Tele-conference **Prepared By**: Bob Travers

Attendees: Steve Rapp, Gary Vervake, Mark Davis, Andy Drake, Bob Travers, Rick Kivela, Kenny Fletcher, Mario Tavolieri, Gary Dial,

Quince Och, Keith Wamsley, Larry Shed, Jerry Crafton

Objective:

Location:

Kick-off meeting of the Pipeline Integrity Oversight Committee.

Agenda Items:

Review goal of the oversight committee

- Setting standard agenda items for future PIOC meetings
- Summary of DOT-OPS Protocol Workshop
- Status of investigations/follow-up activities template for future reviews
- Dent Management Plan and other SOP revisions
- Environmental permitting for "immediate" anomalies
- Leak survey odorized locations; calibration of equipment
- Internal Corrosion liquid sampling / O&M project
- Discuss current problems with ProActive and what we are doing about it
- Anomaly contingency work order
- Training (IMP, SOP, HCA/CLR)
- Completion of 2004 IMP metrics (required by OPS on 2/28/05)
- Diagrammatic Procedures
- Contract employee support at divisions
- STIP goals

Meeting Date: 01-24-05 Meeting Time: 9AM – 11AM CST

Location: Tele-conference **Prepared By**: Bob Travers

Attendees: Steve Rapp, Gary Vervake, Mark Davis, Andy Drake, Bob Travers, Rick Kivela, Kenny Fletcher, Mario Tavolieri, Gary Dial,

Quince Och, Keith Wamsley, Larry Shed, Jerry Crafton

Key Topics and Issues Discussed

Agendas and minutes for the committee meetings will be coordinated by Bob Travers

- OPS Protocol Workshop
 - Documentation will be critical to success of the IMP
 - o Continue using current forms and procedures new ones will be rolled-out as completed
 - Provide FAQ list to the division contacts
- Investigations and follow-up activities
 - Bob Travers will provide template/format for typical follow-up investigations
 - o There is a need to re-focus efforts on to the follow-up work related to the Mississippi River leak
- The issues log (a.k.a. the "parking lot") needs to compiled and distributed to the committee members
 - o Any Division specific issues logs should be rolled-in to the bigger list so we all have one
 - o We need to add to the parking lot the issue of establishing a procedure for rolling-up metrics from the field
- Immediate anomalies
 - o Fast track permitting is in place for "immediate" anomalies in HCA's but should be expanded to non-HCA's
 - o Work can be contracted without having to go through the normal bidding process
- In-line Inspection
 - We need to form a group to define methodology and guidance for selection of geometry tools to be run in conjunction with MFL tools
 - we should arrange for PII to give us dent depth readings right in the report for any possible dents with metal loss identified by the MFL tool
- Use expense job to capture costs for internal corrosion liquid sampling
- Steve Rapp reviewed the content of the Dent Management Plan with the committee and some revisions were made

Meeting Date: 01-24-05 Meeting Time: 9AM – 11AM CST

Tele-conference **Prepared By**: Bob Travers

Attendees: Steve Rapp, Gary Vervake, Mark Davis, Andy Drake, Bob Travers, Rick Kivela, Kenny Fletcher, Mario Tavolieri, Gary Dial,

Quince Och, Keith Wamsley, Larry Shed, Jerry Crafton

2004 IMP metrics need to be collected for submittal to OPS

- Rod Rheaume, Keith Wamsley, and Stan Johnson will serve as the coordinator for IMP metrics within their respective divisions
- Completion of remaining MSD's was discussed Rick Kivela and the DTO's will get together to determine next steps
- Integrity related STIP goals were discussed all applicable employees working on integrity management activities will likely share the same goals
- Andy Drake discussed setting-up meetings with the various OPS Regional Directors division representatives can attend these meetings

Upcoming Dates:

Location:

Next meeting scheduled for Wednesday, February 16, 2005; Houston Office

Meeting Date: 01-24-05 Meeting Time: 9AM – 11AM CST

Houston Office Prepared By: Bob Travers

Attendees: Mark Davis, Andy Drake, Bob Travers, Rick Kivela, Kenny Fletcher, Bobby Arnold, Mario Tavolieri, Gary Dial, Quince Och, Keith

Wamsley, Larry Shed, Jerry Crafton, Ron Haggerty

Objective:

Location:

Meeting of the Pipeline Integrity Oversight Committee.

Topics and Issues Discussed

Attorney-client privilege of documents related to incident investigations

Reporting of Abnormal Operating Condition Reports, Potential Safety Related Condition Reports, Safety Alerts

- AOC > Telephone notification to Dwayne Teschendorf for interpretation questions and send copy of 7T-5 and 7T-6 to Rick Kivela
 - SOP will be revised to show that Division completes the 7T-6 Form
- PSRC > Telephone notification to Dwayne Teschendorf for interpretation questions and send copy to Rick Kivela
- Safety Alerts > Continue with current practice and look into automatic electronic distribution of the reports
- It was agreed that all new reports will be reviewed at each Pipeline Integrity Oversight Committee meeting as a standing agenda item

Incident Reporting – Rick Kivela asked that the Divisions remember to notify Dwayne Teschendorf as soon as possible after any potential incidents

 It was discussed that Division's should continue to make courtesy calls to local DOT representatives after some events but Houston Operational Compliance should be notified of the communication

Meeting Date: 02-16-05

Meeting Time: 8AM - 5PM CST

Location: Houston Office **Prepared By**: Bob Travers

Attendees: Mark Davis, Andy Drake, Bob Travers, Rick Kivela, Kenny Fletcher, Bobby Arnold, Mario Tavolieri, Gary Dial, Quince Och, Keith

Wamsley, Larry Shed, Jerry Crafton, Ron Haggerty

Incident/Event Investigations

 Any member of the committee can launch a review or investigation - the results of which should be brought to the Pipeline Integrity Oversight Committee for review and discussion about what further action might be necessary

- Incident investigation training needs to be added to our parking lot list
- We need to develop a one-pager guide for routine investigations

Auditing Strategy

A discussion was held regarding possible ways to implement a different approach to auditing the Area locations. Further
discussion will be held in the future as we better define the scope of new forms and new procedures.

Stopple Procedure

Alan Lambeth reviewed the new stopple procedure and discussion was held regarding the use of stopples on the DEGT system.
 It has been decided that stopples will be allowed but all proposed installations will be reviewed and approved by the Pipeline Integrity Oversight Committee prior to being installed.

New SOP's

Reviewed diagram displaying how some of the new SOP's will be grouped. Various SOP's will exist for the different types of integrity assessments (i.e. ILI, ECDA, ICDA, hydrotest, etc...). An SOP is being prepared to provide guidance on reviewing and documenting ILI results. This SOP will also provide guidance for scheduling anomaly investigations. Other groups of documents will cover such issues as defect assessment and repair methods. Much of the material for these SOP's exists in current SOP's but will be reformatted and rearranged to be more user-friendly.

Meeting Date: 02-16-05

Meeting Time: 8AM - 5PM CST

Meeting Date: 02-16-05 Meeting Time: 8AM – 5PM CST

Location: Houston Office **Prepared By**: Bob Travers

Attendees: Mark Davis, Andy Drake, Bob Travers, Rick Kivela, Kenny Fletcher, Bobby Arnold, Mario Tavolieri, Gary Dial, Quince Och, Keith

Wamsley, Larry Shed, Jerry Crafton, Ron Haggerty

Regional Meetings with DOT/OPS

o The following dates have been set with the different regions to meet and discuss our program and baseline assessment schedules

- Atlanta March 8, 12:30
- Washington, D.C. May 19, 1:30
- Kansas City and Houston have not been scheduled yet

Parking Lot

 The various issues in the parking lot list were reviewed and discussed. Some adjustments and additions were made. Updated version will be distributed

Upcoming Dates:

o Next meeting scheduled for Tuesday, March 15, 2005; teleconference

Pipeline Integrity Oversight Committee Meeting Date: 03-15-05

Meeting Time: 8AM - 11AM CST

Location: Tele-conference **Prepared By**: Bob Travers

Attendees: Bob Travers, Stan Johnson, Jerry Crafton, Mario Tavolieri, Kenny Fletcher, Steve Rapp, Rick Kivela, Mark Davis, Larry Shed,

Andy Drake, Quince Och, Gary Dial, Keith Wamsley

Objective:

Scheduled PIOC teleconference

Key Topics and Issues Discussed:

· Reviewed current safety alerts

- Reviewed AOC reports
- In follow-up to the discussion about the Line 11-G AOC, a discussion was held concerning the typical historical causes of overpressure
 events
- Rick Kivela reviewed the NOPV that was received from OPS
 - NOPV included findings for overpressure events and for right of way maintenance
- Bob reviewed changes to the Elapsed Time Guidelines
- Stopple Use
 - Discussed stopple use this summer during construction on the Boyd's Creek to Fordtown discharge
 - Gary Dial was going to follow-up with GPB regarding this year's planned activity
- Misc. projects (cross-over inspections, shorted casing remediation, and SCCDA)
 - o Cross-over investigation SOP is needed to better define the scope
 - o Shorted casing remediation more technical direction is needed; possible need for a guideline
 - o SCCDA divisions are asking for better description of the work that needs to be done
- Genscape review
 - Time did not allow for review of the Genscape review. It was agreed that Bob would send the report out and the team would review it prior to the next meeting.

Pipeline Integrity Oversight Committee Meeting Date: 03-15-05

Meeting Time: 8AM - 11AM CST

Tele-conference Prepared By: Bob Travers Location:

Bob Travers, Stan Johnson, Jerry Crafton, Mario Tavolieri, Kenny Fletcher, Steve Rapp, Rick Kivela, Mark Davis, Larry Shed, Andy Drake, Quince Och, Gary Dial, Keith Wamsley Attendees:

Action Items:

	Owner	<u>Item</u>	Due Date
1.	Kivela	What is the code standard for acceptable vegetation/growth on a right of way	Prior to next meeting
2.	Kivela	Follow-up on overpressure events – determine if/where action is needed	No date set
3.	Dial	Discuss stopple use on ETNG w/ GPB	No date set
4.	Travers	Distribute Genscape report	Prior to next meeting
5.	Tavolieri, Och, Crafton	Notify Bob Travers of any needed adjustments to SCCDA budget	Prior to next meeting
6.	Travers	Determine if test lead installation is capital	Prior to next meeting

Upcoming Dates:

Next teleconference - May 20, 2005

Pipeline Integrity Oversight Committee Meeting Date: 05-20-05

Meeting Time: 10AM – 12PM CST

Location: Tele-conference Prepared By: Bob Travers

Attendees: Ron Haggerty, Stan Johnson, Larry Shed, Stephen Lee, Mario Tavolieri, Kenny Fletcher, Rick Kivela, Mark Davis, Andy Drake,

Quince Och, Gary Dial, Bob Travers,

Objective:

Scheduled PIOC teleconference

Key Topics and Issues Discussed:

Reviewed previous minutes and outstanding items

- Kenny Fletcher provided an overview of the event at Bedford Station on 5/17/05
 - Andy Drake and Mark Davis offered assistance in arranging a consultant to participate in the investigation
 - Rick indicated that this had been called-in as a Reportable Incident
- PCB Decontamination Procedure for ILI tools
- Installation of pull ports on the launchers to aid in loading the tools
- Discussed changing the receiver standard to reflect (2) nominal size diameter increase for the trap to aid in slowing the pig
- Planned line lowering projects in Central Division
- Shorted Casings
- Crossover Inspections
- Coordinating with Tech Services for planned ILI modification projects and/or any significant anomaly remediation work
- Right of Way clearing NOPV
 - o Violation was for not being able to see through leaves for leak survey-we feel that we obtain multiple valid surveys during winter
 - o Mark Davis agreed to follow-up with Jody Mitchell regarding the possible use of herbicides
- Stopples
 - o Reviewed Boyd's Creek work
 - We were going to try to find out more information about running pigs through stopples

Meeting Date: 05-20-05

Meeting Time: 10AM – 12PM CST

Location: Tele-conference Prepared By: Bob Travers

Attendees: Ron Haggerty, Stan Johnson, Larry Shed, Stephen Lee, Mario Tavolieri, Kenny Fletcher, Rick Kivela, Mark Davis, Andy Drake,

Quince Och, Gary Dial, Bob Travers,

- Smart plug to be used on 41-A-6
 - o Larry Shed will send info to the group
- IMP Training Program
 - Training outline currently being developed will be sent out to the group for review
- Wartburg Runs
 - Need to explore technology options for low-pressure line
 - o Will work with PII for quick turn-around on 22"/24" run
- Sabine Header 2007 in service date
 - Technical Services to look at X-80 and X-100 options
- Damage Prevention Marker
 - Options for alternative styles
- Compliance Records
 - Divisions were asked to verify that any remaining historic compliance documents be routed to Sue Thornburg's group
- Anomaly contingency project
- Diagrammatic procedure
 - O/M estimate to be prepared
- Maritimes and Northeast Canada IMP
 - Work is underway in developing an NEB compliant IMP for M&N Canada
 - o We will form a subcommittee (reporting to the PIOC) that focuses specifically on this off-shoot of our US IMP
- Kiefner Vintage Pipeline Report
 - o Currently evaluating "untested" parts of our system
 - To be further discussed at upcoming meeting(s)

Pipeline Integrity Oversight Committee Meeting Date: 05-20-05 Meeting Time: 10AM – 12PM CST

Location: Tele-conference Prepared By: Bob Travers

Attendees: Ron Haggerty, Stan Johnson, Larry Shed, Stephen Lee, Mario Tavolieri, Kenny Fletcher, Rick Kivela, Mark Davis, Andy Drake,

Quince Och, Gary Dial, Bob Travers,

As-built drawings

- o Discussed whether we should go back to printing alignment sheets again as opposed to just having them available on-line
- o Discussed compressor station drawings and whether or not "mother" drawings are needed

o Team to be formed with area personnel involvement to help answer these questions

Action Items:

	<u>Owner</u>	<u>Item</u>	Due Date
1.	Rick Kivela	Determine if gas releases such as ESD or relief valve operation should count as incidents	
2.	DTO's	What stations would be large enough to generate \$50k gas loss on an ESD	
3.	Bob Travers	Determine who is responsible for removing cups and discs from ILI pigs	
4.	Mark Davis	Ensure specifications are prepared for the pull port installations	
5.	Mark Davis/ Bob Travers	Review the standard design for pig traps-evaluate benefit of going to larger diameter	
6.	Bob Travers	Email divisions for volunteers to work on developing a standardized approach to	
		remediating shorted casings	
7.	Bob Travers	Resend procedure for Direct Examination (valve sites, crossovers, etc)	
8.	Mark Davis/Jody Mitchell	Re-visit use of herbicides on company rights of way	
9.	Bob Travers	Research history on ability to pig through stopples	
10.	Larry Shed	Forward info to the PIOC on smart-plug	
11.	Bob Travers	ob Travers Forward training outline to the PIOC	
12.	Andy Drake	Visit with Greg B. on GE issue (speedy report on Wartburg run)	
13.		Follow-up on West PA golf course regarding possible use of alternative markers	
14.	Bob Travers/Rick Kivela		
15.		Follow-up with field locations to determine if any more compliance records are out there	
16.	Bob Travers	ers Prepare a suggested revision to list of categories in COMET	
17.	Andy Drake/Bob Travers Create sub-committee to PIOC for focus on M/N-Canada and NEB regulations		

Upcoming Dates:

Next meeting scheduled for July 5, 2005; 1PM in the Houston Office

Pipeline Integrity Oversight Committee Meeting Date: 07-05-05

Meeting Time: 1PM – 5PM CST

Location: Houston Prepared By: Bob Travers

Attendees: Kenny Fletcher, Bobby Arnold, Mario Tavolieri, Gary Dial, Quince Och, Larry Shed, Jerry Crafton, Andy Drake, Bob Travers, Rick

Kivela, Steve Rapp

Today's Date: 07-08-05

Objective: Normal PIOC Meeting

Key Topics and Issues Discussed:

· Development of standardized right of way maintenance practices

- · Consistently filling out 7T-6 forms for follow-up of AOC events
- Heightened awareness on right of way signage and markings
- Use of air patrol for odorized leak survey
- Bailey long wall mine activity
- FERC Ruling
- Status of River Weight Program
- COMET Categories update
- Shorted Casing Review Team
- · Inspection of pipe piers
- Demo of Performance Metrics Database
- Proposed SOP Revisions
 - o Houston will try to be more diligent about email reminders regarding comment period deadlines
- External Communication Plan
 - o One person per division should participate in the effort
- · Launcher pull-ports

Action Items:

	<u>Owner</u>	<u>Item</u>	<u>Due Date</u>
1.	Rick Kivela	Document criteria for on-going inspection of pipe piers	TBD
2.	Steve Rapp	Prepare low-hydrogen welding process for installation of pull-ports	TBD

Upcoming Dates:

Next teleconference -scheduled forTBD

Pipeline Integrity Oversight Committee Meeting Date: 10-04-05

Meeting Time: 8AM – 4AM CST

Location: Houston **Prepared By**: Bob Travers

Attendees: Bob Travers, Steve Rapp, Andy Drake, Rick Kivela, Larry Shed, Jerry Crafton, Stan Johnson, Ron Haggerty, Bobby Arnold,

Mario Tavolieri

Today's Date: 10-15-05

Discussion Topics

IMP Documentation effort
 Bob Travers handed out list of information for divisions to start collecting
 More detailed documentation effort to begin in the next few weeks

- Scheduling of ILI Runs for 2006
 We need to have a coordinated planning session and include Gas Control
- Data Presentation (Cindy Brann)
- High Risk Integrity Projects budget for replacement or inspection?
- Dent Management Plan employee training
- SCCDA Issues
- NCA (non-corrosion anomalies) reporting from Tuboscope Steve reported on the findings from the investigations done on the Norris City Discharge
- Auditing
 We are going to cover this topic at our next meeting slated for early December
- Close Interval Survey Program

 Division tech staffs will continue to evaluate when and where CIS should be utilized based on factors such as annual readings, ILI results, etc...
- OPS Metrics
- RCV Criteria and Valve Spacing
 Action item to establish a standard approach

Pipeline Integrity Oversight Committee Meeting Date: 10-04-05

Meeting Time: 8AM - 4AM CST

Location: Houston Prepared By: Bob Travers

Attendees: Bob Travers, Steve Rapp, Andy Drake, Rick Kivela, Larry Shed, Jerry Crafton, Stan Johnson, Ron Haggerty, Bobby Arnold,

Mario Tavolieri

Today's Date: 10-15-05

M&N Uprate
 A brief update was provided

M&N Canada IMP
 A brief update was provided

• P-PIC Gap Analysis of DEGT IMP vs. OPS Protocols/FAQ's Work continues on the third party assessment of our IMP documents

Action Items*:

	<u>Owner</u>	<u>Item</u>
1.	Bob/Cindy	Develop plan to include anomaly schedule management into data initiative
2.	Steve	White paper detailing SCC program
3.	Bob/Cindy	Include non-HCA integrity assessments into the data initiative
4.	Bob/Paul	Coordinate and facilitate a planning session with gas control to schedule timing of 2006 in-line inspections
5.	Steve/Bob	Training program for dent repair/remediation criteria
6.	Andy	Commission a task team to develop right-of-way maintenance standards
7.	Andy	Commission a task team to develop a standard approach to use of RCV's / ACV's

^{*} Action Items have been added to the Issues "Parking Lot" to be prioritized as appropriate.

Upcoming Dates:

December 7 - Teleconference.

Pipeline Integrity Oversight Committee Meeting Date: 12-07-05

Meeting Time: 8AM - 10AM CST

Location: Tele-conference **Prepared By**: Bob Travers

Attendees: Bob Travers, Rick Kivela, Steve Rapp, Jerry Crafton, Larry Shed, Quince Och, Gary Dial, Mario Tavolieri, Bobby Arnold

Today's Date: 12-08-05

Agenda Topics:

• 2005 IMP Goals (SOP's, Training, Auditing, etc..)

- Coordination of 2006 Integrity Work (Critical Report Prioritization, Gas Control, etc...)
- Bass Trigon / DEEval Training
- Dent SOP Training
- Project Completion Packages

Key Topics and Issues Discussed:

Gas Control Meetings

Divisions have been coordinating and discussing planned 2006 work with Gas Control. Bob Travers will schedule with Tom Atkinson an additional review of the program as a whole. The intent is to avoid any surprises next year.

DEEval and Deferred MAOP Sections

When evaluating a defect in a deferred MAOP area, the larger adjacent MAOP will be used when making decisions about repairs. This is to ensure that any possible return to the original class location in the future (and associated pressure increase) does not cause a problem with any resident defects not fit for service at the higher operating stress.

Division Training Sessions

Sessions are planned at each of the Divisions over the next two months to train personnel on:

- magnetic particle inspection
- evaluating & repairing dents/gouges
- etc...

Steve will send-out a summary of training topics and will then work with the divisions to define the specifics of the training such as who needs to attend and what exactly is going to be covered.

It was also discussed that future training should include blasting calculations, road load calculations, and clock spring evaluation sheets.

SCC SOP

When asked about the status of the SCC SOP, Steve indicated that the new version of the SOP will be released sometime in the first quarter of 2006 and that it will contain updated criteria on the frequency of hydrostatic testing for SCC.

Pipeline Integrity Oversight Committee Meeting Date: 12-07-05

Meeting Time: 8AM – 10AM CST

Location: Tele-conference Prepared By: Bob Travers

Attendees: Bob Travers, Rick Kivela, Steve Rapp, Jerry Crafton, Larry Shed, Quince Och, Gary Dial, Mario Tavolieri, Bobby Arnold

Today's Date: 12-08-05

Auditing of the IMP

It was agreed that Bob would send-out to the group criteria for an area audit looking at documentation of immediate anomalies.

Maritimes and Northeast

Rick provided a status update of the M/N Canada IMP development project and the M/N U.S. Uprate project

ECDA and Class Location Waivers

Areas given class location waivers under the current DOT protocols will be subject to an ECDA in the segments covered under the waiver. This would include the following:

- Wheelersburg
- Delmont
- Maritimes (only the segments that have already experienced a class location change)

Action Items:

	<u>Owner</u>	<u>Item</u>	Due Date
1.	Bob	Send out 2006 DEGT-US ILI Schedule	12/12/05
2.	Steve	Finalize Training schedule/agenda with divisions	12/31/05
3.	Bob	Meet with Tom Atkinson to review overall '06 schedule	1/15/06
4.	Bob	Provide guidance for internal audit of immediate anomalies	12/8/05

Pipeline Integrity Oversight Committee Meeting Date: 12-07-05

Meeting Time: 8AM - 10AM CST

Location: Tele-conference **Prepared By**: Bob Travers

Attendees: Bob Travers, Rick Kivela, Steve Rapp, Jerry Crafton, Larry Shed, Quince Och, Gary Dial, Mario Tavolieri, Bobby Arnold

Today's Date: 12-08-05

Upcoming Dates:

We discussed having the next meeting during one of the following two weeks:

1) During the week of February 6th in Washington, D.C. - There is a public meeting on the 7th on the subject of "alternate design criteria" - The meeting is being held as a result of the Maritimes and Alliance pipelines proposals to increase operating pressure beyond the current design standards - We could possibly meet on Wednesday the 8th

<u>OR</u>

2) During the week of February 27th in Houston - There is a DOT workshop scheduled for February 28th and March 1st on the subject of mechanical damage - Topics such as damage prevention, in-line inspection, and dent assessment criteria will be covered at this meeting

Meeting Minutes

March 9, 2006 9AM – 12PM CST

Prepared By: Bob Travers

Meeting Location: Tele-conference

Attendees: Bob Travers, Rick Kivela, Steve Rapp, Andy Drake, Jerry Crafton, Stan

Johnson, Larry Shed, Gary Dial, Rod Rheaume, Mario Tavolieri, Bobby

Arnold, Mark Davis

Agenda Topics:

Baseline Assessment Plan Updates

- Plan Adjustments
- o New HCA's
- SOP Update
- Training Issues
- Direct Assessment Projects
- Audit Preparation for July IMP Audit
 - Areas of focus
 - o Documentation of 2005 activities
 - Documentation for prior assessments
- Misc.
 - Project Completion Packages
 - o MSD's
 - o Reportable Incidents

Key Topics and Issues Discussed:

Baseline Assessment Plan

Will be meeting shortly to update BAP's for HCA changes and/or risk value changes Divisions should be updating the RMT over the next few weeks and calculating risk values. Bob Travers will contact divisions to identify participants and set up meetings

SOP Update

It was decided that routine administrative updates to SOP's will be made in bulk and released once per year. Any changes of operational significance will be released for immediate use whenever they happen.

The continued use of the Transmission Guidelines was also discussed. It was decided that we will continue with the use of the TG's but an effort needs to made to determine what (if any) need to become actual SOP's, (i.e. they are mandatory, and not just a "guideline"). Also, it was discussed that the TG's could be a place to include "administrative" type documents such as the new PLD procedure.

Aerial Photography and Construction as-building

It was discussed that the photography used during construction is sometimes incompatable with the FRAMME system and that improvements could be made to facilitate the overall as-built process. Mark Davis agreed to review this item further.

<u>Audit Preparation</u>
PPIC gap analysis is being reviewed by procedure authors. Any needed changes will be addressed.

Weather and Outside Force

Engineering Critical Assessments of high priority HCA's need to be scheduled for 2006. Bob Travers will speak with divisions to discuss further.

IMP Training

Garry Matocha has drafted up a proposed training schedule/outline. Will be routed for review. Train-the-trainer will be used where applicable.

Direct Assessment Projects

Outsourcing of major direct assessment projects was discussed. Bob will assign someone Garry to coordinate possible system-wide bidding.

Action Items:

	<u>Owner</u>	<u>Item</u>	<u>Due Date</u>
1.	Bob Travers	Set-up BAP update meetings with divisions	3/15/06
2.	Quince,Rick,Bob	Review TG's to determine what needs to go to SOP's - also add the PLD guideline	
3.	Mark Davis	Review construction aerial photography and as-built process	5/1/06
4.	Bob Travers	Coordinate Outside Force ECA of high priority HCA's	4/1/06
5.	Garry Matocha	Route training outline for review by divisions	3/20/06
6.	Garry Matocha	Review possible outsourcing of DA projects	3/25/06

Upcoming Dates:

Next meeting date TBD.

Meeting Date: 05/6-7/08

Meeting Time: 8AM – 5AM CST

Location: Houston **Prepared By**: Bob Travers

Attendees: Bob Travers, Rick Kivela, Alan Lambeth, John Benoit, Quince Och, Larry Shed, Roy Taylor, Rod Rheaume

Today's Date: 05-09-08

Key Topics and Issues Discussed:

• Standard for when pig traps get installed – short segments, m/r takeoffs etc...(Lambeth)

- a. A team of 4 from EC SE NE & TS will propose a standard report back to PIOC at Q3 meeting later this year
- b. Guidance for the team:
 - i. Possible choices
 - 1. normal piping
 - 2. blinds
 - 3. traps
 - 4. above ground piping
 - ii. population
 - 1. class location
 - 2. HCA
 - iii. gas flow
 - 1. can/can't pig
 - iv. service
 - 1. interruptible or not
 - v. Stress level diameter cleaning needs
- Internal Corrosion Design Regulations Spectra procedure (Matocha/Lambeth)
 - a. It is in the design specs. DG-PP4.0 (form is TS-476)
 - b. We will add reference in TG-030 and revise brown folders checklists accordingly
 - c. Review retroactively back to May 23, 2007 (designed after May 23)
 - d. (add to parking lot) Consider the need to standardize the brown folder checklists
- Internal Corrosion Area Specific Plans (Matocha)
 - a. Work continues on completing by end of year
 - b. Leverage Maximo for setting up ticklers for all the required activity identified in the area plans
- Site HCA's
 - a. Risk methodology has been prepared and is being used by Region staffs
 - b. Some types of facilities need to be done by 2012, other can be done later
 - c. Alan will look at Engineering's practices where HCA's are present can we put it above ground, etc...

Meeting Date: 05/6-7/08

Meeting Time: 8AM – 5AM CST

Location: Houston **Prepared By**: Bob Travers

Attendees: Bob Travers, Rick Kivela, Alan Lambeth, John Benoit, Quince Och, Larry Shed, Roy Taylor, Rod Rheaume

Today's Date: 05-09-08

Corrosion Techs in the ditch at anomaly excavations

- a. Agreed that determination of active/inactive must always be done at corrosion digs
- Patrol pilots meeting review
 - a. Documentation lacking on weeks without flights
 - b. General receipt of documentation
 - c. REX has detailed program we should still review the El Paso findings against our practices Rod will send REX mitigation plan
- Purging procedures
 - a. Current practices need to be reviewed for improvement (Alan has AGA Report)
 - b. For accurate modeling we need to model the different separators we have in use
 - c. Gas control isn't the right place for the modeling to be done region tech staff
- Audit lessons learned mitigation plans
 - a. Agree that the categorization that is being done is very helpful distinguish between "best practice" and actual "non-compliance"
- Leak survey by air compliance challenges? Possible changes?
 - a. Bob will send matrix to field for review
 - b. John will conduct query to evaluate the size of the impact
- ILI Workflow project
 - a. Steering committee will attempt to define Phase 1 (2008) and Phase 2 (2009) given the resource demands that we have
 - b. We all agree that we want to do something this year
- Pam / Kent Cap/O&M Projects and 2009 timeline (K. Denney and P. Wasserman)
 - a. Set up workshop to better define the functionality needs
- DRAS Discussion and Demo (Sinclair and Bigbee)
 - a. Paul needs to get some data from the field to conduct a pilot trial of the proper "statusing" of previous anomalies
 - b. Houston will conduct a pilot run
 - c. Houston will then propose the new process back to the regions
 - d. John will work to create the Maximo work orders that will tie this in.

Meeting Date: 05/6-7/08 Meeting Time: 8AM – 5AM CST

Location: Houston **Prepared By**: Bob Travers

Attendees: Bob Travers, Rick Kivela, Alan Lambeth, John Benoit, Quince Och, Larry Shed, Roy Taylor, Rod Rheaume

Today's Date: 05-09-08

EMAT Discussion

a. Steve explained current plan for Union Church run in 2008

- b. Need to set-up a follow-up meeting to thoroughly review all the risks with moving forward with this program include PII if possible
- c. Steve will send out the two-page white paper he has drafted
- Dent Plan Revisions
 - a. Non HCA shallow "dents-with-metal-loss"
 - b. In about a month Met Services will have proposal
- SCCDA Coating question final decision on stripping all 40'
 - a. yes
- Excavating significant immediate anomalies
 - a. Agree to review company practice and then make sure it is well understood and followed
- Internal Communication and Team Design Roles/Responsibilities (how should we redesign the structure of the teams identified in the IMP to accommodate the new Spectra org structure?)
 - a. PIOC Core team to be defined
 - b. Determine PIOC adjunct members (perhaps.. Schorre, Brann, Fletcher, Mitchell, Deisch)
 - c. Draft proposal for other sub-teams

Meeting Date: 05/6-7/08 Meeting Time: 8AM – 5AM CST

Location: Houston Prepared By: Bob Travers

Attendees: Bob Travers, Rick Kivela, Alan Lambeth, John Benoit, Quince Och, Larry Shed, Roy Taylor, Rod Rheaume

Today's Date: 05-09-08

Action Items:

	<u>Owner</u>	<u>Item</u>	Target Date
1.	Travers/Lambeth	Launch team to review standard for design of pig access on short segments of pipe	6-1-2008
2.	Matocha	Revise TG-030 to reference Form TS-476	6-1-2008
3.	Shed/Taylor	Revise current brown folder checklists to account for Form TS-476	6-1-2008
4.	Travers/Kivela	Review current SET practices against the issues in the El Paso NOPV – make recommendations if needed.	7-1-2008
5.	Travers/Savell	Review of company purging procedures	8-1-2008
6.	Travers/Savell	Distribute proposed leak survey changes along with info on actual operations impact	6-15-2008
7.	Travers/Taylor/Benoit	Establish Phase 1 scope for ILI Workflow project	6-1-2008
8.	Wasserman	Set-up meeting/workshop to identify functionality needs of project financial tools	6-15-2008
9.	Sinclair	Conduct "pilot" run and propose to the regions a process for updating all historical anomalies with remediation information	7-1-2008
10.	Benoit	Create Maximo work order to collect 7T-33AW forms from excavation activities	
11.	Rapp	Send white-paper and set-up meeting with key SE Region personnel to thoroughly review EMAT strategy	
12.	Rapp	Rapp Propose dent remediation procedure changes to PIOC	
13.	Rapp		
14.	Travers/Sinclair/Bigbee	Review company procedure for excavating significant corrosion defects and determine if current pressure reduction requirements are adequate	
15.	Travers	Send to PIOC proposed revision to IM-120 to establish more functional arrangement for the PIOC and the various associated sub-teams	6-15-2008

Upcoming Dates:

Next teleconference scheduled for: 8-12-2008 12:30-2:30 CT

Pipeline Integrity Oversight Committee Meeting Date: 12-11-08

Meeting Time: 9AM - 3PM CST

Location: Houston **Prepared By**: Bob Travers

Attendees: Bob Travers, John Benoit, Randy Schorre, Alan Lambeth, Gary Vervake, Paul Sinclair, Garry Matocha, Larry Shed, Doug Barnes,

Today's Date: 12-20-08

Objective: PIOC Meeting

Key Topics and Issues Discussed:

1. Reviewed IMP220 - Governance and Internal Communication to establish recommendations for revision

- a. PIOC Membership (i. through iv. voting members)
 - i. Dir., Pipeline Integrity (Houston) Chair
 - ii. GM, Tech Services
 - iii. DTO NE/SE
 - iv. Dir., Operational Compliance
 - v. Dir., Operations Business Systems
 - vi. Mgr., Met Services
 - vii. Mgr., Pipeline Design
 - viii. Region pipeline directors and managers
 - ix. Vervake, Matocha, Sinclair
- b. Other misc teams
 - Vervake has notes from the whiteboard
- 2. Software updates
 - a. Risk model
 - i. Going through implementation now
 - ii. To be used for 2009 BAP update
 - b. ILI analyst
 - i. Most baselines have been loaded
 - ii. Anomaly status needs to be completed
 - iii. Paul to develop strategy to have everything implemented by end of 2009
- 3. Dent Criteria
 - a. Approved SOP changes as proposed

Upcoming Dates:

Next teleconference - tbd

Meeting Date: 07-30-09

Meeting Time: 8AM – 12PM CST

Location: Houston Prepared By: Gary Dial

Attendees: Randy Schorre, Alan Lambeth, Rick Kivela, Bob Travers, Cindy Brann, Paul Sinclair, Brian Rode, Tom Tirlia, Gary Vervake, Gary Dial

Today's Date: 08-14-09

Objective: PIOC Meeting

Key Topics and Issues Discussed:

1. Review of internal audit findings / status

- a. IMP DA assessment completed for DA except for SCCDA
- b. DA training development Veriforce will house training documentation
- 2. Software update
 - a. DRAS
 - i. webinar training to be conducted for Houston & Regions
 - ii. loading of 7T-33 anomaly investigation results required for proper use of DRAS
 - b. PCS
 - i. technicians still not using "status" section to record casing status
 - ii. Paul to begin roll out of version 7.1 this fall which will include email notification
 - c. PIRMS (7T-33)
 - i. will begin testing of new database in August with selected technicians & Regions to test database
 - ii. live roll out of database set for fall
- 3. 7T-287 BAP Change Form will edit name to not only include BAP but also reassessment date changes
- 4. Revision of O&M Plan Revise O&M Plan to be road map from Code to SOP'
- 5. Reviewed block diagram for IMP 120 and agreed to all review and rewrite task for each block as SME applicable.

Action Items:

	Owner	<u>Item</u>	Due Date
1.	Sinclair	Due Date Determination in DRAS	8/15/2009
2.	Dial	IMP 120 Block Review Follow-up for structure and team leads	9/15/2009
3.	Vervake	B31.8S JIP SCCDA Reassessment Intervals	9/15/2009
4.	Dial	Follow-up on PHMSA observations to set priorities	9/15/2009
5.	Rode/Segura	Complete gap analysis for SE Region IMP	9/30/2009
6.	Rode	Update IMP AISS to match gap analysis document	10/15/2009
7.	Kivela	Revise O&M Plan	10/31/2009
8.			

Upcoming Dates:

Next teleconference –scheduled for



Pipeline Integrity Oversight Committee Meeting Agenda and Meeting Minutes

Westheimer Office, Houston, TX April 13, 2010 (12:33 pm to 4:00 pm)

Invited Attendees

Drake, Andy

Vice President, Transmission Operations
Schorre, Randy (chair)

General Manager, Technical Services
Dial, Gary

Director, Pipeline Integrity (Houston)
Director, Technical Operations (Southeast)
Director, Technical Operations (Northeast)
Director, Operational Compliance

Director, Operational Compliance Kivela, Rick Director, Facilities Operations Och, Quince Manager, Pipeline Design Lambeth, Alan Manager, Metallurgical Services Rapp, Steve Brann, Cindy Manager, Compliance Data Systems Tirlia, Tom Director, Pipeline Integrity (Northeast) Manager, Pipeline Integrity (Northeast) Rheaume, Rod Sinclair, Paul Manager, Pipeline Integrity (Southeast) Barnes, Doug Manager, Pipeline Integrity (Nashville) Gilboe, Derek Principal Engineer, Pipeline Integrity Matlas, Matt Principal Engineer, Pipeline Integrity Matocha, Garry Principal Engineer, Pipeline Integrity Vervake, Gary Principal Engineer, Metallurgical Services

Overview

Changes to the Integrity Management Program (IMP) will help Spectra achieve *of choice* goals for reliability, customer responsiveness, safety and employer of choice. These chances focus the IMP on regulatory requirements while capturing best practices in the Standard Operating Procedures (SOP) that will strengthen the industry position of the company. Change completion by July 31, 2010 will ensure readiness for the upcoming DOT/PHMSA audit of the company IMP. The April 13, 2010 meeting will review the program changes, assessment plan, risk model and audit preparation.

Gary Dial: The PIOC meeting requires review and approval of several documents, distributed prior to the meeting:

- Section 100
- 2009 HCA list
- 2009 AP for range and site HCA

PIOC Meeting Agenda

Page 1 of 7

April 13, 2010

1. Integrity Management Plan (IMP) Revisions

1.1 Restructuring the IMP

A major shuffling of content is in progress (see attachment 1). This shuffling will reduce duplication in the IMP and Volume 9 and better guide IMP related activities. Documentation will be tiered:

Tier 1: Regulation and policy interpretation

Identify what requirements are defined and how the company interprets these. This is significant since it will clarify the company position on regulations.

Tier 2: Company procedures

Procedures provide the implementation requirements for any processes; they are the process definition. They are the reference for training and process execution.

Tier 3: Work instructions

Define specific tasks within a process and provide necessary guidance for a qualified individual to complete the task. Multiple instructions may be required to complete a process defined in a Tier 2 (procedure) document.

Tier 4: Documentation and data (records)

Any forms, data, or reports are Tier 4 documents, providing results or proof of completion.

The IMP numbering now integrates with the SOP numbering (see attachment 2).

1.2 Document format

The IMP and related Volume 9 Standard Operating Procedures (SOPs) use a new format (see attachment 3). Volume 9 documents and forms will use the Adobe PDF format to better integrate with the company web site, simplify redlining, and facilitate capture of data.

1.3 Section 100

Major changes to the administrative section of the IMP have reduced the page count to 11 pages of content:

- Changed all company names to "The Company" and defined the corporate entities subject to the IMP
- Eliminated the company organization chart and structure
- Eliminated the Commissioning Plan
- Eliminated the Environmental and Safety Plan and referenced the company EH&S program
- Moved the Management of Change process to section 200
- Eliminated all committees except the PIOC and defined reporting to the Vice President of Transmission Services.
- Defined the IMP responsibilities for the Director of Pipeline Integrity (Houston)

1.3.1 Roles and Responsibilities

The Director Pipeline Integrity is responsible for defining roles and responsibilities for the IMP. Review of all changes by the Director of Pipeline Integrity (Houston) and the Director of Operational Compliance occurs before submission to the General Manager of Technical Services and PIOC for approval/ratification.

Responsibility	Lead	Group(s)
IMP Technical Administration	Derek Gilboe	Pipeline Integrity
Assessment Planning	Derek Gilboe	Pipeline Integrity
Risk Assessment Program	Derek Gilboe	Pipeline Integrity
Data Management Program	Derek Gilboe	Pipeline Integrity
		Compliance Data Systems
		Operational Compliance
Performance Planning	Derek Gilboe	Pipeline Integrity
HCA Identification	Cindy Brann	Compliance Data Systems
		Operational Compliance
		Pipeline Integrity
External Communications	Dwayne Teschendorf	Operational Compliance
Administrative Documentation	Derek Gilboe	Pipeline Integrity
Technical Documentation	Derek Gilboe	Pipeline Integrity
	Jeff Savell	
Regulatory Documentation	Dwayne Teschendorf	Operational Compliance

PIOC Comments and Discussion on IMP Revisions:

Rick Kivela:

1. If external communication becomes an SOP, which section does it belong?

Bob Travers

- 2. Numbering in figure 1 is not consistent and needs to be corrected.
- 3. Is Spectra required to notify PHMSA of the changes?

Larry Shed

- 4. M&N + Brunswick have IMP based on old IMP. Are we going to change those? How do we integrate these?
- 5. Do we integrate storage or intrastate pipelines into the IMP?
- 6. Should intrastate piping and storage requirements be incorporated into the assessment plan?

Gary Dial

- 7. Please provide comments on section 100 by Friday, April 23, 2010. Pipeline Integrity will finalize this section and incorporate all comments the week of April 26, 2010.
- 8. Spectra must notify PHMSA of the changes since they are significant. This will occur after final review of the IMP.
- 9. Communications SOPs will be governed under section 200 of the IMP
- 10. Pipeline Integrity will review if we can consolidate M&N + Brunswick into the same IMP.
- 11. This meeting validates the responsibilities of section 3.2 (see table above in 1.3.1 of this document)

2. Assessment Plan and Risk Model

The 2009 Assessment Plan and Risk Model (attached) require review and approval. All future changes must follow the IMP defined process, requiring formal documentation of all changes prior to occurring. The Director of Pipeline Integrity (Houston) has compiled a summary of all changes, including those due to HCA changes, for review.

PIOC Comments and Discussion on the AP and Risk:

Gary Dial

- 1. 2009 AP was issued April 30, 2009. At the end of 2009, additional segments were added to complete the 2010 requirements.
- 2. Brian Rode completed a comparison of the 2009 and past APs.
- Risk data was based on the 2009 AP
- 4. The 2009 AP needs to be approved since it defines the 2010 assessments. It has been published to The Source and is the authoritative version.
- 5. The 2010 Assessment Plan will be issued before the 2011 budget planning.
- 6. HCAs are not aligning with the AP and incorrect data exists on the 2009 AP.
- 7. Need to know all covered segments and access all past and current assessments.
- 8. HCA and assessment data will be ready for budget preparations.
- 9. Until the end of next week we can update the 2009 AP, and will issue final after that. Comments from region and other staff and these will be incorporated to the AP.
- 10. Will adopt/accept this version and focus on 2010 AP (incl. HCA and DA)
- 11. Regions asked to identify missing information/data (Rod in particular)
- 12. Information is on sharepoint site showing the HCA results (so far). These need to be reviewed and determine if we have done anything about the HCAs.

Rod Rheume

13. Reviewing the 2009 AP and some errors were identified.

Derek Gilboe

14. The next AP will be a transaction-based that incorporates all assessment types for covered and non-covered segments.

Cindy Brann

15. Reviewing the current HCAs, including SCC HCAs; this is a cradle-to-grave process of all HCA history. Target completion is May 16, 2010.

Rick Kivela

16. Emphasis needs to be on going forward, not looking backward.

GD will send summary after next week for others for final review and approval.

3. Upcoming DOT Audit

Week 1: August 30, 2010 to September 3, 2010

Week 2: October 18-22, 2010

Rick Kivela:

- Suspect the long length between the first and second is due to PHMSA scheduling
- 2. We need introduction presentations for each audit protocol and area. Tell PHMSA up front.

Andy Drake

- 1. Do we know who we want in the meeting. Resources need to be scheduled ahead of time especially region/staff. Encourage vacation preparations around this audit!
- Resources to be set by Andy Drake, Rick Kivela, Gary Dial, Larry Shed and Bob Travers.
- Mark Hereth will do an internal audit of our system to help us prepare and see what we may expect and what needs to be shored up. Expect June or July.

4. Other

1) Clock Spring Training

Sue Thornburg will have the Clockspring research complete by the end of the month – all sleeve data available in all systems (as far back as possible)

2) IMP Forms Update

- Progress is good (Gary Dial has progress stats)
- 7T-287 is the worst 42% complete.
- Future changes will be batched as much as possible (if GIS generated)
- Adds are a challenge to see how the field will address them.
- Rod Rheume: approximately 100 are changes in scheduled
- April 26 completion for NE region for most forms, including 7T287

7T33

- Ready to start mapping features. Stephen Oxley is going to start this next week and is most knowledgeable with the PACMan application.
- Critical path is still entry
- Tom Turlia: is PACman ready for TEMAX work?
- Matt Matlas: Yes it is ready will talk to TT offline.
- Matt Matlas will set up a PACman demo for Houston staff/management

- Rick Kivela: how do we address other users of the 7T-33 form? We need to be able to use the application (or a lite) universally.
- Matt Matlas: looking at other potential uses for PACman and the data. Need a plan. It is being designed to link to other systems, but the core framework is still in progress. It must link to the other systems.
- 3) Other issues
- 4) PHMSA Anomaly Criteria

5. Attached Documents

- 1) IMP Structure
- 2) Volume 9 SOP Numbering
- 3) IMP 09-0100
- 4) 2009 Assessment Plan
- 5) 2009 Assessment Plan Change Summary



Spectra Energy PIOC Meeting Agenda July 13, 2010 7:00AM to 11:00AM

PIOC Committee Members

Drake, J A (Executive Sponsor) - absent Schorre, Randall G (Committee Chair) - absent

Dial, Gary E (acting chair)

Travers, Robert F

Shed, Larry E

Och, Quince E

Barnes, Doug

Brann, Cynthia M

Kivela, Richard W

Lambeth, Alan K

Rapp, Stephen C

Rheaume, Roderick M – via teleconference

Sinclair, Paul W

Tirlia, Thomas B

Matocha, Garry M – via teleconference

Gilboe, Derek

Meeting Location

Room no.: WO-4L58

Call-in: +1 (866) 756-2719

Conference: 9347102334

Agenda Items

- 1) Integrity Management Program (IMP) Manual
 - The IMP Manual has been revised and consolidated into a single volume labeled SOP 09-0000 Revision 2 (attached). Part of the manual was reviewed and approved at the previous PIOC, however, the consolidation requires submission of the entire manual for ratification.
 - Volume 9 SOPs are being renumbered to better consolidate by subject matter (see attached IMP SOP Structure.
 - All Volume 9 SOPs are in the process of rewriting with a standard format.
 The first procedures to be issued will be for risk. These will be completed
 by the end of July and included in the DRAS risk model. The next PIOC
 meeting will review the update risk model and procedures.

2) Assessment Planning

 The new assessment plan is nearing completion. This plan will be integrated with the GIS system inspection locations database and provide rapid access to assessment history and summary risk data.



All change forms (7T287) have been received and included in the IMP work plan.

3) IMP Audit

- The IMP Audit is scheduled for 31-Aug-10 to 02-Sep-10 and 19Oct10 to 21-Oct-10; the auditors have advised they will be using the Mondays and Fridays as travel days.
- A pre-audit conference call is scheduled for 22-Jul -10 from 9am to 11am. Houston staff will be in WO 4L58 and a call-in is available:

Call-in number: +1 (866) 756-2719

Conference Code: 201331

4) Risk Assessments

- The current risk rankings will be reviewed and ratified. These are the 2011 risk rankings (see attached)
- 5) HCA Review
- 6) Line Hit Task Force update
- 7) Clock Spring Update
- 8) Identifying risks
 - A general discussion in identifying risks and what they are; often termed what keeps you up at night?

Attached Documents



09-0000.pdf



Structure.pdf

Minutes ... called to order @ 7:10 by GE Dial

1) HCA Review

- Copy of HCAs sent to regions for both range, site, and SCC
- Sent in June 2010
- This is a master list that is sent out annually, produced by Compliance Data Systems (CDS) which included a summary of all HCA data and life
- Only one HCA was not on our assessments that was on the list
- This was a comprehensive review
- The list is not on the source but the desire is to public this going forward on the Source



- Process is an improvement over the past, particularly the review by the region and key personnel prior to publishing.
- Procedure to be updated and published
- Home is not certain right now detailed document with many workflows.
- Governing procedure will be SOP (in the IMP/Vol 9) and detailed document will be owned by CDS
- Launchers and receivers list is also being established that are not part of a site, but are
 part of a range HCA. This accommodates the issues for locations that are not a site HCA
 but the range would have an HCA.
- Site HCAs are noted by an S at the end of the HCA
- Discussion over launcher/receiver definition as far as site or HCA. This topic needs to be clarified over the next year – defining sites as HCA/Non-HCA and separating from the range.
- How do we inspect launchers/receivers and site piping? Small diameter piping is not deemed covered piping (from the rule perspective)
- Should we flag the HCA ID with a Site, Range, Launcher, Receiver, etc.?
- HCAs will be posted to the source as soon as possible
- Significant costs have been saved by this review changing HCAs and reclassifying segments as non-covered. This is the field review that validates the assumptions of the CDS survey based on screening information from mapping sources.
- System has almost 1,800 HCAs
- This was a comprehensive HCA review that identified all historic changes and validates the current state of HCAs. A second list has the full history for archival purposes
- Assessments will be SITE, RANGE and LAUNCHER/RECEIVER

PIOC approved posting of the HCA results to the Source.

2) Assessment Plan

- New plan version to roll out that is integrated with HCA data and all types of assessments
- Eliminate the spreadsheets
- Final vetting of the vision to be approved by PIOC once the first concept is shown. To be done at next PIOC meeting
- Finishing the baselines (2011/2012)

3) Risk

- Model is being migrated
- Need to segregate screening versus scoring
- Move to DRAS for risk data and management
- Need to show both HCA and non-HCA
- Need to address consequences as well but not necessarily weight
- Need to track more histories (e.g. pressure)
- Will be integrated with the AP
- Will use new HCA

4) 20-B-1 Validation

• Wireline run for inspection via Baker

Page 3 of 8



 Manufactured anomalies put into the pipe for calibration purposes? Challenges with API.

5) IMP Manual

- Current draft sent out
- Nothing new in the IMP (or additional) any concerns should have been identified previously
- Removes the planning process
- All comments to be implemented by end of July when it will be sent to PHMSA
- Deadline of 23 July 2010
- Send out manual and Acrobat instructions
- Not following current manual:
 - o MOC
 - Decision documentation (e.g. assessment plan set up, HCA, etc.)
 - Generally not following documentation well to prove we are following the process
- Notice to PHMSA will be approved by the PIOC prior to sending under signature of Andy Drake
- Instructions to use SOPs in Outlook were to be sent after the PIOC meeting.

6) Pre-Audit by Mark Hereth

- Scheduling TBD
- Need to address the 52 items of previous audit and send summary to PIOC members

7) PHMSA pre-audit teleconference

- Clyde Myers, Allan Beshore, Buddy Sheet
- The IMP Audit is scheduled for 31-Aug-10 to 02-Sep-10 and 19Oct10 to 21-Oct-10; the auditors have advised they will be using the Mondays and Fridays as travel days.
- A pre-audit conference call is scheduled for 22-Jul -10 from 9am to 11am. Houston staff will be in WO 4L58 and a call-in is available:
 - o Call-in number: +1 (866) 756-2719
 - o Conference Code: 201331
 - Will review previous audit results and path forward

8) IMP Forms

- BAP comparison in source has most recent status of forms it is the verification of forms status
 - o 7T-287 status is shown and is current
 - o 7T-281 and 7T-288 status also shown if available or missing
 - Send in any missing forms signature of Director Pipeline Integrity is required
- Can we document response (e.g. preventive and mitigative activities) on assessments
 - >> NOTE TO DEREK this would be the Assessment Analysis process
- FileNET (Records)
 - Corporate solution but it requires customization
 - Need to index it to allow it to be useful
 - Proposal in place to set this up for next year, starting with the Houston office
 - Need a taxonomy or filing index so we can store and easily retrieve the data



- Need a process to standardize the documentation methods (format and location)
- Who is responsible for this? We need a hybrid of records experts and content experts
- This will be a standardized repository
- Positive response from PIOC supporting direction
- Lots of decision via e-mail and easy way to file from e-mail would really help. This
 would be longer term due to the complexity and issues with FileNET and e-mail.

10) Line Hit Task Force

- E-mail sent out with findings to team, VPs and DTOs
- Three action items:
 - Rewriting SOP for excavation and line location (Jeff Savell)
 - Line locator procedures, type, etc. review and recommendations (Doug Barnes)
 - OQ/Veriforce documentation of training and training process of locators (Tim Vaughn)
- Deadline end of July for items
- Engineering is involved due to differences in procedures

11) Clockspring Update

- Main action item is training and SOP related issues revision is required and has been sent out (it focuses on awareness)
- Documenting process and training with Tim Vaughn for OQ/Veriforce since vendor does not require annual renewal. Contemplating a hands-on requirement for all applicators
- SOP for in-line tool inspection to send clockspring data to ILI vendor for analysis
- Difficulties finding repairs in the system currently populating PACman data (which goes to IRAS). Expect to be done by the end of the week recommend sending final list from PACman/IRAS to the technicians for validation.
- Clocksprings are being banded now for identification by ILI. This has been the norm for the last 2-3 years with consistency. The banding needs to be reinforced and in the procedures – the material comes with the clockspring.

12) RunComs

- Valuable tool currently being used with the Clockspring evaluations
- Working on procedures to streamline the process so application is consistent on a corporate basis
- Discussed with DRAS to load data into IRAS for corrosion rates
- Should we outsource the analysis of the RunComs?

13) SOP Rewrites

- 7T-298 form (SOP Effectiveness) is not being filled out to document evaluation and changes to procedures. This form should be used for all forms
- SOP meetings are occurring regularly in the Southeast, but these are deferred due to the PACman initiative
- Northeast does the regular SOP meetings, currently stopped during the summer
- Questions over procedure ownership who is responsible for the revision, ownership and documentation of the change.
- No documentation of the steps that are reviewed and the procedure itself the actual procedure does not appear to be reviewed in the fine detail.



 Challenges exist to communicating SOP review meeting results to the staff responsible for making the change in the SOP (e.g. via KMS)

14) Flexiforge (Oil States) Fittings

- One installed, one wants to go to inventory. Issues of where to store it and how has the
 cost. Bought on Gateway, neither installed. Installation on another system (East Cam
 286 as an abandonment tool).
- 24" end connector
- Useful for emergency repair
- Concern about inventory being a dumping ground for leftovers from capital projects
- Generally useful in pairs only, but could be used for other applications
- Will be kept and used for future abandonments
- PIOC consensus is to keep it and put it into Texas Eastern inventory

15) 16" 1-A

- 2005 initial (baseline) assessment in Philadelphia required major customer review before tool run
- Cut-outs for any anomaly due dates 7 years or less based on B318S Figure 4
- Active corrosion noted and due this year (2010) if a different corrosion rate applies. Past
 instruction was to assume accelerated growth rate (16 mpy) rather than the standard
 growth rate (12 mpy)
- SOPs do not state any corrosion rates only reference 31.8S Figure 4 which is based on RPR of grown features
- No evidence to show issues greater than those already repaired.
- This is a stray current area
- Jim Burns recommendations are to install coupons this year and use these to monitor and rerun tool in 2011.
- Will follow recommendation

16) Line hits

- Quick to dig and remediate without full investigation, particularly on unpiggable lines
- Gary put together a procedure for addressing leaking defects
- Gary has draft SOP for investigating line hits to reduce risk (safety)
- Need a discussion to work through the concerns for investigated hits and leaks this is recommended between DTOs and Metallurgical Services

17) Risk: What keeps you up at night? Concerns regarding Pipeline Integrity

- HCAs are okay non-HCAs are an issue. We need to take ownership of the non-HCA lines from a pipeline integrity perspective
- Geotechnical issues on ETNG (dents and gouges)
- Concerns were are not making lines piggable that should be pigged due to costs (E-3 leak shows the importance of making these piggable). DA is not as effective as pigging! These are particularly concerning for special permit lines. Need to get back to (1) pig, (2) DA and (3) pressure test as far as choice of assessment. How do we justify making pipe piggable? Cut outs are from ILI and none from DA severe indications found by DA, but nothing as severe as on the ILI runs. We are not assessing the non-HCA parts of non-



piggable lines. CIS is generally HCA only – is there really a cost saving with DA when we only hit the HCAs rather than the whole line with ILI

- Need to re-evaluate the thinking of costs future benefit
- Black powder is becoming more prevalent. Not sure where it is coming from, but
 appears to be dumped into us and collects on the pipe and makes pigging a problem,
 impinges flow and causes accelerated corrosion. ETNG, East TX, Arkansas, and PA now.
 Filter/separator cutbacks are exacerbating this challenge.
- Pipeline environment is changing with increased regulatory scrutiny without any guidance of engineering principles. How do we address or prepare for this environment with what PHMSA is doing now ... failures, class locations, corrective action order, etc.
 - o PHMSA behavior appears to be random and unpredictable
 - O Driver is financial on this as far as impact, but safety is not a major issue here
 - Are we adequately staffed to meet the regulatory demands? We are understaffed, either due to lack of funding or qualification. Are we able to obtain any success with our staffing/organization?
 - Cost benefit thinking is a bit off not about rational thinking, but ultraconservative reaction to regulators
 - What would happen if a grandfathered line experienced a failure? This is a major issue with some of our lines – with an unacceptable economic impact
 - Pressure reductions are significant loss of income –and can run into FERC issues for not meeting deliveries and fines for not meeting contracts or curtailing deliveries due to reductions.
 - Larry Shed expressed concerns about getting resources to identify the work that must be done (required) and obtain the manpower. DTOs seem to have challenges identifying the needs and what is required to get it done. Help is needed to identify resource needs.
 - The issue is that we are not completing the small things that keep adding up and can result in fines from PHMSA – which is more expensive than getting the staff to start with
- About to install plastic pipe on Ozark and no procedures, design criteria, operating
 procedures, etc. An infrastructure is completely lacking around plastic pipe. DCP may
 have some experience on this, but Spectra has no resources at this time. Issues with
 design factors
- Data integration how to we share information throughout the company and notify different groups of information changes and obtain related data sets (e.g. operational data) and other information. Who owns the data, where does it belong and do we need to integrate it.
- Should we acknowledge special permit ranges (or grandfathered pipe)? What are the special requirements for each permit? SOPs are being written for each SOP, but tracking and integration is a challenge and how do we incorporating to the AP? This is a new process and is under development.
- Do we need a resource to help tie together all of the data? What about process documentation, definition, and improvement. This group has specialized experience that makes this a challenge. Process improvement is painful and how it impacts up/downstream processes. Many processes (e.g. PACman, completion report, as-built process integrations). Seems we have too many heterogeneous systems. Decisions need to be with the PIOC.



- o Is EAM a resource to assist with this process or integration? Not likely
- A facilitator would help, but the work needs to be done by the staff. Where could we find a facilitator? Development of any process documentation needs to be internal.
- Brown folders are a good example of a broken process that needs to be standardized – there are disconnects throughout the process with respect to content and timing
- o Documentation is a process that needs to be defined and documented
- o We are not integrating process (e.g. as-built, Maximo, brown folder, and GIS)

Next PIOC meeting to occur near the end of July – date TBD

Meeting adjourned at 11:50am

POMRC Meeting Minutes-February 6, 2018

Attendees:

Bill Q (Harrisburg), Rico M (Nashville), Tom T (Waltham), Shanthi (Calgary)

Houston: Gary D, Terry D, Jacob P, Thanh P, Chris B, Kyle S, Gary V, Melanie H, Mark C, Dan L, Bryan M, Stephen R, Jason S, Rick K, Daniel W, Gary V, Garry M, Sumi R

- 1. Overview of IMS (Presentation by Kyle).....slides attached
 - Moving towards a single IMS across GTM
 - 4 pillars: governance, compliance, operational excellence, change management
 - Plan-Check-Do-Act; This is a continuous process

2. MOC Process

- Nothing new to report
- Continue to send MOCs to Kyle for the interim
- 3. Incident Learning and Prevention
 - UMS Pig trap failure on offshore platform
 - · Currently being investigated
 - Lessons learned and findings upcoming
 - CGTM Wolf pipeline slip
 - There are many midstream and transmission locations in British Columbia (BC) that have runoffs occur in May/June
 - Wolf (16" diameter, NEB line) (incident occurred in 2017)
 - A beaver dam let go of water during a high water event. The water flowed down the ROW. The pipeline was shut in. In order to bring back to service, NEB required a fit for service assessment which included a girth weld assessment. The line is now in service.
 - CGTM Oak pipeline slip
 - Incident occurred prior to Christmas 2017
 - Located on a steep gully and crosses a creek
 - Nov 2017-completed a ground survey study
 - Currently out of service and shut in
 - UST Athens slip
 - Since this has already been identified as a slip area, why didn't engineering take this into account?
 - Lessons learned-We need to identify where these slip areas are and communicate this information
 - Engineering to investigate

Welding Issues

- Sabal Trail-Half way through the project, PHMSA found a girth weld that was not adequately heat treated. PHMSA found one girth weld, with over approximately 35,000 manual stick welds completed!
- Nexus-The last 12 miles is class 3, and no odorant; therefore, a special permit from PHMSA is required. As part of permit, PHMSA requires; need cellulose stick welding and have to run an ILI within a couple years of service
- Updating the annual welder qualifications
- Construction PL1 spec in development for US and Canada pipeline construction
- Welding is being scrutinized. More PHMSA scrutiny at the field level. This is likely due to recent new pipeline failures in girth welds.

HDD

- Mears assisting with the analysis of data for the following; I-9 investigation, construction standards and HDD overview
- Enbridge will then use this data and perform a risk ranking
 - I-9 at the Fore River
 - Recommendations: additional CP needed, complete another ILI
 - We do not know what we have until we run an ILI
 - Difficult to monitor CP
 - Not many industry standards for referencing
 - Construction Standards
 - Will obtain a better understanding of pipe once we take it out and complete a relative risk ranking of the coating (e.g. Excellent, good, fair, poor)
 - Do we need to add individual ground beds?
 - HDD Overview
 - Sable Trail-Citrus County Lateral: 90% of current going through HDD. This is an indication of issues.
 - 118 crossings-are they in good shape?
 - Approximately 50 HDDs have some form of corrosion problems, but we have not yet found a correlation/trend between all of them
 - No regional focus-corrosion is occurring everywhere
- After Garry M. receives report from Mears, he will work with the risk group to risk rank and work on next steps which might be; accelerate ILI tool runs, and/or add additional test stations.
- Currently no industry standards. Who is accountable for accepting the bore before pull through? What is the acceptable criterion? What are the specifications?
- Learnings:
 - We know we have lots of HDD and the majority have coating damage
 - Need to ensure that CP is adequate
 - Need to work with the Engineering & Construction group

- Need to standardize across Canada and the US
- CP is just as important as welding and X-Ray
- PHMSA: Must have adequate CP within one year of service
- Typically look at first 40 feet as this is traditionally the worst joint. However, indications show that there is lots of corrosion in other areas as well
- No industry standards for monitoring CP

4. Performance Measures (P&M)

P&M

- Periodic Risk Evaluation Meetings occurred in the fall/winter 2017. The Area/Segment/P&M forms need to be approved by regional managers (Chris, Doug, Bill)
- A possible metric for 2017 is completion of Area/Segment/P&M forms......Gary D
- Philip currently working on a 'reminder email'Philip

DRAS Risk Model update

- Completed the second round of discussions with DRAS
- CGTM is behind in its migration
- End of May/June, transmission risk to be run with new algorithm
- Next 2-3 months, will likely find holes in data
- Periodic Risk Evaluation discussions will need to start earlier in the year
- GPP liquids to be run with old algorithm
- By 2019: Risk run will include ALL assets
- Going forward, risk needs to be run in January in order to be prepared for budget

5. Assessments/Audits

- Need to ensure that across all regions, the same reports (e.g. ILI summary report, etc) are being reviewed for integrity audits. Gary to set up a discussion with Paul S. et al......Gary D
- PHMSA integrated audit-pipeline integrity is a focus area
- NOPV for Westwood (NE region) has been accepted
- NOPV for Delmont expected this year
- Regional personnel are the compliance officers. Cannot rely on the technicians.
- CP, corrosion is a reoccurring message which needs to be taken back to tech meetings
- Compliance dates are compliance dates!!!! No excuse to miss these!!!

- This year, we have already missed two in the budget. They are due in August.
- Currently, regions have their own spreadsheets which they manually look through for due dates.
- This data should be in IRAS which will eliminate the use of multiple standalone spreadsheets
- PHMSA enforcement issue:
 - Notice of amendment from PHMSA: Related to how we do our leak surveys
 - Our procedures are not adequate for locations where aerial patrols/vegetation surveys are not optimal or easily accessible. Alternate leak survey methods need to be utilized (e.g. LIDAR gun). These need to be captured in SAP.
 - Our commitment to PHMSA: we will update our procedures by April 20, 2018
- 6. Risk Identification and Mitigation
 - Enterprise risk team will be implementing a software solution by mid to late 2018
 - Will be continuing with the current format of risk register (handout provided in meeting)
 - Level 1 and 2 risks have timelines. A level 2 risk has a 12 month timeline. If this level 2 risk is not resolved, sign off from the VP is required as to why it is delayed and to an extended timeline.
 - Jason S to schedule a discussion with Gary D/Terry et al to walk through the process of identifying level 1 and 2 risks and their associated timelines......Jason S
 - Program risk not included on main risk register, only operational risks. Process is as follows;
 - ID Hazard
 - Use risk matrix to risk rank hazard as a 1, 2, 3, or 4
 - Risk ranking endorsed by SME
 - Risk with associated risk ranking documented on main risk register
 - If a pipeline integrity risk identified, then a representative from pipeline integrity is on the team or considered a SME
 - The asset owner is accountable for the treatment of the risk.
 - Update US OMS Risk Register......Sumi
 - Last week, Andy passed on to Guy, Walter and Bill, that our #1 risk of failure is external corrosion.
- 7. Welding/NDE Standard Operating Procedural Changes (Presentation by Daniel).......slides attached
 - Industry PHMSA Audit Finding
 - Mid-America Pipeline Company Notice Of Amendment
 - Delayed NDE vs. Post-Weld Heat Maintenance
 - Removing 24-hr delay prior to NDE, adding post-weld heat maintenance requirement

- Standard Operating Procedure Volume 7 (Welding) Revisions
 - Seal circumferential welds on hot tap sleeves & post-weld heat maintenance on in-service welds
- Annual Company Welder Qualification
 - Training, informational, and Q&A sessions to review welding related changes
- 8. SCCIMP Enhancements (Presentation by Gary V)......slides attached
- 9. Clock springs
 - Perulack 12 nicknamed Corvette Ridge due to the first 0.5 miles having so many clock springs
 - Installing back to back clock springs because we don't want to take the line out of service
 - Questions from Michelle to Andy;
 - Is there a point that the pipe can be wrapped too much?
 - Do we have a history of coating issues due to operational temperatures being too high?
 - During the annual periodic evaluation risk meetings, any temperature exceedances are noted on the area form
 - SOP states that there will be an annual review

10. Metrics

- No integrity metrics included in 2018 STIP metrics
- Still require integrity metrics for monthly reported to Bill Y
- Currently establishing what these metrics will be



Agenda

1. PORMC Charter - Terry

- Review the PORMC Mandate
 - Mandate was reviewed and brought forth to the PORMC. Discussed the change in the Pipeline Integrity group in Houston and the purpose of the Technical Standards and Compliance group under Terry Delong.
 - ii. Changes to the IMP are underway and will be reported to PHMSA when completed as significant changes to the IMP.

2. IMS update - Mark

Mark reviewed the IMS updates to the PORMC. IMS and the IMP have completed a gap
assessment. There has been a corrective action plan put together to address the IMP gaps.
Those action plans will be part of the 2019 plan to close the gaps as the IMP and IMS are
completed.

MOCs – Mark

 Mark reviewed the MOC's as part of the IMS update. The MOC process as well is under change and will be updated in the new IMS framework.

4. Incident Learning and Prevention

- ETNG ESTI 3200-1 Leak
- AGT C-1 Leak
- TET Colerain CS Settlement
- Shelley Incident BC Pipeline
- Angleton CS Hydrotest Failure
- Shell Platform Pig Barrel Failure
- Incidents were reviewed as relevant information was available for each incident.

5. Performance Measures

- Performance Evaluation Review (2016 & 2017)
 - Reviewed 2016 PE and agreed there were no significant changes recommended by the PORMC
 - ii. Reviewed 2017 PE and agreed there were no significant changes recommended by the PORMC

RCV Review

- i. A review of the RCV plan was put before the PORMC. A few possible errors were identified during the PORMC meeting. A review of the plan included the need to ensure that Enbridge is evaluating RCV additions based on factors as outlined in the IMP not just on response times.
- ii. Region MTO's and staff to review the information and provide updated information by the end of December, 2018.
 - RCV file will be updated with changes and a full review of the RCV prioritization schedule for 2019 and 2020 will be developed.



- iii. The review consisted of reviewing the timelines established for each line segment and a review of those line segments where significant response times changed to understand the reason for the change.
- Susceptible Pipeline Pressure Exceedance
 - Reviewed the list of susceptible pipe pressure exceedances. A total of 5 locations were identified that had an exceedance in MAOP.
 - ii. The Region MTO's were asked to review the list for correctness and identify any line segments where the pressure data was incorrect.
 - iii. The Manager, Codes and Compliance was asked about the requirement for assessment and hydrostatic testing of line segments found to have exceedances.
- Goal's, Objectives & Targets
 - i. Review 2018 GOT's
 - Reviewed the GOT's for 2018 that were developed as part of the PI groups performance goals in 2018.
 - ii. Development of 2019 GOT's
 - Discussed the development of the 2019 GOT's
 - PI Manager, Standards and Compliance will be accountable for the initial development of GOT's for PI and will be reviewed with the PORMC in early 2019, prior to the required deadline for submittal of the GOT's.
 - Timeline for Performance Goals is January 15.
- Metrics
 - Discussed the 2018 metrics and reviewed the metrics file that has been developed to track the metrics that are used to measure program effectiveness.
 - ii. Shared the new Dashboard that has been developed by the GIS group to track metrics real time. Discussed the value of this program and the roll out in January to the larger Region audience.
 - iii. The metrics are used to evaluate our GOT's effectiveness.
- P&M Measures Action Items
 - i. Reviewed the P&M meetings and current status.
 - ii. Discussed the new tracking file for findings identified during the P&M meetings and the use of the file to ensure identified items are corrected and closed appropriately.
 - iii. Data from the P&M meetings and action items will be used by the group for evaluation of systemic PI issues that need to be evaluated for system impact and corrective plans put in place if required.

6. Assessments / Audits

- PHMSA Integrated AGT/TETLP, TETLP South and Offshore(legacy Spectra) audit Kivela
 - Reviewed the current status of the audits underway and the findings or possible findings.
 - ii. Discussed the areas of non-compliance in Atmospheric Corrosion Inspections, External corrosion, Internal corrosion, DOC, RCV's and other PI related items.
 - DOC is an area of interest in ensuring that pipe is replaced to the current code required depth. An operator was cited for not complying with current DOC requirements as required by 192.
- NEB Audit Update Alliance PI Audit
 - i. Discussed NEB Audit and areas of focus on the PI IMS program elements.
- Outstanding audit findings and upcoming audits



- No outstanding audit findings discussed.
- ii. Discussed upcoming internal S&R audit in 2019 of the Pipeline Integrity Program.

7. Risk Identification and Mitigation (Risk Registry changes)

- DRAS Risk Model update
 - i. Discussed the DRAS model and current status of program. Program will be run for all UST, CGT and Alliance pipelines by the end of the year. The DRAS risk model will be used to assist in the development of the 2020 budget for PI related items.
- New Enterprise wide risk register update
 - i. Mark provided update during the IMS review. There is a significant requirement to ensure that the Enbridge risk register is able to incorporate the findings from the DRAS model to ensure risks are being properly identified and raised as appropriate to the larger organization.
- Risk Registry update
 - i. The current risk registry will be reviewed by a smaller sub group of the PORMC led by Bryan MacKenzie to review the findings and create updates that will be brought to the PORMC for review.
 - ii. Plan for Sub group to meet in January to review current risk registry and update.

8. Open Discussion Items

- PI Organization Chart & Impact
 - i. The PI organization was discussed. Timing has been slowed to roll out new functional based organization due to divestitures, acquisitions and pipeline incidents. Plan is to continue in 2019 to have functional managers begin working with new staffs to move along with the transition plan.
 - ii. The Region PI groups will be involved in the discussions to ensure consistent knowledge transfer and transition of accountabilities.
 - iii. An MOC document trail will be required as part of the transition plan.

9. Wrap-up Quarterly IMS/Risk Meeting

Action Items:

- Delong Changes to the IMP are underway and will be reported to PHMSA when completed as significant changes to the IMP.
- Region MTO's Region MTO's and staff to review the information and provide updated information by the end of December, 2018.
- PORMC RCV file will be updated with changes and a full review of the RCV prioritization schedule for 2019 and 2020 will be developed.
- Region MTO's The Region MTO's were asked to review the list for correctness and identify any line segments where the pressure data was incorrect.
- 5. **Kivela** The Manager, Codes and Compliance was asked about the requirement for assessment and hydrostatic testing of line segments found to have exceedances.
- 6. MacKenzie Plan for Sub group to meet in January to review current risk registry and update.

7.



PORMC Meeting Minutes- May 8, 2018

Attendees:

Bill Quinn (Harrisburg), Mike Greenway, Doug Barnes (Nashville), Mariam Ghiacy (Calgary)

Houston: Tom Tirlia, Terry Delong, Melanie Hosey, Thanh Phan, Chris Burris, Kyle Hart, Steve Rapp, Mark Cernigliaro, Dan Larrington, Bryan Mackenzie, Jason Sewell

- 1. Review of Last PORMC quarterly Action Items Melanie Hosey
 - Performance measures changes in OPDM forms, process...have had some approval process changes, more to come...need to review whole approval process with IT
 - Consistency of reports across Regions. i.e. ILI summary report...still need to discuss with Paul and what is needed during audits
 - Jason Sewell to discuss Risk register with Gary Dial upon his return
 - OMS Risk Register was updated and will be updated prior to each quarterly meeting all Region and Technical Managers need to discuss action items on risk register with their teams prior the updates.
- 2. IMS Update Mariam Ghiacy
 - Mariam reporting on behalf of Diana Goff
 - IMS was submitted to NEB early
 - IMS team working on GOTS, Governance, IMS requirements, GTM Scorecard, GTM elink website for IMS
 - ESOR requiring a mapping document developed for all Integrity by end of June; gaps by end of year.
- 3. MOCs Kyle Hart
 - On hold till after midstream assets divestiture
 - May link it in with development of Maximo
- 4. Incident Learning and Prevention New items Steve Rapp, Terry Delong, Chris Burris
 - Comp. Station 2 on Nexxus project major winds blew over structure on site; all personnel stopped work 10 minutes prior and no injuries; easy to recognize the Weather and Outside Forces risk
 - Leaking dent upon excavation CGTM
 - Mont Belvieu accidental ESD in station due to left over liquids from an earlier ILI weeks before; need to look at handling liquids procedure

5. Performance Measures (P&M) – Melanie Hosey

P&M – all the below items have been completed

- Periodic Risk Evaluation Meetings occurred in the fall/winter 2017. The Area/Segment/P&M forms need to be approved by regional managers (Chris, Doug, Bill)
- Now able to run a report to extract the action items listed on the forms.
- A possible metric for 2017 is completion of Area/Segment/P&M forms......Gary D
- Philip has developed a 'reminder email'Philip

DRAS Risk Model update

- New algorithm is developed and currently being implemented. Should have first run by end
 of May. Will have data to review and scrub till years end, but anticipate using it for Jan.
 2019
- Going forward, risk needs to be run in January in order to be prepared for budget
- 6. Assessments/Audits Chris Burris, Terry Delong, Bill Quinn, Doug Barnes
 - PHMSA integrated audit-pipeline integrity have been taking place since early this year...most of TETLP, AGT, Line 1 and now Offshore
 - PHMSA audit teams are in the filed locations now and until end of August records search
 - There have been no findings so far
 - No new news for NEB audits...all corrective actions mostly complete from 3 years ago
 - M&N Internal audit occurring this week
- 7. Risk Identification and Mitigation Jason Sewell, Mark Cernigliaro, Melanie Hosey
 - Enterprise risk team will be implementing "Enabalon" by mid to late 2018
 - Will be using an ESOR guidance to drive it to the asset level
 - Standardization of a risk matrix will use both a 5 x 5 and a 7 x 7 matrix
 - Continuing with the current format of risk register for this year
 - Reviewed risk register as it has been updated since last PORMC meeting
 - Discussed new risks
 - Add the Damage prevention program
 - Expand IC Interference program need to assign responsible parties and action items...we have a procedure; just need to develop a sub-program
- 8. Met services Update Steve Rapp
 - Reminder that we have a new SOP on hot tapping new procedure includes a process enhancement to deal with in-service welding and post heat treating fillet welds on reinforcement sleeves. Should be in KMS right now...S. Rapp to check on this

Page 2 of 3

• Will need future guidance on pipes without enough records that are TVC compliant- where do we stand on this? Need discussion with Kivela.

9. Issues

• Tom Tirlia brought up pipelines not fit for service post construction; numerous problems arising shortly after in-service. Need to be brought into design discussions with E&C early on and during 3rd party design sessions for CP, especially.

PORMC 4th Qtr Meeting Notes 12-6-2018

- 2016 Performance Measures Report: Please find this report attached. This report was
 reviewed during the PHMSA audit, and the inspector said that it needs to be signed off
 with reviewer signature(s) as well as with recommendations documented within the
 report. He also said that the report is good, but the information is a bit too high-level,
 and recommended that we break down more of the metrics by business unit. He also
 reminded us that we need to collect all performance metrics listed in ASME B31.8S.
- 2017 Performance Measures Report: Taking the recommendations we received from the inspector, I've changed the format of the report, and I'm also including all performance measures that are required to be collected as per ASME B31.8S. This report will look different from the 2016 report. I'm finishing that up now and will send it this week.
 - The format for the 2016 (previously submitted) and 2017 report are different. The 2017 report is reporting metrics by BU, where the 2016 report was at a higher level in some places.
 - The 2016 report did a great job of comparing previous year's results into one graph and/or table. The 2017 report doesn't have this same past year comparison. Since the way we reported things in 2017 changed, I wasn't able to do that. Perhaps this will be a good report enhancement for future reports once it's decided the standard format for these reports.
 - There are some metrics that we need to do a better job of collecting in the future. I can go into more detail on that in person.
 - The goal is to look at incident's failures, and events from prior year and offer IMP program enhancements. The reports should also be signed with the reviewers identified. Program changes and enhancements should also be documented on the report. The IMP 9-0000 currently states that the PORMC will have a yearly review of the prior year's Performance Metrics report and will document results.
- 3. Main Line Valve response time: For this one, I've attached the updated spreadsheet with mainline valve response times. Updates were provided by the region. I've also asked Jared to highlight areas where the response time has increased or decreased compared to 2017. Those are highlighted in the spreadsheet. I recommend the regions look at areas where response times have increased. There are a few areas where it increased by a considerable amount. That needs to be verified by the area. Based on our commitment to INGAA, I believe all companies have committed to have a response time of 1 hour by adding RCV's/ASV's where necessary. Part of the documentation for this review should be a listing of who all reviewed the spreadsheet, and recommendations that the group has on how many RCV's/ASV's to install next year, as well as where they should be installed.

4. PORMC Meeting Documentation: The Inspector commented that these meetings are good to have, but we need to have proper documentation of the meetings. This documentation includes an agenda, who all attended, major decisions that were made, action items, etc.

Susceptible Pipe Review

This one is not necessarily a PORMC requirement, but it is the right audience to make a decision on the matter. Since the Susceptible Pipe review was expanded beyond ETNG, some historical excursions have been identified that exceed the 5yr mitigation agreement made for the ETNG corrective action. I've discussed this with Bryan and he mentioned discussing this during the PORMC meeting to make a decision on when these excursions would need to be pressure tested. I've attached the file for your reference.

Additional Comments:

- Mt. Pleasant to Gladeville Special Permit status? when does it kick in? need to understand the requirements for O&M tasks and costs.
- The new Houston based ILI personnel that has been discussed in the past, when will this start and what is within their scope; that is, how will our tasks change in the Regions, and when?
- Guidance on low-point drains, in our Tuscumbia Annual Integrity meeting it was
 discussed that we have not been clearing them and have not in some time, I need to
 research the SOP requirements, cannot just blow them to a barrel as they have full line
 pressure.
- Similar discussions have taken place in the past on the sweeping of aux river crossings, we are not consistent, some areas are sweeping them and others have said that they swept, put some inhibitor in and closed the valves and were told to leave them this way, many years ago.
- Re-establishment of a weekly call of the P/L Integrity Supervisors and Houston Integrity Manager, it was a good way to keep each other informed.
- 2019 Corrosion Tech Meeting schedule, prosed agenda.

Bryan's Notes:

 Consider non-piggable piping aboveground rather than belowground for future integrity assessments. Meter and Compressor stations, tie-in locations, etc...ability to inspect is more efficient. Design consideration for cold weather systems with aboveground piping and insulation considerations for inspections and maintenance. Facilities integrity specific?

- National Response Center requires certain reports within 1-hr of incident. How are these events tracked and reported to the Compliance group to meet the requirements of the reporting structure.
- What is the plan for pipeline integrity in 2019 and into the future? How to communicate effectively across team and GTM business units? How does this correlate with the Integrated Management system?
- PE Mtg action item and parking lot findings to present at 1st Qtr 2019 meeting of the PORMC.
 - Put in SAP items that need to be tracked and executed
- ILI team looking at software/consultants to perform different vendor run comparisons in consideration when running different ILI tools on a case by case basis (time of year, regulations, gas control)
- Susceptible Piping Hydrostatic tests
 - When do we test? East Tenn lines having 5 yrs was a negotiation due to the number of tests.
 - Develop a plan and budget for performing assessment in the following year (found in 2018, budget in 2019, perform assessment in 2020 – unless there is a risk based assessment that states we need to assess sooner).
 - Consider pressure excursion variances from MAOP as prioritization
 - Consider prioritization against risk ranking and determine need to test sooner
- Risk Ranking:
 - Review annually with PORMC prior to budget season
 - Review Top 10's? Review statistics driving highest ranks? Interactive data sets working appropriately encompassing HCA's?
- PORMC Risk Register Sub-Committee
 - Report only needs on register up to PORMC
 - Bryan MacKenzie will chair. Discuss initial plans with existing project managers listed, create committee of managers?
- Remote Control Valve Response Times
 - Reviewing the spreadsheet with response times to verify and possibly re-classify certain locations as emergency response valves
 - Review the spreadsheet for locations named inaccurately (ie: pig trap isolation valves).
 - Review the 2+hr locations, followed by the 1+hr locations
- Reviewed Organization chart along with responsibilities again
- How to react to an "Immediate" call... take a pressure cut, take a pressure cut and excavate/investigate, or something different?

PORMC 2nd Qtr 2019 Meeting Minutes

May 23rd, 2019

Attendees:

Terry Delong, Kurt Baraniecki, Kevin Schindel, Than Phan, Chris Burris, Rick Kivela, Steve Rapp, Bryan MacKenzie, Tom Tirlia, Doug Barnes, Bill Quinn, David Mucz

Introductions:

Safety Moment:

 Bike Safety Month (May) – Helmet laws by province, replacement recommendations for helmets, safety examples

Prior meeting minutes:

- ASV/RCV address what we really do in IMP and capture during IMP consolidation and updates to come
- Risk Matrix accountability on the spreadsheet how do we address within the spreadsheet and not just continue to change the delivery date how do we rank risk (use existing 5x5 or transition to the new 7x7)?
- Performance document review when? How to document and track annually?
- Mandate Review continued Roles and Responsibilities Accountabilities for this committee

Committee Mandate Detailed Review:

What does this committee oversee and have accountability of? Do we make consistent with Facilities and Underground storage versions (or combine)? Learning from incidents (inside and outside company and industry), metrics (leading and lagging), review of the entire program as a whole and any trends we can focus on to make change, consistency across all business units. How do we capture key integrity discussions that are important and accountable to Integrity as a whole? Does not need to be consistent issues across all regions, but high risk issues that are important and need an accountable group to mitigate. Report out annually of Periodic Evaluation meeting issues to this committee. Discuss compliance issues. Roundtable discussion during these meetings to discuss any relevant incidents in or outside industry. Create a standing agenda so items to be discussed can be created well in advance of the next meeting. Industry Groups or JIP project reporting and request for needs to bring back to those groups. Review of significant events relating to Abnormal, Safety, incidents, and MAOP excursions. How do we track these in metrics? Sharing topics from the monthly technology call across all Enbridge? Audit findings. Performance Metrics need to be reviewed by this group. Do we need to add an E&C rep to this group if we are going to discuss design and construction issues related to Integrity? Need to define accountability of technical owners of the specifications and facility owners/Operation Group of the asset who will ultimately operate...is this Operations group or Engineering group? Remove E&C from this group and bring in to discuss only as needed. Remove Supply Chain opportunity for this group unless as needed. Special teams ad-hoc based on group incident discussions to address integrity needs should still be handled in this meeting. Discuss SOP's and IMP as needed. Discuss annual Risk Results.

Risk meeting structure to change mid-2019? Ask Stephen McFadden during Process Safety update mid-morning in today's meeting. How do we update the old Risk Matrix? Transitioning to Bow Tie methodology to rank.

Pipeline Integrity Organization Update:

Future state org chart being proposed has been provided for discussion. Not set in stone at this time. Meetings with Operations set for June 10th /11th to finalize possible future state. Largely based on Enbridge LP organizational structure. Discussed high level roles and responsibilities under future state org chart. Proposing to have organization stood up later in 2019 to be ready to execute in 2020. Need to be sure new and old roles are mapped to appropriate data and document entry required (MOC's, special permits, etc).

Consolidate IMP – path to getting to one consolidate IMP by the end of the year, but this must be taken in context. What does completed mean? Does it mean we have a written document that basically shows what the program will look like with a 2-3 yr plan to get initiated across all of GTM. A consolidation plan and implementation plan should be documented at a minimum, by year's end, with direction toward existing documents currently being maintained. Dynamic Risk acting as consultant and will have a phased approach provided. How do we use the Management System with the IMP? Is it part of the overall, singular document, or does it become a reference outside and aligned within the IMP.

Dynamic Risk Independent Integrity Program Review:

History of the review occurring, the phases of the review, and current status. Gap identification based on specific program section reviews. Create an action plan based on the data we have. Some lines have been pressure restricted due to specific threats. As data is received and reviewed, pressure restrictions can be removed. For pipelines that are currently pressure restricted, if on forecast for abandonment, can we justify doing that now and removing from overall line list of assets. What formal document do we need in place to lift a pressure restriction based on technology utilized to validate risk has been mitigated.

Integrated Management System (IMS):

Update on the current status of the program(s). Quite a bit of work that is currently underway including critical areas like MOC, Competency, Roles and Responsibility that we will be held accountable and need to align with and meet the requirements. How Integrity complies with these requirements will be a focus, including assurance as well.

Process Safety Update:

Asset Management of Change (AMOC) – Element 6.0 within the process. Used when making changes to our pipelines, facilities, operational controls, etc for gas carrying assets. Process in development including tool enhancements. One standardized way to execute across GTM. Will replace the paper forms and progress into an electronic tracking and approval system. Other MOC's are Documentation (DMOC), Organizational (OMOC), and Regulatory (RMOC).

Operational Risk Management (ORM) -3^{rd} Qtr 2019 changes coming. Standardized approach to how risks will be managed, identified, evaluated, and analyzed. Accountabilities and responsibilities within the process. Tools to use and when to use them including escalation and management review.

The program will follow ISO31000 process structure. Timeline for implementation is tentatively July – October 2019.

Risk Update:

Alliance is performing their independent Risk review this year. OneGIS program will have their pipeline attributes loaded by November 2019. Vector, Offshore, Alliance, and CGT are all loaded into the system, but missing aspects of the pipeline attributes being linked to the system through the OneGIS project. So the current risk ranking outputs very conservative numbers based on missing data not mapping to the risk software at this time. Innovation Lab is focused on building maps to all of the data consistently and creating confidence tables so we can create projects based on threat needs. Risk Algorithm has been finalized and appears to be working as needed, but need data to feed it consistently. Specific threats within the algorithm will need to be modified based on findings from the DRAS Independent IMP report. We need OPDM Periodic Evaluation forms from 2018 to be updated as applicable and completed. Corporate risk register threats need to be aligned to current 5x5 matrix, but also to upcoming 7x7 planned. Threat sub-committee to meet at the end of July to align to the matrix and will report out during 3rd Qtr PORMC. Suggestion for GIS group to work with a business rule query looking for bad data points (ones that are not realistic) for correction for bad values already in GIS. How do we work with Facilities Integrity to determine process to notify of common work (ie: crossovers, headers, mid-wall pipe issues in a station)?

Compliance:

Update on the pipeline safety act reauthorization based on 4 yr cycle. Most significant changes would need a Prof Eng to sign off on certain aspects of Operator Qualification tasks. Push for PHMSA to regulate safety management systems. Gas "Mega" Rule will be split into two Rules, rule 1 in 2019 and rule 2 in 2020. How will DRAS Independent report reflect rule changes and how we respond to threats. PHMSA enforcement action metrics showing violation breakdown. What needs to happen with the Offshore assets in regard to the overall IMP (Gas Trans, Gas Gathering, and Oil Transmission)? Focus on class location special permits and how to manage these?

Incident Summaries:

Shelley – 12 formal engineering assessments to be filed. 5 out of 12 have been submitted, no approvals yet. EMAT validation going very well working with BHGE. Proposing to run ROSEN simultaneously with BHGE to validate both tools and analysts. Engineering Assessment process will be well documented through this incident. Full EA's and "EA light" could be two different versions of the process going forward.

Pleasant Shade – continuing to look into the crack related issues that drove this failure and how it might affect the overall operation and IMP for this system and others susceptible.

Noble County – Investigation report should come out soon. Geohazard ground movement caused failure at a girth weld. Need to use ILI data appropriately to better view our geohazard management. PHMSA focused on ground survey and analysis that came from it. Building program based on incident process and recent advisory bulletin.

Program Performance/Review:

Annual Performance Reports – verify 2016 and 2017 reports were finalized and documented as "no actions needed." 2018 report almost completed and will be reviewed in PORMC 3rd Qtr meeting. Who has accountability of this report going forward? What version of this report do we want going forward and how to capture the metrics and performance needed to validate and create action items, if necessary? How can we learn from these findings? Example: 4 ILI's failed this past year, why did they fail, what percentage of total runs did this affect? What can we learn from these failures? Immediate features – what program do these issues fall under and is it representative of a leading indicator, trend, or program improvement we need to enact to capture this learning and show a performance metric reflecting this learning/knowledge. What does our repair rate look like and is it consistent across the organization? What can show in learning from incidents? Shelley and East Tennessee failures in 2018. Can we capture in the 2018 report what incidents occurred and how we have changed the program, as a whole, to reflect the learnings from those incidents - tie into what we are currently doing in 2019.

Metrics (Monthly, Quarterly, & Annually) - How can we get data from regions in a more efficient manner so we don't have to take their time? How do we handle scorecard data mining. Some are internal metrics, but many are regulatory driven (US & CAN) and need to be collected frequently. Need to designate a time to discuss interim efficiencies in obtaining the data (access to software and server locations possibly, working with the Power BI team to build a metrics module before building other modules on the dashboard).

Future Progress:

How can we make this meeting more effective? What do we gain from getting this group together? Does the topic rotate from meeting to meeting to focus on specifics such as incidents, technology, risk, etc? Most do not want to spend the entire day going through the detail specific risk registry. How do we utilize the data we have access to better, so that risk isn't such a detailed assessment by this group? How do we tie into what's happening between the newer Integrated Management System work and how the Integrity Management Program is evolving? Timing for the meeting to be typically setup prior to the Accountable Officer meeting and coordinate with other disciplines. Who is accountable for this meeting?

Action Items?

- Performance Document review needs to occur 1st or 2nd Qtr Meeting chair
 - Verify all prior complete vice chair
 - o Review 2018 doc during 3rd Qtr meeting committee
 - Metrics tied to these documents vice chair
- Revised mandate document completion and signoff chair
 - Who is accountable for this committee chair
 - o Who manages learnings/action items for this committee vice chair
 - o Standing Agenda for all meetings distributed well in advance vice chair
- Do we collaborate with Facilities Integrity and Storage groups in overall format for these meetings or even consider merging? chair

PORMC 3rd Qtr 2019 Meeting Minutes

August 6th, 2019

Attendees:

Terry Delong, Chris Burris, Bryan MacKenzie, Tom Tirlia, Doug Barnes, Adiki Risch-Gage, Duane Boyce, Joshua Minhas, Dan Larrington, Kyle Hart

Introductions

Safety Moment:

• Gas Pipeline Rupture/Ignition event: Another pipeline rupture with a fatality...this cannot happen. Are we looking at the right things, analyzing the proper data, and making the best determination in how to prevent these events from occurring?

Prior meeting minutes:

- Performance document review when? How to document and track annually?
 - Status from Adiki
 - o 2019 document to be delivered to committee 1st or 2nd Qtr 2020?
- Mandate Review continued Roles and Responsibilities Accountabilities for this committee
 - o Final format and signoff for Chair send out for final review/comments
- Risk Meeting Structure Change
 - o Updated membership list and need for quorum
 - o Committee name change
 - o Cover all programs? Storage, Facilities, Pipeline
- IMS/Process Safety/ORM
 - o How does this meeting tie into the overall intent for this committee
- Incident Reviews
- DRAS Independent Review/ IMP Consolidation Update

Outstanding Action Items:

- Performance Document review needs to occur 1st or 2nd Qtr Meeting chair
 - Verify all prior complete vice chair
 - o Review 2018 doc during 3rd Qtr meeting committee
 - o Metrics tied to these documents vice chair
- Revised mandate document completion and signoff chair
 - o Who is accountable for this committee chair
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- Do we collaborate with Facilities Integrity and Storage groups in overall format for these meetings or even consider merging? – chair

Risk Review:

 Ask DRAS to complete annual report/documentation for individual risk analysis on UST, CGT, Alliance. Needs to be captured in a document over just having risk output.

- How does risk work with planning group? When should reports be completed and by whom?
 - Does this group review those reports?
- Risk & Hazard Registry. How to list, work with Risk Engineers and Planning Engineers and compare to what Compression and Storage have in their registry. What is a risk v/s a hazard? Work with Adiki and Quince to compare changes to the registry. We shouldn't develop this list, we should review the list that is maintained and managed by other groups.
 - Bryan to work with Quince and Scott regarding registries and comparing and how that ties back in IMS requirements. (Duane Boyce)

IMS Update:

- Provide senior leadership with reports on Management effectiveness and overall IMS requirements.
- Quarterly reports are currently being maintained by Terry and stored in Calgary, but does it need to be handled by another responsible group?
- Establish targets that represent the program and shows the effectiveness
 - How do we define qualitative targets such as program effectiveness over physical project/program targets that are more easily tracked?
- Need to define how Internal and External Audits are handled through the overall program and captured within IMS.

ORM & AMOC Update

- ORM: Risk Management Process to include risk registers, governance meetings, EnCompass Risk management process workflow
 - Risk matrix converting to 7x7 matrix. Hazard ID and inventory document being developed – Compression group is the pilot program.
 - Who will maintain Hazard inventory? Currently a tool in Enabalon. Need to enter Hazards into Enabalon tool.
 - Threat, hazard, risk definitions needed and how to best capture
 - Quarterly governance meetings to discuss High and Very High risks at Manager,
 Director, and VP levels
 - o Roll-out through the end of 2019.
- AMOC: Scoping document being developed and close to final approval
 - o Roll-out most likely 1st Qtr 2020

IPIPR - DRAS Update

- Continuing to work on various document convergence programs
- Pressure restriction work completed on segments with Top 10% consequence exposure

Incident Learning & Prevention

- Shelley: TSB did issue an SCC advisory based on the incident, all EMAT's (12 segments 36") have been run. 6 segments have been lifted from restriction. 3 reports submitted for review.
 - 3 hydrostatic spike tests (110% SMYS) near the rupture location completed with no failures

- Run both EMAT vendors (GE & ROSEN) on same section of pipe to get validation of tool capability and analysis. Won't receive reports until November, but expected similar responses.
- Noble County: Additional strain analysis being performed on ILI tool runs in regard to other locations with significant strain.
- Pleasant Shade: No new reporting, no final report just yet.

Program Performance & Review

- 2018 Program Annual Review doc needs to be discussed and signed off
 - o 2019 document needs to be prepared and ready for review 1st Qtr and no later than 2nd Qtr 2020
- RCV/ASV Review: Regions are reviewing the list and completing Tier I needs and working on Tier II needs.
 - Exists at the region level on a spreadsheet. Who has ownership and what does this committee need to review?
 - What is actually required to be reviewed in regard to rules for Valve Placement and Access/Response times?
- Goals, Objectives, & Targets:
 - Repository setup where people could update their portions of the ongoing metrics and others needing the data can grab/view?
 - o A sharepoint site?
 - Depending upon data points being viewed, TIS could create a metrics dashboard accessed through PowerBI potentially? It would be real time updated then.
 - o Being developed at the VP level and Sandra Coates is managing the "ask"
 - Can we review everything we need to collect now and determine how best to obtain and does it provide value?
 - Spent a large portion of this meeting going through the existing metrics and adjusting specific "ask" to reflect what is currently available.
 - o What is a CP survey? A single process along a segment regardless of the number of test points? Need definition to clarify across UST and CGT.

Audits

- S&R Internal safety and reliability reviewing program and have provided draft recommendations
- PHMSA Alliance Audit finished
- DNV Auditing Maritimes Integrity as required in OPR (every 3-yrs)
- ETNG PHMSA audit in Sept follow up from spring
- Texas Railroad commission audit of VCP and BIG in October

Current/Outstanding Action Items:

- Performance document review when? How to document and track annually?
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 - Risk Meeting Structure Change
 - Updated membership list and need for quorum
 - Committee name change
 - Cover all programs? Storage, Facilities, Pipeline
 - How do IMS/ORM meetings tie into the overall intent for this committee?
 - Bryan to work with Quince and Scott regarding risk/hazard registries and how to compare and tie back in IMS requirements. (Duane Boyce)
- IMS/Process Safety/ORM
 - o Who handles quarterly IMS reports/Targets/effectiveness/audits/etc?
 - Who will maintain Hazard inventory? Currently a tool in Enabalon. Need to enter Hazards into Enabalon tool.
 - Threat, hazard, risk definitions needed and how to best capture
 - Quarterly governance meetings to discuss High and Very High risks at Manager,
 Director, and VP levels
 - How do we minimize number of quarterly committee meetings so membership and quorum are consistently achieved? Combine committees and make meetings longer to capture appropriate membership?
- RCV/ASV Review: Regions are reviewing the list and completing Tier I needs and working on Tier II needs.
 - Exists at the region level on a spreadsheet. Who has ownership and what does this committee need to review?
 - What is actually required to be reviewed in regard to rules for Valve Placement and Access/Response times?