pros and cons to different locations, and there are more liquids in south end.
- With the New Development Subcommittee, Shell will start to look at locations in early 2015.
- Shell needs to get some production data from Waterton 77 to determine whether another well would be desirable in that area.
- Some of the possible well locations are on existing leases but not all; whether to drill on or off existing lease sites would be part of the discussion about trade-offs that needs to occur prior to making a decision.
- Shell remains committed to no new net increase in access to the area.
- Q - Could there be beneficial trade-offs for headwaters protection?
A - Possibly and that would not be in Shell's control.
- ***Anyone interested in joining the New Development Subcommittee to discuss Waterton drilling for 2016 is invited to contact Rod Sinclair or Karla Reesor.***

3. Operations Report

- Peter Argument reviewed operations for the field and the Waterton Complex for 2014.
- Integrity events – 1 to date in 2014; pinhole leak in methanol injection fitting weld; operator smelled an odour on a lease during routine

surveillance; line was shut down for a week, repaired and put back in service.

- Odour Notifications – 21 calls to date in 2014; 11 were confirmed as a Shell source; an increase in Q3 from one facility; Shell addressed the issue and there were no complaints so far in Q4 from that facility.
- Traffic Notifications – 13 complaints to date in 2014; 2 noise complaints were received and 11 complaints were received based on dust concerns. Shell worked with residents, the MD and reduced speeds to 30 km/h in some areas along with convoying the trucks to help mitigate the dust concerns.
- A resident noted that they appreciated Shell's responsiveness to a perceived air quality issue; it turned out there was an issue and it was not sourced by Shell, however, Shell staff were very helpful and responsive in addressing the issue.

4. Traffic Trailer Updates

- Rod Sinclair provided an update on the information collected at the traffic trailers.
- Two trailers – one at Seven Gates Road and one at the Shell Plant Road at Hwy 6 intersection.
- Recorded Data – 169 days recorded out of a possible 221 possible days; recorded data included: daily volumes, under 1 ton trucks, over 1 ton trucks, public traffic, Shell traffic.
- Waterton 77 activity to date (e.g. rig moves, completions trucking) – under 1 ton = 2032 and over 1 ton = 1974 for a total = 4006.
- Shell Plant Road – Total Volume = 47,416 (Shell = 37,159, non Shell = 10,257)
- Communication and coordination were key to minimizing traffic issues.
- Two incidents – crew van down the Riviere Road and a propane truck spun out on the hill up to plant.
- Challenges:
 - Dust;
 - Volumes with multiple Shell projects, 18 cattle drives, house and bridge moves (Shell installed kilometre markers for trucks to call in at each kilometre so that they were aware of others on the road).
- Successes:
 - Managed 47,416 trips without any safety issues;
 - Handled incidents as per Shell's commitments;
 - Captured data on Shell's impact to the community.
- Shell started to build a traffic management model in 2006 at Screwdriver Creek and relied on that experience for this project.
- Weekly integrated team meetings were also helpful in dealing with upcoming issues such as the cattle grazers coming on the land.
- Normal traffic volumes are predicted to resume by the end of January 2015.

5. Communication Update

- Emma Guppy provided an overview of Shell communication activities.
- Waterton Activity Updates (5 to date) have been provided by email to those who have expressed interest in receiving them.
- Updates have been provided every one to two months.
- The updates included project specific information about Waterton 77 and Waterton 68, general plant updates and reclamation updates (e.g., since 2004, Shell has remediated and reclaimed six well sites and two facilities in the Waterton area).
- WAG participants noted that they appreciate receiving the updates every month or two.
- Shell needs to receive an “OK” from people to continue to send the updates (to comply with anti-spam legislation).
- Updates will start again in January 2015.

6. WAG Participant Updates

Residents

- A question was raised about breaches past the Alberta Environment and Sustainable Resource Development (ESRD) gates on the front canyons.
- Shell indicated that there were five breaches through locked gates in 2014.
- Concern from resident regarding cattle polluting lake at head of Carpenter Canyon. This is not Shell’s jurisdiction. SRD requires cattle fencing to be in place for Blue Lake and every effort is made by grazing permit holders and ESRD to deal with any issues that arise.
- A resident noted that they received a call about an audit on reclamation for Waterton 9. The Alberta Energy Regulator (AER) now initiates the audits.
- A resident noted that Shell has provided funding in support of many community initiatives however organizations such as the Joint Council and Family and Community Support Services (FCSS) are looking for potential support from Shell to offset their 91k shortfall for 2014.

Southwest Alberta Sustainable Community Initiative (SASCI) – David Green

- Foothills Restoration Forum held a session in Claresholm in the fall.
- SASCI is seeking a coordinator.

SASCI/FCSS – David Green

- SASCI and FCSS are working together to hold round table discussions between January and June 2015. The purpose of the discussions will be to build a volume of knowledge and stories that will inform municipal government, companies, schools and the community about priorities for the area. The result will be a strategic document that will support citizens in owning the process and implementing outcomes.

Oldman Watershed Council – Connie Simmons

- The Headwaters Action Plan is moving to the implementation phase.
- Three indicators of headwaters health are being addressed as follows:
 - Presence and abundance of fish;
 - Density of linear features; and,
 - Aquatic invasive species.
- The Oldman Watershed Council would appreciate the opportunity to talk with Shell about areas of potential mutual interest.

Alberta Energy Regulator (AER)

- The AER is approximately a year old and has now completed its phased implementation approach.
- Several agencies were regulating at different points in the lifecycle for oil and gas including the Energy Resources Conservation Board (ERCB), aspects of Sustainable Resource Development and Environment. Through the Regulatory Enhancement Project, they were amalgamated to form the AER.
- All applications are now posted on the AER website.
- AER looks after all upstream oil and gas activity.
- AER is now working on transformation by looking at internal systems and processes to try to make improvements.
- Behn Morris will be the AER representative for WAG.