

**Meeting Summary**  
**National Work Group on Leak Detection Evaluations**  
**Kissimmee, Florida, March 12-15, 2002**

**3-13-2002 – 1:00 p.m.**

Attendees: Work group members plus Andrew Shively, VT DEC; David Iacono, USEPA Reg 3; Russ Ellison, VA DEQ; Sharon Sadlon, AK DEQ; Gwendolyn Glenn, BNA; Russ Brauksieck, NYSDEC.

- Welcome and opening remarks Curt Johnson. Curt introduced and specifically welcomed John Cernero, TX, EPA Region 6, the newest work group member.
- Sharon Sadlon (AK) expressed interest in filling current vacancy on the work group.
- Andrew Shively (VT) expressed interest in filling current vacancy on the work group.

**Action Items (cumulative from 12-15 Mar):**

1. Next meeting - Fall 2002 in South Carolina (Primary Dates – October 9, 10, 11; Secondary Dates – September 24, 25, 26).
2. Fall 2003 meeting tentatively in Kansas City.
3. Shahla Farahnak:
  - Send copy of California wording on water table effect calculations to VTTT team for review.
  - Write descriptive paragraph for each form.
  - To develop forms for sensors like existing forms.
- 4.. Tim Smith:
  - Lead on SGB submittal review.
  - Request submittal from Eurotank (Mr Fiech).
  - Send copies of Vigilant and Permatank system reviews to Shahla and John K.
5. Beth DeHaas:
  - Coordinate changes for Red Jacket/Veeder-Root.
6. John Kneece:
  - Coordinate Marley Pump list changes.
  - Do preliminary for meeting next fall in SC.
  - Wording change for Tracer listing to be forwarded to Curt and Jon. (See quote on 3-14 afternoon session.)
7. Jon Reeder
  - Coordinate USTMan/Entropy/Watson Systems list changes relative to Veeder-Root and forward to Beth.
  - Create “Inspector Resource” section on web site. Put the current and new California forms at this location.
  - Send math font package to selected members of group.
8. Mike Kadri and John Kneece – supplement Sensor team for SGB review (pipeline stuff).
9. SIR team to finalize appropriate list wording/comments to address “floating” threshold issue.
10. Shaheer Muhanna and John Kneece to review California sensor field evaluation report for Shahla.
11. Team leaders to bring “summary of changes” to each meeting for inclusion in next edition.
12. Curt Johnson to hold on 10<sup>th</sup> edition until all V-R stuff comes in from Beth.
  - Curt to begin maintaining “Issue Date” and “Revision Date” on spec sheet for list.

**Review team assignments and reassignments:** Mark Lenox resigned from group due to job change. John Cernero is new to the group. New assignments in *italics*.

- ATG/Volumetric: Beth DeHaas (lead), Jon Reeder, Mike Kadri, *John Cernero*
- CITLDS: Shahla Farahnak (lead), Shaheer Muhanna
- Non-Volumetric: John Kneece (lead), *Shaheer Muhanna*
- Pipeline: Mike Kadri (lead), John Kneece, *John Cernero*
- SIR: Jon Reeder (lead), Shaheer Muhanna
- Sensor and Vacuum Test Methods: Tim Smith (lead), Shahla Farahnak
- Administration: Curt Johnson (lead), Tim Smith, Jon Reeder

**Phone conference with Veeder-Root:** Conference set up to discuss list changes/modifications needed due to recent acquisitions by V-R. Bob Hart had set up V-R representatives for each area (atgs, SIR, other products) on the conference. Topics discussed included new tank gauge boxes to be marketed under Red Jacket Pro Max and Red Jacket Pro Plus branding; USTMan, Entropy, and Watson Systems SIR brands; other Marley Pump products. Beth DeHaas to head list change project (ATG and CITLDS pages); Jon Reeder (SIR) and John Kneece (other Marley products) to forward list changes through Beth. V-R contacts: John Dionne – SIR products – 860-651-2859  
Jim Longworth – Pro Plus/Pro Max and ATGs – 860-651-2813  
Don Holla – Sensors and LLDs – 860-651-2789  
Jerry Bradshaw – Marley Products – 814-696-8075

### **Team leader updates:**

#### **ADMINISTRATION (Curt and Tim)**

- Curt invited visitors to consider becoming a candidate for work group.
- Tim discussed possible procurement of STATPAK or similar software for evaluations. Funding source for purchase is biggest problem.
- Jon Reeder update on web site – Activity has been consistently growing...highest day so far has been 400 visits. The “these are new” page helps users find latest updates.
- Curt led discussion of under review section of list. Asked team leaders to remember to review that section and to give him appropriate updates as system reviews are completed.

#### **SENSOR/VACUUM (Tim)**

- Three new listings. Nothing pending.

#### **SIR (Jon)**

- Little activity.
- Led discussion of language to describe the type of threshold used by specific variety of method. Jon and Shaheer both prefer use of the term “floating” based on threshold derived from the dataset under review. Group discussed whether or not the list could accurately reflect what was tested vs field use of the method. Shahla stressed that list should reflect third party results. Bob Mitchell from SIR International to make presentation on threshold calculations during public session. The SIR team to finalize language for threshold area and comments section during team meetings.

#### **PIPELINE (Mike)**

- No activity.

#### **ATG /VOLUMETRIC TESTING/BULK TANKS (Beth)**

- Several systems under review.
- Probe comparison discussion led by Beth and Shahla. Discussed discrepancy between evaluation dates for probe in V-R submittal. Date of original probe evaluation does not match any previously listed.
- Changing volumetric testing listings to reflect concerns about water on tank relative to product level during testing.

**BULK TANKS (Mike and Beth)**

- 2 systems under review.

**NON-VOLUMETRIC (John)**

- 2 systems still under review. One evaluation not complete (water intrusion detection method still needs development). Other is nearing final review (Mark Lenox had the lead and is sending final package to John).

**CITLDS (Shahla)**

- One system still under review. Team awaiting additional information from evaluator (should be submitted within month).

Preview of schedule for next day.

ADJOURN

**3-14-2002 – 8:00 a.m. Morning Session**

Attendee List –

Name	Representing	Phone	e-mail
Tim Smith	EPA/OUST	703-603-7158	<a href="mailto:smith.timr@epa.gov">smith.timr@epa.gov</a>
Shaheer Muhanna	GA/EPD	404-362-2579	<a href="mailto:shaheer_muhanna@mail.dnr.state.ga.us">shaheer_muhanna@mail.dnr.state.ga.us</a>
Mike Kadri	MIDEQ-STD	517-335-7204	<a href="mailto:kadrim@michigan.gov">kadrim@michigan.gov</a>
Bob Mitchell	Sir International	830-964-5855	<a href="mailto:sir@gvtc.com">sir@gvtc.com</a>
Ken Wilcox	KWA, Inc	816-443-2494	<a href="mailto:kwilcox@kwaleak.com">kwilcox@kwaleak.com</a>
Jon Reeder	FDEP	813-744-6100xt472	<a href="mailto:jon.reeder@dep.state.fl.us">jon.reeder@dep.state.fl.us</a>
Beth DeHaas	MEDEP	207-287-7883	<a href="mailto:beth.dehaas@state.me.us">beth.dehaas@state.me.us</a>
Shahla Farahnak	SWRCB, CA	916-341-5668	<a href="mailto:fahrahnas@cwpswrcb.ca.gov">fahrahnas@cwpswrcb.ca.gov</a>
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Sharon Sadlon	AK-DEQ	907-269-3057	<a href="mailto:Sharon_Sadlon@envircon.state.ak.us">Sharon_Sadlon@envircon.state.ak.us</a>
John Cernero	EPA/Reg 6	214-665-2233	<a href="mailto:cernero.john@epa.gov">cernero.john@epa.gov</a>
Howard Dockery	SIMMONS	972-497-9002	<a href="mailto:Howard.Dockery@SIMMONS-CORP.com">Howard.Dockery@SIMMONS-CORP.com</a>
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Manfred Fiech	EUROTANK	352-629-3700	
Randy Golding	Tracer Research		<a href="mailto:rgolding@Tracerresearch.org">rgolding@Tracerresearch.org</a>
Russ Brauksieck	NYSDEC	518-402-9549	<a href="mailto:rsbrauks@gw.dec.state.ny.us">rsbrauks@gw.dec.state.ny.us</a>
Jost Berg	SGB		<a href="mailto:berg@sgb.de">berg@sgb.de</a>

**Introductions.**

**Presentations.**

**Sam Gordji (Univ of Mississippi):** Presentation on predictability of vapor loss in high throughput tanks.

**Jost Berg (SGB):** Presentation on underpressure/overpressure leak detection systems for double wall tanks and piping (European). Presenter also covered European Standard for leak detection systems (5 classes) as well as the technical rules for equipment and method approval in Europe.

**Randy Golding (Tracer Research):** Two part presentation. 1<sup>st</sup> half was on use of averaging as part of system performance enhancement during evaluations. 2<sup>nd</sup> half focused on naturally occurring microbial cleanup zone and proposed universal leak detection rate equal to the bio-remediation rate. Then leak detection could be preventive vs reactive.

**Bob Mitchell (Sir International):** Presentation on statistical calculations of threshold especially as it applies to SIR methodology.

**Manfred Fiech (Eurotank):** Presentation on the characteristics of this tank system to include some of the leak detection capabilities of the system.

Adjourn for lunch.

### **3-14-2002 – Afternoon Session**

Attendees: Work group members (the work group had asked selected vendor/industry reps to participate in specific portions of the afternoon session...those individuals will be listed under the appropriate topics).

- **Tracer Listing:** The Work Group asked Randy Golding to discuss current wording of Tracer data sheets as it applied to frozen saturated soil. The wording on the sheet had been changed over time such that the original meaning of the comments had been lost. After discussion of the evolution of the data sheet, the group arrived at the following: “The presence of a layer of water saturated soil that is also frozen above the location where a leak may exist may inhibit the effectiveness of the method by impeding the transport of the tracer labeled product into the unsaturated zone.” John Kneece to effect this change.
- **SGB Presentation:** Jost Berg returned for this session and further described the test methods for each leak detection method he had described during his morning presentations. Shahla reviewed requirements for submittal to work group. Since the SGB systems encompass several methodologies, Curt appointed Mike Kadri and John Kneece to supplement sensor team (Tim and Shahla) to review submittals from SGB (forthcoming). Tim Smith to also request package from Eurotank (Mr Fiech) for review.
- **Discussion of presentations.**

### **Old/New Business:**

- **Discriminating Sensors:** Shahla distributed V-R letter from August 2000 about recalled sensor. Also distributed California guide on annual certification testing for sensors. She asked John Kneece and Shaheer Muhanna to review upcoming California sensor field evaluation report. Tim Smith

suggested that some of the issues concerning sensor units might be beyond work group – those should be forwarded to OUST.

Preview of topics for next morning.

ADJOURN

### 3-15-2002

#### New Business:

- **“37 Inch Rule”:** Jon Reeder reported on Florida inspector challenge to Tanknology application of “37 inch rule.” After much discussion, group decided to delete reference to “37 inches” from underfill VTTT method listings. Shahla to send copy of California wording on calculating water table effect to VTTT team for possible inclusion in the glossary.
- **Records retention questions:** Beth had question on how long to retain 3<sup>rd</sup> party test records. Shahla has created 3 ring binder with basic essentials on each eval and then archived the test info. Jon keeps file on each. Shahla will send copies of her file checklist. Mike suggested each state apply own retention rules. Shahla said that list of rejected evals and problem evals should be maintained so future group members know what has been rejected before. After all this, the group decided that a record of “failed” submittals should flow to Curt during the review process. No decision or recommendation as to what Curt would do with this info.
- **Leak detection equipment monitoring form:** Shahla introduced new California monitoring form. She recommended replacing current forms in the list. Group concurred...as soon as instructions for new form are complete.
- **Inspector resource location on web site:** Separate but related discussion led to request to Jon Reeder to place current and new forms on the web site in a newly created “inspector resource” location.
- **Feeling unappreciated:** Group expressed unanimous disappointment at failure to get a slot for Work Group presentation on national meeting agenda. Suggested Curt write letter formally requesting time at next meeting.

#### Old Business:

- **Protocol review.** Group reviewed recommendations from Univ. of Wisconsin, Madison, protocol review report.
- **SIR Threshold.** Jon Reeder said that SIR listings would be updated to show floating vs fixed threshold based on testing information.
- **Current vacuum systems:** Tim Smith to send data on Vigilant and Permatank systems to John Kneece and Shahla for review.
- **Math Font.** Jon Reeder to e-mail font package to group.
- **Future editions.** 10<sup>th</sup> Edition will be held until V-R info is routed through Beth to Curt. Team leaders to bring “summary of changes” to future meetings for administrative use. The update package on the web site each time will just move the current edition to the new edition (previous update information in this section will be scrapped).
- **Low volume level ATG testing.** Team discussed whether or not these tests qualified as precision tank testing because of doubts about whether or not the testing accounted for water, vapor and

deformation. Shahla said California list contains statement about ATG testing. Suggested statement, “0.1gph test w/ATG does not appear to satisfy federal requirement for accounting for vapor pockets, tank deformation, and the location of the water table.”

#### **New/Old Business:**

- **Protocol review.** There is one currently under submittal to UW-Madison. The work group is planning to review European submittals based on existence of peer-reviewed testing procedure. Shahla suggested there were changes needed in the CITLDS protocol to incorporate single vs manifolded tank performance expectations. The listing should be separate for each due to statistically significant variance in performance data (separate Pd and Pfa for each condition). Also, group received separate CITLDS protocol concern list from KWA. No resolution of protocol issues...group consensus is still that the original 7 need to be brought forward with major revision (starting with the SIR and ATG protocols).

#### **Team Meetings and Adjournment**