

Minutes of WCMUC's twice-yearly meeting; Nov. 18, 2010.

Meeting location:

ALS Environmental, 9936-67 ave., Edmonton AB

Attendees. Eleven representatives of WCMUC member companies were present; also chairman Ansar Qureshi and, on speakerphone, Michael Jones & Cary Morris from SDI, Inc. and Mitch Golay of Central Labs.

Our round-robin co-ordinator Irene Gaudet sent regrets.

1. The meeting was called to order by Ansar Qureshi at 10:10 a.m. and all introduced themselves. The day's Agenda was approved.
2. The Minutes of the previous meeting (May 27, 2010) were approved.

Matters arising

- Drilling waste disposal Directive D 50 is now expected to be released in 2011.
- George Ruddock outlined a Microtox training workshop proposed for Canmore, AB on May 12-13, 2011. Day 1 would see an overview of general principles and of current and new test applications, followed by hands-on training in methods and data interpretation. Day 2 would cover regulations in various countries, QC and proficiency testing.
- Suggestions are welcome as to what other topics the workshop might cover. There would be time for a committee meeting later in day 2. The workshop would be a joint venture by WCMUC, Osprey and SDI.

3. New business

- Unstable, high-rising light readings from *Vibrio* reagent were still being seen (batches 10E1005 and 1005A were mentioned). Crimped seals were occasionally loose enough to allow lids to be turned by hand. An adhering pancake disk of Reagent rather than the usual "clumps" had been noticed in some recent vials, but not noticeably connected with any particular change in Reagent behaviour.
- John Ashworth suggested labs try preparing *Vibrio* solutions by diluting 5 x 0.2 mL portions of freshly-reconstituted Reagent into 1.8 mL of Diluent in five cuvettes at 15 C. The cuvettes take up well space, but light output seems to remain higher than when the Reagent residue is kept at 5.5 C and diluted into one cuvette-plus-Diluent at a time.

4. WCMUC Round-Robin (RR) No. 43. Three samples supplied by ALS were sent to 19 labs; results were returned by 18. Attendees at the meeting went through data analysis summaries provided by Irene Gaudet.

Sample 1 was a solution of Allura Red dye (used in food colouring) in de-i. water (45 mg/L). Eight labs reported optical absorbance in a 1 cm cell at 490 nm near 2.0 (the expected value) but four labs reported other values. These four outliers are urged to check their spectrophotometer measurements; the Azur/Omni colour-correction procedure depends on this result. The mean uncorrected EC50(15) value observed was 42 % (RSD = 20 %) but this false toxicity was due to light absorbance. After colour correction, 12 of 13 labs obtained a non-toxic, off-scale result (> 82 %).

Sample 2 was zinc sulphate with 2.9 mg Zn-ion /L. The mean reported EC50(15) was 37 % (RSD = 32 %), reasonably close to the expected value of 48 % (based on SDI's specification of 1.4 ± 0.8 mg Zn/L).

Sample 3 had the same concentrations of ingredients used in samples 1 and 2, combined. Once again, 8 labs reported optical absorbances near 2.0 but four outlier labs reported various different values. The mean (uncorrected) EC50(15) value was 20 % (RSD = 22 %) which, after colour-correction, rose to 45 %, very near the target. This result again indicates that Allura Red dye has little or no toxicity, and did not interfere with zinc toxicity. A wide RSD (= 47 %) following colour-correction may have been due to outlying light absorbance measurements.

5. Treasurer's Report (Anthony Neumann)

WCMUC's current balance is nearly \$ 1,500 (Cdn.), with another \$ 1,500 due for unpaid membership fees. There was no proposal to change membership fees; we therefore stand to collect \$7.5 k for 12 full and 5 subsidiary member organizations, for the financial year July 2010 – June 2011.

Anthony will follow up on unpaid fees and will advise Alberta Innovates that the outstanding fee for RR # 42 will be paid by the end of 2010.

6. Future of WCMUC

The 3 executive members (Qureshi, Ashworth, Neumann) agreed to stay on in their current roles, there being no objections nor new volunteers.

In discussing whether WCMUC should continue to provide round robin samples or simply meet for discussion as an inter-lab committee, various points were made:

- WCMUC's RR samples do not constitute a proficiency test (PT)
- A Pass in a WCMUC RR would not over-ride a CALA PT failure

- RR costs use up most of the \$500 membership fee.
- The economic downturn and cost-cutting have made some labs drop out or consider dropping out.
- CALA's samples are not challenging, real-world samples
- Member labs learn from running WCMUC samples but there's no feedback from CALA
- Discussing the RR data is the core of WCMUC meetings
- The meetings provide feedback on SDI/Osprey product quality

Related suggestions made were:

- Team up with CALA to provide PT samples
- It is costly (\$20 k perhaps) to become an accrediting body
- Have one info-exchange meeting and one RR per year
- Do data analysis within WCMUC and save the contracting-out cost (\$ 2 k)
- Set up automated on-line data analysis; labs would simply enter data

A show of hands indicated that all attendees wanted WCMUC to continue with at least one RR per year. John will survey all member labs asking each lab to vote for 1 or 2 RRs per year.

7. Other business

Sharon Lu advised that Epcor may be able to take over preparing and sending out RR samples. She and Anthony agreed to approach colleagues about doing data analysis. John to advise Epcor about labour and costs of providing RR samples.

There was some discussion of gelling (drilling waste) samples. Dilution may be needed to avoid gelling at the higher concentrations tested; the EC50 obtained must then be divided by the dilution factor used, before being reported.

Timing of WCMUC RRs was discussed – it would help labs if WCMUC samples were offset from CALA samples.

Date and place of next WCMUC meeting.

In conjunction with Canmore workshop, unless circumstances change.

Meeting adjourned at 2:40 p.m.