



CCQTA Update for COQA meeting

Randy Segato

Thursday Oct 27, 2011

Tulsa OK





Agenda

1. Project summaries by technical area
2. Project execution practices
3. Active project matrix by participants
(**Example and focus on H2S**)
4. Joint Meeting reminder



CCQTA Background

The Canadian Crude Quality Technical Association membership consists of companies from multiple segments of the Canadian oil industry. The Association is established with the following educational and scientific objectives:

- To facilitate communications among industry stakeholders
- To provide a forum for the presentation and consideration of proposals for industry projects related to any aspect of crude oil quality.
- To improve industry knowledge and awareness of crude oil quality through the cooperative exchange of technical information among industry sectors.

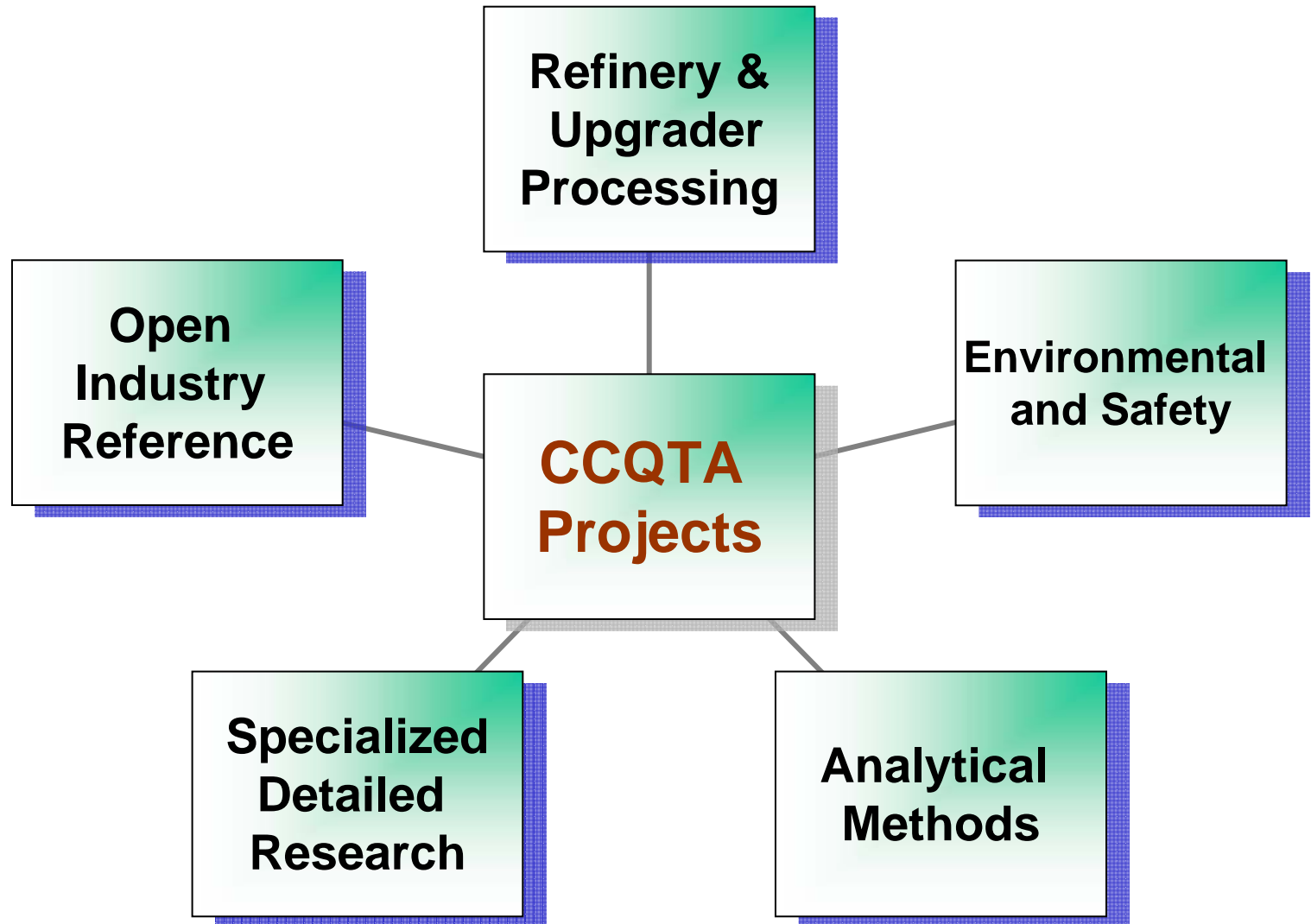


CCQTA Background

- CCQTA does not typically fund projects, but acts as a facilitator for projects
 - Provides meeting venues, phone and web-conferencing support, and third party accounting to project groups
- CCQTA currently has 57 member companies



CCQTA technical areas





CCQTA technical areas

Refinery & Upgrader Processing

CCQTA Projects

- Oils Sands Processability (Phase 1 complete, Phase 2 active)
- Emulsion Characterization (active)
- Phosphorus (active)
- Crude Compatibility (active)
- Condensate Quality (active)
- Additive Screening (complete)
- Iron Fouling (complete)
- Heavy Oil BS&W (complete)
- Online Contamination (complete)
- Tank Cleaning (complete)

- General focus of CCQTA is still Refinery centric
- Upgrading and Refinery commonality being considered



CCQTA technical areas

Environmental and Safety

CCQTA Projects

- Hydrogen Sulfide(H₂S) in Crude (Field Analyzer)
- Hydrogen Sulfide(H₂S) usage (in Industry)
- Emulsion Characterization

- Some above gaining visibility
- Some issues not so much new but needing a standard in a new interpretation
- bridging the measure into something to be applied by industry



CCQTA technical areas

Analytical Methods

CCQTA Projects

- H₂S in Crude Field Analyzer (field standard in development)
- Phosphorus in crude (definitions)
- TAN Phase 1 (method for Bitumen)
- Heavy Oil Methods
- Proton NMR Olefins Method for Crude
- Additive Screening

- Some newly developed for Canadian crude but can be applied to wider industry
- Some are now standards where none previously existed



CCQTA technical areas

Specialized Research

CCQTA Projects

- Tan Phase 2 (complete)
- Tan Phase 3 (complete)
- Tan Phase 4 (active)
- Parts of Oil Sands Processability (active)
- Parts of Crude Compatibility (active)

- Leverage Research Specialists
 - > AITF, CANMET, Universities
- Leverage Lab and Company Specialist
 - > MAXXAM, desalting & chemical service specialists



CCQTA technical areas

**Open
Industry
Reference**

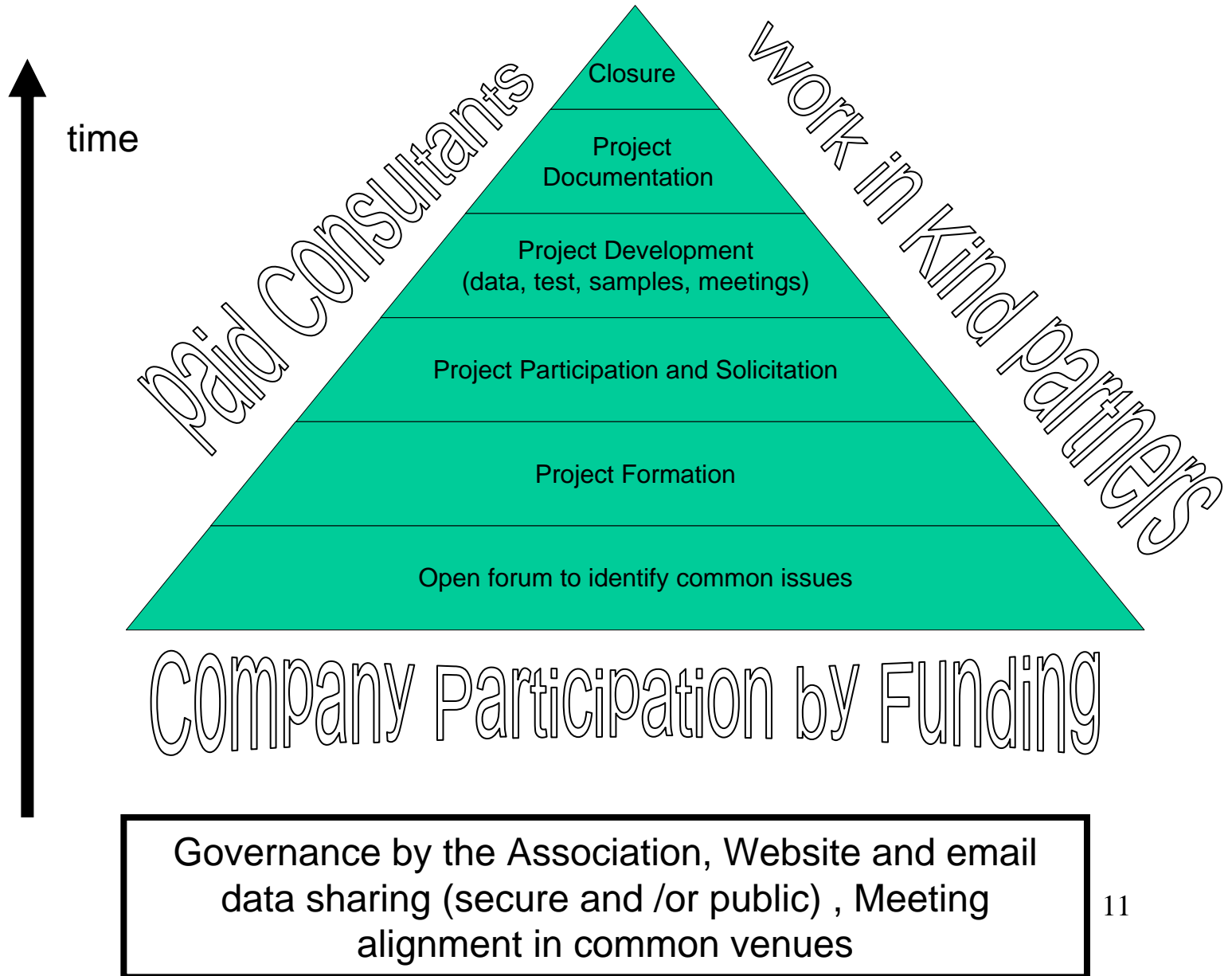
**CCQTA
Projects**

- Crude Quality Tutorial (new)
- Bitumen Dewatering (new)
- Crude Shrinkage (new)
- TAN method (the sequel to Phase 1!)
- Condensate Quality

- generally funded by CCQTA and made available to public or just members
- increasing scope in recent years to gain industry alignment on key quality measures and use in industry



CCQTA project execution





CCQTA project membership

	TAN Phase 4	Oil Sands Processability 2	Emulsion	Phosphorus	Heavy Oil Compatibility H2S	Condensate Quality	Dewatering and Shrinkage
AITF		X	X		X	X	
Astra Energy					X		
Baker Hughes		X	X	X	X		
BP	X			X			
Cameron		X			X		
CanmetEnergy	X	X			X		
CCS				X			
Cenovus	X		X		X	X	X
Champion		X					
Chevron	X		X	X	X		
CITGO			X	X			
Coffeyville Resources					X		
ConocoPhillips	X	X	X	X	X	X	
Crude Quality Inc					X		
Devon		X				X	
Enerchem				X			
Flint Hills Resources	X		X	X			
GE			X				
Gibsons				X			
Haliburton				X			
Imperial Oil	X			X		X	
Inspectorate					X		
ITS Caleb Brett				X		X	
Keyera						X	
Kinder Morgan					X		
Marathon		X			X		
Maxxam Analytics				X	X	X	
MEG Energy					X		
Newalta				X			
Nalco		X					
NCRA	X	X					
Nexen	X						
Omnicon Consultants	X	X	X	X	X	X	X
Pall Filters			X			X	
PetroBras	X				X	X	
Provident						X	
Shell	X		X		X	X	
Stanhope-Seta						X	
Statoil	X		X				
Suncor Energy	X	X	X	X	X	X	X
Tesoro				X			
Total	X	X		X	X		
Transport Canada					X		
Valero					X		
XOS				X			



H₂S In Crude Measurement

Project Overview

- Project goal is to adapt and validate an existing method (IP 570) to accurately measure both liquid and vapor phase H₂S in crude petroleum
- Testing will focus on a comparison of existing H₂S measurement methods (ASTM D5705, UOP163, and ASTM D5623) to an adaptation of test method, IP 570
 - COQA participants include: Inspectorate, Baker Petrolite, Coffeyville Resources, Valero, Suncor and ConocoPhillips



H₂S In Crude Measurement

Request for Samples

- Crude petroleum samples (H₂S ≤ 100 ppm) are required for final instrument proofing and H₂S methods comparison
- All samples to be collected using AITF testing protocol (see attached)
- Samples will be renamed prior to reporting to maintain anonymity

**Testing to be performed at AITF in
Edmonton, AB – November 21, 2011**



CCQTA/COQA Joint Meeting



Will have normal Joint Agenda...

- Tue Jun19 CCQTA focus
- Wed Jun20 COQA format
- Thu Jun21 Golf Outing

...80 rooms planned

...online booking open shortly

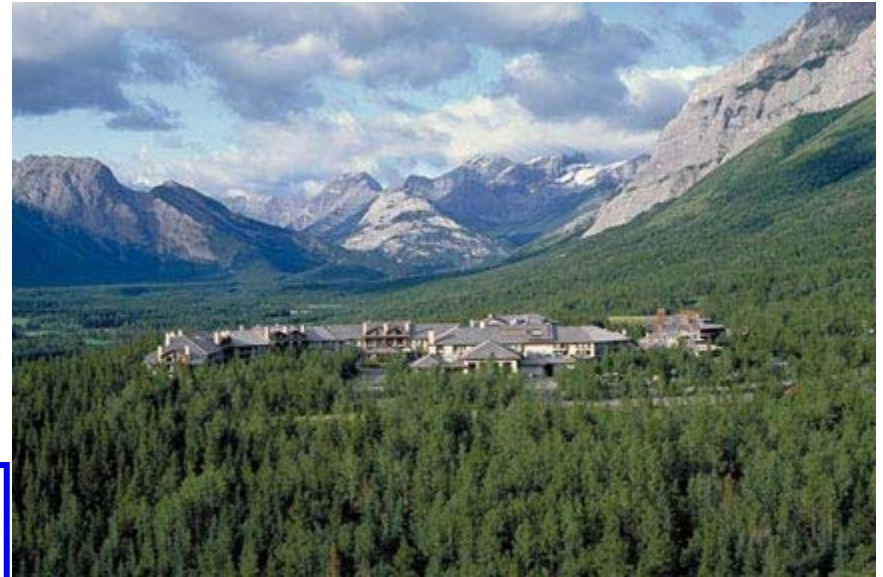
...seeking sponsors ☺



Contact

Randy Segato – CCQTA VP

- Ph: 403.296.4561
- Email: rsegato@suncor.com



Date: Scheduled for week of June 18th 2012

Location: Kananaskis Resort – located 90 km/50mi west of Calgary

