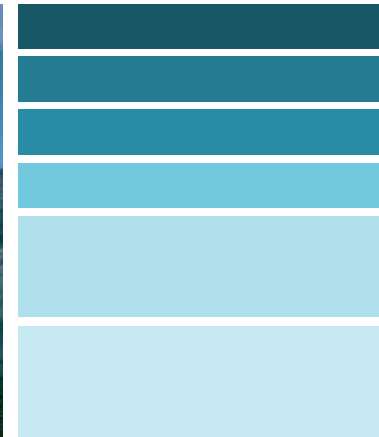


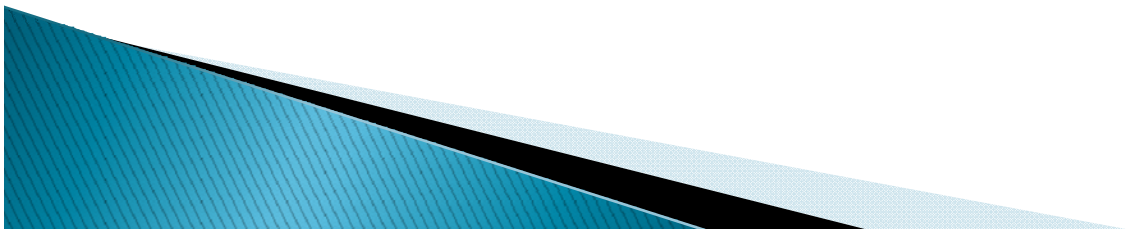


# Screwdriver Creek Valley RWDI Air Study Recommendations: Shell Update – May 2013



# 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 within the Screwdriver Creek Valley (SCV). The utility of this station will be evaluated after one year.

## Status Update

In Progress

- Shell is working with RWDI on a Siting Study for the new station.
- The Siting Study will consider Air Monitoring Directive criteria, power/land access, emissions, dispersion, and meteorology in the area.
- The Siting Study should be completed by Q2/Q3 2013
- The new monitor should be installed by end of Q4 2013.
- After one year, Shell will evaluate the station utility.



# Recommendation #3



## Plan

- Establish H<sub>2</sub>S perimeter 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

- Shell is presently reviewing technology options and equipment suppliers (there are many different types/makes/models of monitors available).
- This is a longer-term initiative that will involve equipment procurement, contractor site visits, electrical tie-ins, SCADA connections, etc.
- Shell expects new perimeter monitors could be up and running within a pilot test program site by early 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).

# 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 H<sub>2</sub>S, SO<sub>2</sub>, and meteorological measurements from the SCV to a shared website for public internet access.

## Status Update

- Shell will ensure the contractor operating the new continuous station makes the data public, and that summary reports are available 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's historical data is now available via a public website at: <ftp://ftp.envision.rwdiair.com/>
- Enter Username: **Shell Waterton**
- Enter Password: **Reports**
- Select all files, right click, and "Copy to Folder" to save the files to your computer. The FTP site will be available until the end of June.



# Recommendation #8



## Plan

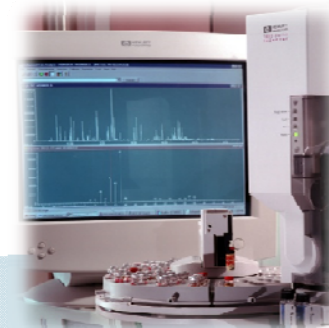
- Provide a public tour of the Shell Waterton Complex ambient station(s) and Control Room with demonstration of monitoring and alarm systems.

## Status Update

In  
Progress

- Shell is planning a public tour for Q3 2013.
- More information on the date/time/details will be made available through WAG shortly.

# 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

- RWDI completed a survey of common VOCs around Shell's operations at Texaco 5-20, 6-17, and 6-12.
- Two surveys were completed by RWDI (field down vs field in operation), one in Oct 2012 and another in Dec 2012.
- Results were analyzed independently by Maxxam Analytics.

# Recommendation #9 *(cont'd)*

## Results

- Measured values were very low, with a majority of samples being non-detectable.
- There were no significant upwind vs downwind differences in the samples.
- All measured values were much lower than their applicable AAAQO (including BTEX, hexane, styrene; several other VOCs were also evaluated by Maxxam, most of which were found to be non-detectable).
- The complete RWDI report is available for anyone interested in receiving a copy.



# Ongoing/Upcoming Work

- ▶ Shell will continue to provide regular updates via the WAG meetings as these initiatives move forward.

