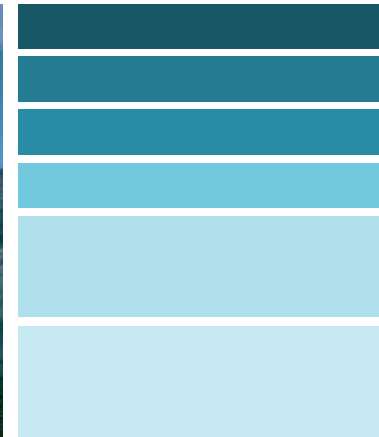


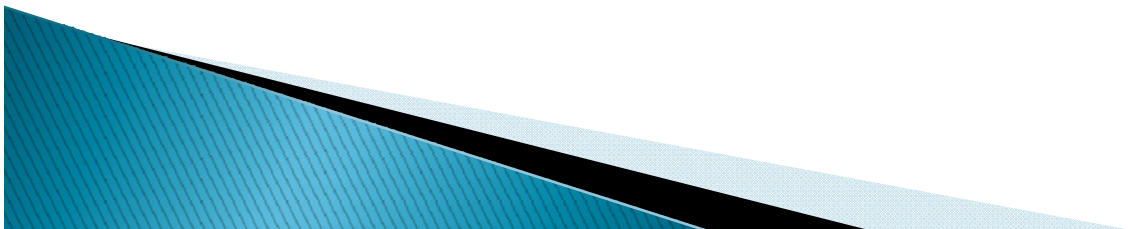


Screwdriver Creek Valley RWDI Air Study Recommendations: Shell Update – Oct 2013



Shell Update on RWDI Air Study Recommendations

- ▶ As discussed at the September 2012 WAG meeting, and as per the December 2012 RWDI Final Report, nine recommendations were made to Shell.
- ▶ Shell has committed to implement all of the RWDI recommendations.
- ▶ The following slides provide an update on Shell's progress to date.



Recommendations #1 & 2



Plan

- Establish a new meteorological and continuous air quality monitoring station properly sited within the Screwdriver Creek Valley (SCV). The utility of this station will be evaluated after one year.

Status Update

In Progress

- Shell and RWDI met with SCV residents in July 2013 to ground-truth potential site options.
- The RWDI Siting Study has now been completed.
- Shell solicited quotes from vendors and selected AGAT Labs to supply the rental station and associated services.
- The station has been prepared, and Shell is currently working on land agreements, access road development, and electrical hookups for the station.
- The new station should be installed by end of Q4 2013.
- After one year, Shell will evaluate the station utility.

Recommendation #3



Plan

- Install perimeter H₂S monitors at six sites within the SCV (including WAT Junction, TX 5-20, TX 6-17, WT-61, WT-68, and CA 6-12).

Status Update

In Progress

- This is a longer-term initiative that will involve equipment procurement, contractor site visits, electrical tie-ins, SCADA connections, etc.
- Shell has reviewed technology options/equipment suppliers and is currently engaging with Protek to setup an initial pilot test program for the perimeter monitoring at WT-68.
- Shell will have new perimeter monitors up and running at WT-68 before production of the well begins in 2014.

Recommendation #4



Plan

- Consider relocating the existing DAP unit to locations downwind of sites where flaring activities are taking place, or not use the units at all.

Status Update

- Shell is presently working to get the new continuous station established, and will keep the DAP unit as-is until the new station is fully setup and operational (end of Q4 2013).
- Depending on stakeholder interest, Shell may consider keeping the DAP unit in SCV after the new monitoring station is setup.

Recommendation #5



Plan

- Participate in any future regional ambient air and environmental monitoring networks.

Status Update

Complete

- Shell will be open to support airshed initiatives in the future as PAS, federal, and/or provincial governments are ready to move forward.

Recommendation #6



Plan

- Post any new continuous H₂S, SO₂, and meteorological measurements from the SCV to a shared website for public internet access and have the ability to generate summary reports.

Status Update

In Progress

- Shell will ensure the new continuous station data is publically available, and that summary reports are provided through WAG.

Recommendation #7



Plan

- Summarize and make public the results of historical monitoring readings in the SCV area from 2008 onwards.

Status Update Complete

- Shell setup and hosted an FTP site with historical data, which was presented at the June 2013 WAG meeting.
- Please contact Shell with any questions.

Recommendation #8



Plan

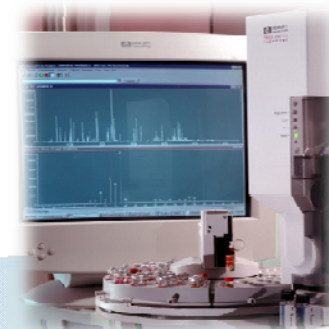
- Provide a public tour of the Shell Waterton Complex ambient station(s) and Control Room with demonstration of monitoring and alarm systems.

Status Update

In Progress

- Shell is planning a public tour for November, 2013.
- The tour will contain a brief visit to the Waterton Complex control room, and a visit to a nearby existing continuous air monitoring station.
- AGAT Labs will be present to discuss the operation and maintenance of the analyzers.
- For those interested in attending, please connect with Rod Sinclair 403-627-7282.

Recommendation #9



Plan

- Undertake a one-time ambient survey of common VOC's such as BTEX compounds at three well sites in the SCV, at upwind and downwind locations on the lease boundaries.

Status Update

Complete

- Results were presented at the June 2013 WAG meeting.

Ongoing/Upcoming Work

- ▶ Shell will continue to provide regular updates via the WAG meetings as these initiatives move forward.
- ▶ For full details on each of the recommendations outlined herein, refer to the RWDI (December 2012) report.

