

03/20/2019

Don Taylor-(first meeting as NWGLDE Chairman) Introductions of existing members and new members and guests (see attachment for attendees). Opening statement: acceptance of Chair position, welcoming statement to members and all visitors, and conveyance of main topics from agenda including Ken Wilcox memorial presentation.

Minutes Review:

Motion from Chair, Don Taylor, to finalize minutes from previous meeting was granted with a second. Tim Smith conveyed typos/spacing mistakes and provided hardcopy for corrections. With consideration for corrections the minutes were accepted and confirmed. David Wilson requested final documents to be sent to him.

1. Don Taylor requested update from EPA/Tim Smith

Battelle Protocol

- a. Used the 2002 University of Wisconsin report on assessment of deficiencies with EPA's 1990 leak detection equipment test standards.
- b. Contract granted to identify areas of inconsistencies with lack of new equipment developed:
 - i. Pointed to discriminating sensors.
 - ii. See if protocols were adequate for ethanol additive.
 - iii. Review ethanol release detection effect on equipment operability.
 - iv. Modernize protocol to include new technology (density probes, phase sensors, etc.).
- c. Added to written protocols leading to new insertions by 50 vendors with minor addendums.

EPA OUST Webpage on Revised Test Protocols

- a. Hardcopies handed out for member review.
- b. Q/A to be posted to EPA website on new protocols for release detection equipment.
- c. Posting timeframe May, 2019.
- d. Noteworthy question and answer: old release detection equipment doesn't need to be reviewed with new protocols but manufacturers/vendors should reevaluate methods/equipment to see if they should consider updating listings.

Don Taylor, Chair - requests David Wilson to be copied on emails from vendors only, not all conveyance on reviewing proposals by team members.

Team Leader Updates:

1. **Peter Rollo** - Aboveground and Bulk Storage Tank Methods
 - a. Completed Review: None.
 - b. Under Review:
 - i. Pneumercator- requested to update console with no software changes.

After comparison of old and new console and review, decision made to require 2010 test protocols must be followed for new console update.

2. **Shaheer Muhanna** – CTLDS/SIR Methods
 - a. Completed Review: None
 - b. Under Review:
 - i. ASIS of Turkey SIR method for tank tightness testing:
 1. Initial proposal was conveyed for annual tank tightness testing utilizing SIR algorithms.
 2. NWGLDE initial response during review conveyed depth to groundwater would be required by the method if they intended to move forward with 0.1 GPH precision test proposal.
 3. Clarified with vendor that their intent was not an annual precision test proposal but a monthly release detection proposal of 0.2 GPH monthly.
3. **Wesley McCain** – Non-Volumetric Testing Methods
 - a. Completed Review:
 - i. Mesa-V2 Water Sensor Revision mentioned and discussed with concerns for ethanol blends and water intrusion.
 - ii. Leighton O’Brien Dry test release detection method for 0.025 GPH Non-Volumetric Tank Tightness Test (Pascal Perfect New Tank and Line Commission Testing) and mentioned presentation scheduled for current meeting.
4. **Greg Bareta** – Line Leak Detection Methods
 - a. Completed Review: None
 - b. Under Review:
 - i. February 2019 in receipt of ATMOS Pipeline line leak detection (Airport Hydrant Test)
 1. For 5,000 – 50,000 gallon systems.
 - ii. Tim Smith stated a need to send letter for 6 additional tests to vendors that had not been contacted.
 - iii. Pneumercator-not using KWA so Greg sent new protocols for 3rd party evaluator to utilize.
5. **Tim Smith** – Interstitial Monitoring and out of tank methods
 - a. Completed Review:
 - i. 2 items removed from list. Moved to “never listed” due to no response:
 1. 2013 with Steel Tank Institute on hole orifice size (utilized diesel instead of gasoline)
 2. Tank Tech of Missouri - Unable to reproduce testing and 3rd party evaluation over 3 year period.
 - b. Under Review:
 - i. CORE Engineering Solutions Safe Site Vacuum Interstitial Monitor
 1. Used the “Flora Method Protocol.” Now under review for whether proper protocol.
 2. Appears to be eval. for vacuum wrapped pressurized portions of fuel containment and dispensing systems.
 3. Determine whether this evaluation should remain with the IMOTD Methods Team.
 - ii. PID Analyzers
 1. KWA amended 2004 version.
 2. Trying to add diesel, jet A, and Aviation Gasoline fuels to this listing.
 3. Concern was raised within the group about low volatility of diesel.
 - iii. Integrated Controls
 1. Liquid sensor-used new evaluation protocols.
 - iv. PMP Corp- new sensors
 1. New proprietary sensor (not re-manufactured)

- a. 3rd party used 1990 sensor protocol for groundwater sensor monitoring.
 - b. Third party evaluator: John Longworth of Michigan Institute of Technology.
 - c. NWGLDE under review to see if the interstitial sensor protocol is equivalent to protocol utilized to 3rd party certify.
- 6. Peter Rollo –
 - a. Completed Review: None
 - b. Under Review:
 - i. 2017 MD Leak (under Review).
 - ii. UDC secondary request to include tank bottom testing.
 - iii. NWGLDE decided to require new 2019 protocols must be utilized to include tank bottom testing.
- 7. Greg Bareta –
 - a. Completed Review:
 - i. Accent' Environmental Dri-Sump – Just listed by NWGLDE
 - 1. Includes sump and spill bucket testing.
 - b. Under Review:
 - i. Fastech (clone of SB 989)
 - 1. Unapproved protocol.
 - ii. MC Leak
 - 1. 1/4 inch change over 24 hours v/s normal 1/8 inch in an hour.

Administrative:

Don Taylor – discussed Website, updating listings, bills, etc.

Don Taylor- revealed Ken Wilcox memorial piece for presentation to Ken's wife and son.

Discussed work group processes for new members and asked members for ideas and suggestions for future presentations.

Old Business:

1. Review of Policy #3 for editing by the group. All agreed to keep 3-month time frame for review timing.
2. Peter Rollo- Review of Members only webpage.
3. Password token not working properly-David Wilson to investigate and respond to the group.
4. Reviewed 3 file lists for the group: Under Review, Not Listed, and Completed. David Wilson moved a few proposals from one list to another at the direction of the group. Pete handed out forms to team leaders to move proposals to and from each of the 3 file lists.
5. Don Taylor - initiated discussion of remote monitoring protocol suggestions submitted from John Kelly of Canary Compliance.
6. The group discussed the data integrity from ATGs (automatic tank gauges) with reference to remote monitoring done via phone/CAD5 lines and what would be needed to verify results are, in fact, from the facility in question and not just fabricated results. The group agreed 5-6 points would be needed to validate integrity of data set but decided not to provide comment or suggest parameters at the present time. The group agreed this issue does not fall within the direct mission of the group. The group agreed to be available and provide assistance during the development stage if formally requested for input.
7. Battelle Protocol- discussed earlier out of line with the agenda.

8. Airport Hydrant Bulk listings- done with hydrant vendors. No work has been completed with Bulk or Field Constructed Tanks.
9. Bulk or Field Constructed Tanks- the group discussed vendors providing conversions for actual tank sizes. The group agreed to separate vendors into two groupings: Meets new EPA 0.5 GPH standard or Not Meets new EPA 0.5 GPH standard.

New Business:

1. Team Assignments: (get matrix and new members assignments).
2. Interstitial Monitoring- Discussed sensor configuration and slope. Discussion transitioned to emergency generator tanks and piping manufacturers (ex. UPP and OPW Loop) that do not require normal industry standard sloping. Leak scenarios were discussed that have issues with normal interstitial monitoring and piping replacement parameters were also discussed.
3. Vapor Recovery issues-the group discussed the issue where stage 1 vapor recovery and associated equipment produce a vacuum in drop tubes after a delivery and substantial product dispensing activities have taken place. Then during idle time when the ATG is conducting monitoring and the vacuum pressure is lost, the fuel held in the drop tube at a higher level than current tank contents drops out causing a drastic increase resulting in a failure of the monthly 0.2 GPH testing. The group discussed their experiences with alterations of drop tubes or stage 1 vapor recovery equipment that fall outside industry standard practices/manufacturer specifications. These fixes that contractors/owners do to alleviate the release detection issue ultimately bypass the stage 1 vapor requirements from the air quality standards. The group agrees this is an issue that will need further discussion but decided not to provide comment at the current time.
4. Don Taylor-provided comments and presented the memorial from the NWGLDE celebrating the life of Ken Wilcox to his wife of many years, Kathy and son, Craig Wilcox and his wife, Precious. Several group members and contractors made kind remarks reminiscing about Ken and his life of accomplishments in moving the UST world forward with respect to release detection, 3rd party certification, and making a grand impact on the UST industry, as a whole, and associated industry individuals. Ken was obviously a kind, brilliant man with great impact on many people from around the country. Photos were taken to preserve the memorial presentation and should be posted soon on the website.
5. Don Taylor-conveyed verbal respect in memorial for another UST industry leading professional that very recently passed away, Steve Pupora. His accomplishments and kindness were recognized by the group.
6. Presentation from Scot Thrash with Leighton O'Brien Inc. on Dry test release detection method for 0.025 GPH Non Volumetric Tank Tightness Test for new construction called Pascal Perfect New Tank and Line Commission Testing.
7. Tim Smith-**New Action Item**-discussed adding protocol to evaluations to understand if new protocols are used. Old listings are grandfathered in. Peter Rollo suggested just adding to all new proposals and all agreed.
8. Tim suggested minutes recorder is supposed to pull action items out and convey via email to the group. The minutes recorder agreed and will send the minutes for all to read and find their action items.
9. Don Taylor-**New Action Item**-brought up NTM National Tank Monitor and Horner method. The group needs to know if they bought the rights to Horner. John Morgan provided NTM contact information to the Shaheer Muhanna for contacting NTM.
10. John Morgan-**Action Item not assigned**-brought up the vacuum testing methods with water sensors and the ethanol issue with water outside the tank shell where water intrusion can be missed because of the water

binding properties of alcohol. Wesley McCain discussed the statement of concern on the issue was recently added to a new listing (Mesa V2) and suggested the work group add to existing listings with similar testing parameters.

11. Next meeting location reduced by NEIWPC to two cities: Seattle, WA or Portland, OR.
12. Shaheer Muhanna-**New Action Item**-is to work on Lust Line article in May.
13. Discussed new article-**Action Items not assigned**- Oma Gilbreth suggested alternative test methods not covered by PEI RP1200. Tim Smith and Don Taylor discussed methods for sump testing: Recommended Practice, Manufacture's specifications, or implementing agency protocols. Article would discuss potential new sump testing methods. Don Taylor-brought up (EG) Emergency Generator tank leak detection configuration issues. Members discussed EG tank configurations and their states. Also proposed an article on marinas in the "atypical systems" series.
14. The team discussed file retention and different ways to back the system up. The age of the webpage came up again and how to replace it and maintain old files.
15. Group photo taken but Wesley had already departed. Sorry Wesley! Maybe David can photo shop you in!

Updates/Discussion topics:

1. Tim Smith- Protocol updates
 - a. Key changes will be listed for changes to each protocol.
 - b. One page descriptions will be circulated to the group when available.
2. Greg Bareta-Discussion revealed 500 ppm of water in gasoline is out of specs.
 - a. >13,000 ppm of water in gasoline leads to automobile injector issues
3. Veeder Root representatives, Lee Girard and Kent Reid, that were present expressed concerns with water in fuels and compatibility issues with equipment having to be compatible with fuel and additives but not required to be compatible with contaminated fuel. Their definition of contaminated fuel is fuel with water in it.
4. Greg Young, Vaporless Manufacturing, spoke of fuels testing and acidity of fuel being caused by "acid bugs" enhancing the corrosion rate of equipment. He discussed the Ph of fuel being of primary concern with recognizing when the corrosion rates are being accelerated. He mentioned they had a line leak detector fail at the 2.5 year mark of installation resulting in a release at a facility and attributed it to internal corrosion caused by fuel acidity.
5. Greg Young, Vaporless Manufacturing, suggested the acidity of the fuel (ethanol blend gasoline) is the reason the line leak detector and STP bolts are corroding so badly and when the hydraulic hammer effect happens when the STP kicks on the housings are shifting and allowing o-rings to leak. He sparked the question, is there a correlation charted somewhere showing Ph is affected by water concentrations? To that end, Scot Thrash suggested fuel scrubbing is the answer.
6. Peter Rollo- brought up sometimes supplemental information is added after 3rd party evaluation testing results. To that, Greg Bareta suggested making the 3rd party the responsible party for conveyance to the NWGLDE to verify whether or not the additional information was added for evaluation by the group.
7. Tim Smith-Discussed bulk listing and the workgroup using simple math to reformat the listings that currently indicate surface area of a tank to more clearly show how individual methods meet the new release detection standard. It was also discussed changing the parameters on the webpage from "50,000 gallons or greater" to "greater than 50,000 gallons" to match the wording of the EPA regulation.

8. David Wilson, Webmaster, brought up webpage security and upgrading before it dies. Discussed paying for new website or John Morgan suggested attempting to gain pro bono work for new webpage in exchange for a small advertisement in a corner for the web developer.
9. Tim Smith- discussed older hard copy sensor files from older workgroups being scanned. David Wilson said he was unable to scan them. Oma Gilbreth offered to scan them for the group.
10. Tim Smith- mentioned policy and procedures manual and how the process works for new member's benefit.
11. CORE proposal was discussed and the group decided it belonged with the Line Leak Team.
12. Don Taylor, California sump testing protocol from 10/24/2001 is back up for review. Greg Bareta suggested his team would like to review it for the group.

ATTENDANCE LIST
 National Work Group on Leak Detection Evaluations
 San Antonio, TX
 March 20, 21 and 22, 2019

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