Beyond IRP 21: What are the Implications for the Coiled Tubing Service Industry?

2011 ICoTA Roundtable
Regulation in General

- New regulation is always more prescriptive than the old one
- Regulation born out of an incident is generally excessive
- Canada is moving towards European style legislation
- Politicians will always play to the crowd
- Often the regulators do not understand what we do
- Regulation costs money

Imagine what would happen if the situation on the next slide happened today
Why Are There IRPs?

• Lodgepole blowout in 1982 was the main reason for IRP1

Blowout during drilling operation
2 died, 16 hospitalized
50 to 150 MMSCF/day sour gas release (28% H₂S)
2000-3000 m³/day condensate
280,000 tons of sour gas released
Blowout lasted 68 days, 23 of which the gas was not ignited
Reports of sour gas smell in Winnipeg (1500 km away)
This incident followed a blowout in the area 5 years earlier
Who Issues IRP’s?

- Drilling and Completions Committee (DACC)
Who Issues IRP’s?

• If DACC can’t agree, what happens?

For any vote:

• At least 50% of members must be present
• Teleconference attendance is acceptable
• 75% of those present (including teleconference) must vote yes
• If ERCB or CAPP vote no, proposal is returned to sub-committee for further review and resolution
Why Write An IRP?

- Must be requested by one of the members

- A rationale must be presented
  - Why required, purpose/scope, benefits, cost, risks, impact

- Often a consequence of an incident

- IRP21 was written to ensure ‘they’ did not write the document
Do I Need to Follow An IRP?

• OHS general policy is that in the absence of any specific policy/procedure, they will take the IRP as the minimum standard that should be met.

• Ignorance is not an excuse.

• Just following IRP21 is not enough, other IRPs may be relevant to your operation.

R. v ----- Well Service, 2009 ABQB 1

‘If there is systemic confusion in an industry, it is the responsibility of the employer to deal with that confusion, and resolve it for its workers’
How Many IRPs Are There?

IRP Vol. 1  Critical Sour Drilling
IRP Vol. 2  Completing and Servicing Critical Sour Wells
IRP Vol. 3  Heavy Oil and Oil Sands Operations (being re-written as In Situ Heavy Oil Operations)
IRP Vol. 4  Well Testing and Fluid Handling
IRP Vol. 5  Minimum Wellhead Requirements (currently under review)
IRP Vol. 6  Critical Sour Underbalanced Drilling
IRP Vol. 7  Standards for Wellsite Supervision of Drilling, Completion and Workovers
IRP Vol. 8  Pumping of Flammable Fluids
IRP Vol. 9  Basic Safety Program
IRP Vol. 10  Return to Work
IRP Vol. 11  Dangerous Tree Control
IRP Vol. 12  Hand Signals for Directing Vehicles
IRP Vol. 13  Slickline Operations
IRP Vol. 14  Non Water Based Drilling and Completion/Well Servicing Fluids
IRP Vol. 15  Snubbing Operations
IRP Vol. 16  Basic Safety Awareness Training
IRP Vol. 17  Ground Disturbance and Damage Prevention
IRP Vol. 18  Fire and Explosion Hazard Management
IRP Vol. 20  Wellsite Design Spacing Requirements
IRP Vol. 21  Coiled tubing Operations
IRP Vol. 22  Underbalanced and Managed Pressure Drilling Operations Using Jointed Pipe
IRP Vol. 23  Lease Lighting Standards (NOT APPROVED AT THIS TIME)

Available on Enform Web site (http://ww2.enform.ca/safety_resources/IRP.aspx)
What is ICoTA’s Role?

- ICoTA are also involved in the acceptance of other IRPs
- Voting member on the DACC subcommittee
- Remember IRP21 is not the only IRP CT needs to follow
- Represent the interests of coiled tubing and intervention
What is ICoTA’s Role?

• ICoTA were the driving force behind IRP21

• Attempted to get feedback from members as IRP21 progressed.

• All of the concerns raised were addressed although not always with the hoped for outcome
What Has Happened in 2011?

• Entire DACC rationale and Terms of Reference being reconsidered

• Some members reconsidering their voting member status

• All IRPs were evaluated to confirm they met the intent of the IRP process

An IRP is defined as a set of best practices and guidelines to conduct operations in a safe and technically acceptable manner. They must be developed to meet, or exceed, the minimum intent of the applicable legislation in each member's jurisdiction.
Recent Changes

IRP Vol. 3  Heavy Oil and Oil Sands Operations
Completely revised and retitled In Situ Heavy Oil Operations

IRP Vol. 4  Well Testing and Fluid Handling
Revised to contain a section on Propane flowback

IRP Vol. 5  Minimum Wellhead Requirements
Old IRP completely revised
What Changes Are Coming?

- All the current IRPs have been evaluated to see if they pass the test as an IRP.

- Some of the current IRPs will be re-designated as work practices or guides.
What Changes Are Coming?

The reclassification of following from IRPs to another format is being considered

IRP Vol. 7  Standards for Wellsite Supervision of Drilling, Completion and Workovers
IRP Vol. 9  Basic Safety Program
IRP Vol. 10 Return to Work
IRP Vol. 11 Dangerous Tree Control
IRP Vol. 12 Hand Signals for Directing Vehicles
IRP Vol. 16 Basic Safety Awareness Training
IRP Vol. 17 Ground Disturbance and Damage Prevention
IRP Vol. 18 Fire and Explosion Hazard Management
IRP Vol. 23 Lease Lighting Standards

IRP 10 already reclassified as a Guideline. Others may be Guidelines, Work Practices, etc.
What Changes Are Coming?

IRP Vol. 4 Well Testing and Fluid Handling

Proposal to replace the current Open Cup Flash Point requirements with a Closed Cup Flash Point

IRP6: Critical Sour Underbalanced Drilling

Although there is currently little to no Critical Sour UBD the value of the IRP is recognized. Current plans are to investigate incorporating IRP6 into either IRP1: Critical Sour Drilling or IRP 22: Underbalanced and Managed Pressure Drilling Operations Using Jointed Pipe.

Will likely be rolled into IRP1 and the CT sections removed as they are covered in IRP21
What Changes Are Coming?

IRP 14     Non Water Based Drilling and Completion /Well Servicing Fluids

May in future contain information on Exposure Control and Exposure Monitoring, initially with regard to invert vapours but it will probably not stop there

IRP 15     Snubbing Operations

Re-opened to address concerns with the Equipment Inspection Checklist

IRP 23     Lease Lighting Standards

Designed to provide guidelines on ‘adequate’ lighting standards. Unlikely to be an IRP
What Changes Are Coming?

API RP16ST: CT Well Control Equipment Systems

PC3 Well MASP 3501-7500 psi (24138 – 51710 kPa)

Returns through tree

Returns through flow T
What Changes Are Coming?

API RP16ST: CT Well Control Equipment Systems

<table>
<thead>
<tr>
<th>Pressure Category (PC)</th>
<th>MASP Range (Maximum Anticipated Surface Pressure)</th>
<th>Minimum Rated WHP of Stack</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>3000 psi</td>
</tr>
<tr>
<td>1</td>
<td>1 – 1500 psi</td>
<td>3000 psi</td>
</tr>
<tr>
<td>2</td>
<td>1501 – 3500 psi</td>
<td>5000 psi</td>
</tr>
<tr>
<td>3</td>
<td>3501 – 7500 psi</td>
<td>10000 psi</td>
</tr>
<tr>
<td>4</td>
<td>7501 – 12500 psi</td>
<td>15000 psi</td>
</tr>
</tbody>
</table>

PC0 is a well incapable of unassisted flow to surface as per the local agency guidelines.
How Can I Change Things?

- All draft IRP’s are placed on Enform website for a couple of months for comment
- Read the IRP, make constructive comments, suggest alternatives
- ICoTA can vote NO on the DACC Committee
- Inform ICoTA via E Mail or personal contact about your concerns
- Don’t wait until after the IRP is approved!!!

If all else fails join the IRP committee or sub-committee and fight for what you think is right
Summary

• We can help develop regulation to ensure it provides safety and security for all stakeholders without excessive requirements.

• We need to focus on being positive and coming up with practical solutions to the ever changing working environment.

• Government and the public need to know that we are committed to the safety of everyone involved in our business and the environment.

• YOU need to read all draft IRPs during the consultation process and let us know what you think.
Summary

• Do not wait until IRP is approved before you raise concerns!

• Some changes likely this year to the DACC sub-committee

• Likely that most/all provincial OHS regulators will stop sanctioning IRPs but will continue to provide input/comment.
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Questions?