CASQAT April Meeting Minutes
April 27 and 28 Houston, TX @ Williams

Day 1, April 27 (3pm start)

1. **Welcome, introduction of guests, review note-taking task**
    - **Present in person:** Andrew Lu, Mary Holzmann, Dane Spillar, Larry Rankin, Steve Nanney, David Chislea, Harry Bryant, Virgil Wallace, Garry Matocha, Bob Fassett, Alan Eastman, Max Kieba
    - **Phone:** Dave Berger
    - **Not Able to Attend:** Alan Mayberry, Bob Smith, Bill Lowry, John West
    - **Guests:** There were no guests on day 1

    Max will serve as primary note-taker for this meeting, with additional collaboration with Andrew.

2. **Approve minutes from April 15 conference call. Approved.**

3. **Discussion on how decisions are made on task group, address what happens if consensus cannot be achieved, discussion on "the June 1 product" and CASQAT after the workshop.**

    As mentioned on the April 15 conference call, in cases where consensus cannot be reached, PHMSA will make the final decision. PHMSA would, however, prefer to limit the amount of “tough calls” it has to make, and would prefer to do so only after allowing sufficient input to be received through CASQAT meetings, the public workshop, and additional discussion with CASQAT following the workshop. If conflicting opinions still exist at that point, THEN PHMSA will make a call. As someone on the team mentioned, it will follow a process similar to a rulemaking initiative, where PHMSA may get several comments in, many of which may not agree with one another, and has to decide based on all input received how to proceed in the interest if public safety.

    Speaking of rulemaking, there was some confusion in a previous meeting where Bob Smith/PHMSA mentioned we would be going to a rulemaking eventually based on this guidance material. Max clarified while it may eventually come to a point where things like the guided wave 18 point checklist and CASQAT documents are incorporated into a rulemaking and one can never guarantee timing of priorities, there are no plans that he’s aware of to draft up an NPRM or similar documentation “anytime soon”. The group had some additional discussion and agreed it’s far too soon to consider a new rulemaking based on these current guidelines. These documents need time to not only be more vetted and presented, but also time to see how effective they are from both a regulator and industry perspective.

The June 1 “product” will be the complete package of guidelines and other supporting documentation (such as the road map) which will be released together. We will highlight and make a note of those items for which we could not reach full consensus prior to providing them for public review before the workshop.

Max will recommend that CASQAT stay together following the workshop. At a minimum, the group will get together right after the workshop to discuss input received prior to the final guidelines being published (timing TBD based on mutual convenience). As also agreed, there may be a need for the CASQAT to be available for discussion in the future if deemed necessary following an update of NACE or other relevant standards/practices.

4. Status of “legal disclaimer”

PHMSA is still discussing the exact wording proposed, but in general doesn’t feel a disclaimer is needed on each and every document produced. If the guidelines continue to live on the GasIMP website, wording on the website should be sufficient based on what was done previously. The rest of the group is supportive of putting it on website and/or as the preamble when referring to these documents.

Also note while “legal disclaimer” has been used previously in describing this language, the group agreed it’s an improper use of words. It is really more of a statement to put the information into context.

ACTION ITEM: PHMSA to continue discussing draft wording proposed to convey scope and applicability and provide an update to the group by the next meeting

5. Review Road Map draft document – Andrew

To refresh everyone, this overview document (and accompanying PowerPoint slides) is intended to put the guidance documents into context when the entire package is presented publicly. Since there are so many documents being developed, it is a tool that should also be used to introduce the task group’s efforts and explain its scope. Several good suggestions were made to improve the document and the draft has been updated to reflect these changes. *See attached*

6. Thoughts on Post-Assessment

The group agreed some kind of additional documentation is needed on post assessment. Currently, what documentation do we have for operators to be able to rule out the threat of external corrosion and what else is needed? In general,

for this and all guidance materials, users should follow (and know) NACE 0502 first. For clarification on post-assessment on casings vs. linepipe:

- The main thing different theoretically on post-assessment for casings vs. line pipe is establishing re-assessment interval. The group feels providing clarification on this and other differences could be helpful.
- Max reminded folks about the Pre-CASQAT draft re-assessment procedure documents that were put in the parking lot whole or in part. They may or may not include some helpful wording in the development of post-assessment documentation.

ACTION ITEM: Dane will lead putting together a post-assessment document, with assistance from Bob F. and Alan E. will assist.

7. **Back to overview document**

   Several additional changes were agreed to, in improving the overview document.

   ACTION ITEM: Andrew will incorporate the edits/comments received and re-send to the group.

8. **Additional discussion on legacy/previously filled casings.**

   How to recognize previously filled casings… where is the line drawn and what will CASQAT's position be? We have casings that were filled decades ago prior to rules, others just prior to and after new rules, and even some very recently while this guidance is being developed. The group had a lengthy discussion on what to do with previously filled casings and agreed an additional document with some examples could help. While we can't lay out all scenarios, we may at least be able to provide an example of

   - a definite pass,
   - a definite no, and
   - one in between where engineering judgment is needed.

   The document should also provide guidance on

   - Those filled immediately after commissioning of pipe
   - Those filled sometime after commissioning
   - Those filled with known short

   ACTION ITEM: Mary, Garry, Andrew, and Dane will put something together initially and circulate for consideration

9. **Discussion on monitoring document (previously referred to as Virgil's document, hereafter requested to no longer be referred to as Virgil's document.)**

It was acknowledged the monitoring document is a work in progress and some tweaking is needed to make things more clear overall. A bit more discussion took place on some clarifications needed such as procedural differences based on temperature.

The group had some additional discussion on the shorted casing issue discussion in the context of this document. PHMSA reiterated that it would not be comfortable allowing shorted casings to be included in the group that is granted exemption from reassessment requirements for external corrosion. The group is still deciding if some additional guidance on shorted casings is needed, or whether it's even worth it based on the PHMSA position. It may end up being that we'll just have to note it as a topic on which the team could not reach full consensus, realize it will be sensitive topic of discussion at the workshop, PHMSA will state their position, and the operators will be instructed to present their justification on a case-by-case basis to PHMSA to convince them otherwise.

10. Discussion on edits to publicly available audit protocols

As part of the discussion on an alternative to the Regions document (specifically including R's and C's), Andrew asked if PHMSA would consider allowing CASQAT to provide input on audit protocols. As an example, Bob Fassett took the example of publicly available audit protocols from the PHMSA website and through tracked changes, included questions for the operator to consider based on some of the CASQAT comments added to the regions document. This hadn't been vetted yet by others on the team. (See more description under Day 2, item 15)

Day 2

Present: Mary, Dane, Andrew, David C., Bob F., Harry, Virgil, Garry, Max, Alan E.
Phone: Dave B, Larry, Steve N.
Guests (in person): Frank Rampton and Rob Geib (only for agenda items 11 and 12)
Guests (on phone): Jim Warner, Consumer's Energy (only for agenda item 13)
Not Able to Attend: Alan Mayberry, Bob Smith, Bill Lowry, John West

11. Rob Geib presentation on the EMW technology and how it works.

Among the items clarified as part of Q&A during the presentation:

- The minimum number of contacts needed on the carrier pipe is dependent on pipe diameter. A question was asked on the importance of keeping the contacts intact during the testing and whether breaking contacts ends the test. Rob mentioned while you never want to lose a contact during testing, if say you one out of 4 is lost, it will affect the data, but the inspection is still viable since there is some redundancy in the contacts.
- The signal stops if it hits a hard short. That's how they detect the end of a casing… they create a hard short. If there is a short in the casing, it will

stop at the casing (and the tool can tell you where it is), but the signal will not be able to go past that.

- Resolution of detection (be able to tell one material (such as water) compared to another (such as air.)) It's easier to tell if you're able to compare against a baseline. If you don't have that baseline, it is more difficult to interpret the first time through, but there is an ability to create models to help.
- The technology cannot detect wall loss, or at least tell specific amount; however, it can be used by the operator to determine the level of corrosive environment that exists in the annulus.

12. Discussion on wax-fill document with Frank Rampton

Frank Rampton was provided with previous drafts of the wax-fill document, and sat-in on some industry calls. He's provided some input back through different CASQAT members, so was asked to stick around for a bit to discuss only his specific comments with the group for consideration (he and Rob would not be allowed to take part in additional CASQAT discussion on the rest of the document). The following were some of the main points discussed with Frank:

- Strike "filler should also be non-flammable" and include "refer to NACE RP0200-2000 for filler material criteria." The group was ok with this
- In talking different filler materials, temperature is obviously an important consideration. CASQAT members have seen/heard all sorts of ranges thrown around publicly and privately (even from the same manufacturer) and were wondering if it can provide guidance on "a number" to watch when certain filler materials will melt, while not giving unfair preference to a particular manufacturer. Frank could not give a firm number on temperature when fill melts, but promised to get back to us after talking with his folks and looking at relevant ASTM standards. After going back and forth a bit with best guesses, for the purposes of CASQAT when we go public with the guidance, it may be best to say the group acknowledges this is a concern, but can't give guidance on "a number"… best talk to manufacturer. [Note: Frank provided the following in a later email: "*I'm following up on the request for an ASTM temperature maximum for the Trenton hot fill (Fill-Coat #1 product). The drop melt point temperature (ASTM D127) is 160°F for the Fill Coat #1"* Even if we now have a number linked to a standard, we may still as a group want to suggest readers to talk to the manufacturer for more details. *]*

Break (Frank and Rob left at this point)

13. Jim Warner, Consumers Energy, joined the meeting by phone to share some of his company's ILI data and discuss the ongoing analysis.

The data presented was emailed to the group, including those on the phone. It will also be uploaded to the CASQAT internal website. The discussion helped to serve multiple purposes. It provided some rather raw data and discussion on ongoing analysis as an example of the some of the challenges an operator may face and the effort required to analyze data (including data on some older casing installations with limited data), risk ranking, developing a plan and communicating that plan to regulators. The data indicated Jim's company's experience in discovering anomalies on cased pipe vs. non-cased pipe. Within cased pipe, it provided data on anomalies found on fill vs. non-fill installations with many of the fillings from the 1940s, 50s and 60s. It provided anomaly distributions by several cuts:

- Casing length
- Carrier pipe diameter
- Installation Year
- Type of Filler, Insulator, Bushing, Cradle
- Distance from casing end
- Distance from weld

Some of the casings were partially filled based upon the information the company had. Casings over 80% filled were considered as "filled" for the analysis. Steve Nanney asked if the company could perform analysis on the distribution of anomalies for shorted and non-shorted casings, especially those are filled. This is an area that Jim said his company still needs to examine.

Lunch break

14. Additional discussion on Rob Geib presentation

While some on the team have used the Profile EMW technology, it is still a developing technology and should only be used for go/no-go decision currently, not a full out replacement of the GWUT yet. If it can advance enough though, it could be a more solid tool in the tool box.

15. More discussion on protocol document presented at the end of Day 1.

To clarify, with the exception of some industry members on CASQAT that had it emailed to them Sunday, no one has seen it before the Houston meeting, so it's acknowledged it needs to be further developed if the concept is acceptable to PHMSA. The thought behind it is most operators go to the protocol page to know what questions they have to ask themselves, and what questions may be asked of them in an audit, so it would he helpful to put some of the questions there. Yes, this would be an alternative to some of the language in the casing region document and yes, some members of CASQAT do still feel strongly that the R's and C's should be removed from the Casing Region document. The group

understood that IF the ultimate decision is to remove the R and C from CASQAT guidance documentation, PHMSA will still provide more detailed guidance for both Federal and State inspectors on what they think R's and C's should be prior to more detailed discussion in audits, and hopes there are no major surprises in the future on why operators are being inspected a certain way. Industry reps expressed an interest in helping PHMSA write the protocols for cased pipe assessment.

ACTION ITEM: PHMSA to take a look at the document, consider the R and C issue more and get back to the group.

16. Discussion on Bob F's data "Casings that were ILI'd and DAd 9-2-08" doc.

As another example of the type of data operators may have and how they analyze, Bob F. shared some of his company's data. There was some Q&A on some of the data points, but not a lot of time spent going over the full dataset. Bob was willing to answer any questions others had, including spending more time during the meeting if the group felt it was useful. In general, though, it helped put additional perspective on "whether we want to go there" and how far in the context of CASQAT documents.

17. Additional discussion on monitoring draft

Mary made some edits to the document and shared with the group for discussion. The following recommendations were made based on this version:

- Clean up intro better from what Mary had (Document should start with 2nd paragraph "To ensure..") The beginning language Mary had was good, just may be better placed elsewhere in this or other documents
- Break out temperature consideration vs. no temperature consideration. This may help clear up a lot of confusion over the previous version and help relax some of the requirements if an operator won't typically deal with higher temperatures. Doing so would also adjust some of the requirements on quarterly monitoring that has been a concern in previous documentation. PHMSA is tentatively ok with adjusting quarterly monitoring if there is a clear enough distinction of temp vs. non-temperature related applications, but had to wait on seeing the next version before giving a more concrete answer.

ACTION ITEM: Mary, Dane, and Virgil will work together on the next version.

18. Additional general discussions that affect multiple documents and may come up as questions in the workshop

a. **Questions on** ruling out the threat of external corrosion … will it just be ruling out the threat of external corrosion related to subpart O, or .467 as well? The general consensus is you still have to do .467 regardless.
b. **Discussion on DA monitoring**. Is more clarification needed to specify more frequent monitoring is needed for determination of electrolytic condition in certain situations (wet and dry seasons), etc?
    i. Consider putting CP monitoring in post assessment document. Do we need it elsewhere? Also in pre-assessment? It has a place in monitoring as well. The group is still deciding if best placed in one document or multiple documents, but in general the operator has to establish monitoring plan to consider seasonally electrolytic conditions.
c. **Minimum Examination Requirement for Cased Pipe segments** discussion. From the meeting agenda: "**Cased Pipe Examination Requirements"**: There was disagreement on the conference call regarding item 5. Tools are currently being utilized to perform Direct Examination within the operators' ECDA procedure. How will this be addressed in this document?"
    i. The group agreed putting NACE language in the document should help clarify the concerns. See "Minimum Direct Examination Requirements for ECDA"
d. **Question on 180 day notification**: In general, questions were raised as to whether the 180 day notification can be changed for certain technologies that officially are still "other technology" but perhaps a bit more proven, or if too complicated at least adjust all notifications where multiple reporting isn't needed. Those that suggested a change didn't have an exact number in mind yet (such as changing to 60 or 90 days), but would like to discuss further. PHMSA acknowledged the rationale and decisions on 180 day notification rules are a bit outdated, and is willing to discuss further and/or entertain proposals.

    There was a recommendation to take language from 0502: The techniques included in this list are not intended to illustrate the only direct examination methods that are applicable or the capabilities of these inspection methods under all conditions. Rather, they are listed as representative examples of the types of direct examination methods available for an ECDA program. Other direct examination methods can and should be used as required by the unique situations along a pipeline or as new technologies are developed. In addition, the reader is cautioned to assess the capabilities of any method independently before using it in an ECDA program.
e. **FAQ updates**. It was agreed that there is a need to "freshen up" FAQs 198 and 235. For instance: one is Dec 04, another Dec 05; both are a bit contradictory to one another; Guided Wave hasn't been updated for ECDA. **ACTION ITEM** (PHMSA): Take a look at FAQ 198 and 235.

19. Review other changes to wax fill document.

The following additional changes were recommended:

- Consider removing "7) backfill." Keeping it in there doesn't seem to add anything significant one way or another.
- Section B… remove non-fillable (insert refer to NACE.)
- End of B… remove last sentence "Choose a fill material
- B2, remove parentheses, add "," around (air and ground not too cold)

Next meeting: Wednesday and Thursday, 5/27 and 5/28 in DC (will try PHMSA first; plan B is AGA) Plan to travel afternoon/evening of the 26th, Wednesday 5/27 all day through Thursday afternoon. End time depends on flights.