

Minutes of Casing Quality Action Team Meeting

AGA Headquarters, February 4th and 5th, 2009

[DISCLAIMER: Summary minutes are being shared in the interest of transparency. Please keep in mind while minutes may include discussion of guidelines being considered, nothing is considered final until vetted more by the task group and released on the public site.]

In attendance

Andrew Lu – AGA	Alan Mayberry – PHMSA (Beginning of day 1)
Virgil Wallace – Williams	Steve Nanney – PHMSA
Garry Matocha – Spectra	Max Kieba – PHMSA
Mary Holzmann – National Grid	Harry Bryant – North Carolina UC
Dane Spillers – Ameren	David Chislea – Michigan PSC
Alan Eastman – Mears	Dave Berger – Cyclo/PHMSA
Larry Rankin – Corrpro	
Victoria Plotkin – AGA	

Unable to attend: Bob Fassett (PG&E), Bob Smith (PHMSA).

February 4, 2009

The meeting opened at 1 PM on February 4th at the AGA Headquarters offices in Washington, DC. Attendees, above, met to discuss several proposals for assessing pipelines in casings and other hard to assess areas where ILI or pressure testing could not be utilized.

Alan Mayberry welcomed everyone and thanked AGA for hosting and putting the group together. He said that PHMSA is looking forward to making significant progress and would like to have the guidance from the group ready by June 1. He said that these guidance documents will help both the industry and the regulators with reviewing casing assessments. He reiterated that the law and the rule specify that all pipelines within an HCA must be assessed. He also said that the documents that have been circulated were straw-men developed by PHMSA to start discussions and hoped that would be the case.

[For the benefit of those outside the task group, PHMSA shared some DRAFT documents on how PHMSA could consider implementing cased crossing re-assessment guidelines/procedures to meet CFR 192, Subpart O.

- High level spreadsheet of Cased Crossing IMP Guidelines
- Re-assessment of cased crossings document (how lengthening the time between assessments can be justified under the Pipeline Integrity Rule)
- Casing Re-assessment procedure (More detailed procedure for interim (7 year) inspections for external corrosion)
- Casing Regions with guidance materials
- Guidance on Filled Casings

These documents were put together through the course of internal and external discussions, but not yet published or otherwise implemented. They were provided first to AGA following the December 2008 meeting. PHMSA/AGA discussed whether best to “start from scratch” or work off these documents to start. It was agreed best to start working off these to help get CASQAT discussion going, with the understanding they are all subject to change based on CASQAT input. The task group may also decide to not use some of the documents at all, roll certain elements into others, or develop new ones entirely]

Andrew Lu went over some housekeeping issues and reviewed the issues he talked about in a recent email.

1. Dave Berger will serve as note taker and will provide meeting minutes. All comments and responses should be sent to him for incorporation into documents. Team members should use the following format on file names DOCUMENTNAME DATE INITIALS such as [Casings under rivers 2-5-09 DB.doc]. This way the date of the comment and name of the commenter will be apparent and can be tracked if there are any questions.
2. How would the group handle issues where consensus could not be reached? Per Alan M, this was something that the group would have to see if it came to pass. Task group members believed that many of the issues could be resolved and that industry and the regulators may be closer than it appears on the surface. As the process went on, things may come together like they did when the joint technical committee was working on the gas integrity rule (Alan Eastman and Dave Berger were industry members of that group). The task group agreed to use a parking lot for any individual issues that could not be initially resolved or agreed upon.
3. Is the task group scope just Subpart O or all pipelines? For now, it will be to look at assessments per Subpart O. (NOTE: We are looking at integrity re-assessments that go beyond 2012. That table lays out re-assessment requirements)
4. There are many other people interested in the information and outcomes being discussed, how should this be communicated? Per Max, he will work on both a committee internal website and a public website hosted by PHMSA. There was some discussion about people getting the wrong impression of draft documents if they are posted on the public website. It was suggested that AGA and INGAA keep their respective members up to date with drafts but to caution people that these are not official documents, they are subject to change and are a work in progress so nothing can be inferred from them until they are finalized, hopefully by June 1. David C and Harry will make sure to do the same with info provided to NAPS.R.
5. The next in person meeting is scheduled for the week of April 27th (sometime between April 28th and the 30th) [See the end of the minutes for a change to have a meeting sometime in early March].

Alan Eastman offered the Mears Rosebush, MI facility as a place to hold the next meeting and to review the test facilities which can be used to demonstrate how some of the indirect inspection tools work, and their strengths and weaknesses.

Another question was how will PHMSA use the developed guidance material? Per Alan Mayberry it will be used by PHMSA inspectors and will be made available to states for their use and of course to operators. Guidance and FAQs are not enforceable and as such they are for guidance to assist both the regulators (state and federal) and operators on what is expected to meet the demands of the rule and regulations. There was a discussion on how prior assessments would be viewed. The key is that technically based decisions should be reviewed but the entire ECDA process was one of continual change and improvement so each successive assessment should be improved.

Mary was concerned that, under specific circumstances, older systems with coal tar and asphalt coatings had problems using GWUT as an assessment tool. Virgil W cited the SWRI report entitled “Statistical Analysis of External Corrosion Anomaly Data of Cased Pipe Segments” published in December 2007 for the INGAA Foundation.

Alan Eastman asked that PHMSA confirm that an operator will be expected to assess their entire system, but will not be required to directly examine all aspects of their system. He also stated that not all contacts or indications may need to be directly examined if the ECDA process is truly being followed, only immediate indications and some scheduled would have to be excavated.

In addition, he suggested that in developing guidance for ECDA on cased pipelines, the task group avoid imposing a level of rigor that exceeds those already in place for buried pipelines.

A frank opinion from some task group members are good operators and professionals will endeavor to use effective tools and good technique and will question things, while other operators will be doing nothing and will expect to get a free pass.

Virgil was concerned about atmospheric corrosion and how big a problem or an effect it really is. Dave B said that a paper he found said that mild steel in a marine environment can be expected to lose between 1 and 2 mils per year of metal. The paper is “*Estimation of Atmospheric Corrosion of High-Strength, Low-Alloy Steels*” by S. Vaynman, R.S. Guico, M.E. Fine, and S.J. Manganello in Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, Volume 28A, Number 5 dated May 1997 .

The group agreed to review the casing region document.

Alan E. had put it into a table format and added columns to determine if the conditions required the casing to be in a separate region (a must or shall) if a separate region should be considered (a should). Each of the conditions in the straw-man guidance was reviewed. Review and consensus on the conditions is ongoing.

Some discussion then ensued regarding how to handle coated casings, nested casings and other casing design issues which were resolved by putting these issues in item #2 and re-titling it design and engineering issues. Additional discussion by the group will follow in email and future meetings.

The group adjourned for the day at around 5:30 and will meet again tomorrow, February 5th at 8:30 AM

February 5, 2009, 8:30 AM AGA Headquarters

Christina Sames from AGA greeted those that were there before 8:30am, and also stopped in after the lunch break to greet the group as a whole and reiterated AGA's thanks for their participation in this important initiative.

The group continued discussion on the casing region documents, including the best manner in which the table can be organized to be clear to both operators and regulators. This group will continue its clarification efforts in future meetings.

The group then decided to discuss the wax fill issue. In reviewing the draft titled "Guidance on Wax (or other suitable material) Filled Casings", the feasibility of creating two sets of guidance, one before and one after 12-17-04 was discussed. It was explained it was from when the Gas IM rule was effective and it was thought that the people should not be held to a rule that did not exist [i.e. having operators comply with a regulation prior to its enactment] so that wax fillings before that date needed to be handled one way vs. fillings after that date another way.

A team member asked if pictures of a clear annular space would be sufficient to prove the filling was acceptable. Also, some GWUT service providers are not saying they can assess filled casings while two operator related positive experiences with filled casing being assessed over 60 feet in each direction; this was a surprise to both the operator and the service provider.

The task group had extensive discussions on what would constitute a quality filling for a casing. It was noted that in order to effectively remove the external corrosion threat from a cased pipe segment, two steps must be achieved: 1) the operator must substantiate that an integrity assessment on the carrier pipe was conducted and that any significant anomalies were remediated; and 2) the operator must demonstrate the casing has a "quality" fill that meets the criteria to be developed by the task group. After both steps are achieved, the operator would still need to perform periodic monitoring on the cased segment to ensure conditions do not change over time.

The task group also exchanged ideas on what would constitute a "quality" fill, whether it was performed prior to the issuance of the Integrity Management rule or after it. If the amount of fill used is close to the calculated amount, then that would suggest there are no air pockets / voids or leakage spots. However, if the amount of fill is different than what is calculated, additional considerations are needed to determine what might be

acceptable. A subtask group (including Andrew Lu, Dane Spillars, Mary Holzmann, Virgil Wallace, and Alan Eastman) was defined to refine the draft “Guidance on Wax (or other suitable material) Filled Casings.” The group would get a new draft back to the task group for its consideration.

The group then moved onto the Re-assessment QA Spreadsheet which went through several iterations. By the end of the day there were several more drafts. The latest draft which contained the group’s comments was shared following the meeting for further consideration and discussion at the next meeting. The matrix is a summarization of requirements for baseline assessments and reassessments for cased pipe segments covered by the integrity management rule.

The next item of business was the Draft Casing Re-assessment Procedure. Initially this was sent to the parking lot but brought back when the group was told that PHMSA would have some guidance on this to their inspectors. The group decided they wanted to assist and develop it. The pre-assessment step was pretty much covered via the regions and tool selection criteria (Alan E provided a spreadsheet on a draft tool matrix). The only open item was the NACE ECDA feasibility study as part of the pre-assessment step and some discussion yielded that it should be very similar to what is NACE RP0502 for line pipe (accessibility, can I dig if I find a problem, etc.) The task group recognized the value of the information contained in Draft Casing Re-Assessment Procedure and that it agreed to extract this information, where it can be used, in the development of guidance for Step 2, Step 3 and Step 4 documents.

Under step 2, indirect inspections, a subtask group led by Garry Matocha will put something together for the committee. The group will also review the tool matrix and make the necessary changes.

For step 3, direct examination, a subtask group led by Alan Eastman and Larry Rankin will work on that and will provide references to NACE RP 0502 and some guidance material.

Finally the post assessment step needs to have some guidance on monitoring in addition to other issues from NACE RP 0502.

What remains in the parking lot is some language on the applicability of GWUT and other technologies within the ECDA process. There was disagreement in the group when discussing the applicability of the GWUT 18-point checklist as part of the ECDA process. The group will continue to discuss this issue in future meetings.

The meeting was adjourned at around 3 and the next meeting is tentatively scheduled for either DC or Baltimore on March 10th, a full day starting first thing in the morning and going all day (this was later changed to March 12th in DC at AGA). Team members should plan on a late night. Another meeting is tentatively scheduled for April 28-30 but it may be moved up.