



**WCMUC semi-annual meeting**  
**Thurs. May 28<sup>th</sup>, 2009 10:00 a.m.**  
**ALS Laboratory Group, 9936-67 Ave., Edmonton, AB**

The meeting was called to order at 10:10 by John Ashworth in the absence of chair, Ansar Qureshi..

**1. Preliminaries**

**1.1 Introductions**

Members introduced themselves. (See attached attendance list) Guest member, Chinook Environmental.

**1.2 Approve Agenda**

Agenda was approved as circulated.

**2. Approve Minutes of previous meeting, November 20, 2008**

The minutes were approved as circulated.

**2.1 Matters Arising.**

**(a) Workshop feasibility study group.**

George R gave an update. Where there is more structured training available, there is more consistency in results. Issue: 1) The application of the test - technical summary of what can be done. 2) Technical training at the bench level. This requires a minimum of 10 people with a maximum of 16. Cost of \$300-500/day. The feasibility group is to survey the membership to find out if there is interest in this going forward. Irene stated that historically there was an open technical summary in the morning and an afternoon bench training session. The date is possibly mid April - to tie into the next meeting date.

**(b) SDI R&D work.**

Michael Jones gave an update on this. SDI values what this group does and what they bring to the table. From an application standpoint, the group has more experience than SDI. They see the workshop as valuable and would be willing to support consumables.

In late 2007, they realized that they needed to pay more attention to manufacturing issues. The reagent should be the least of a client's concerns. New lyophilizer coming online at this time. The sampling plan changed and is statistically based upon the lot size (3-4000 vials/lot). The sampling plan tripled the number of samples. Verification levels and outlier analysis have been added.

EC<sub>50</sub> results – all points must pass to be within spec limits. Added within lot variation acceptability criteria. EC<sub>50</sub> is the average of all data points. Internal specs from light output and light decay.

Omni demonstration at the next meeting. Had to be rebuilt 1.18 is the newest software. Release 2 should be out by mid-June. Group to get 30 day free trial.

Microtox is now in Standard Methods.

Deltatox – not temperature controlled. Same reagent, smaller size, can take at the source and use in the field. Used for Ecotoxicology and Investigative Toxicology tracking incidents. Can also test ATP for bio-contamination with the luciferase test. Used in China during the earthquakes to test water quality.

The changes were implemented by October 2008. Specifications to QC numbers are not likely to change.

### **(c) Rationale for using Microtox**

Alberta Environment is using Microtox on municipal waste outflows as of July 1, 2009. Effluent testing was the initial reason to use the test. CLRA is saying get rid of Microtox, some people are pushing their agenda. It does not matter that the organism is marine origin, from a toxicology standpoint, it makes sense as it correlates with other organisms. As well, there is an international effort to reduce animal testing.

## **3 New Business**

### **3.1 Reagent Quality**

Bodycote has seen an improvement. Call Osprey representative if there are any issues with quality. SDI responds to worldwide concerns of lot quality.

### **3.2 Colour Correction Update (John Ashworth)**

Deferred to next meeting.

### **3.3 Delta/Tox Info and Demo (SDI)**

Deferred to next meeting.

Ansar Q. assumed the chair.

## **4 Round Robin Report # 40 (Irene Gaudet)**

Irene went over Round Robin 40 results (reports sent to member laboratories prior to the meeting).

**a. Review data**

Three samples were included in this study.

Sample 1 was phenol at a concentration of 30 mg/L with 0.4% fabric dye. The mean EC<sub>50</sub> 15 minute was 31.4% after rejection of outlier data. Colour correction for this sample produced a mean EC<sub>50</sub> 15 minute of 47.3%.

Sample 2 was a real world pulp mill effluent holding pond sample. The mean EC<sub>50</sub> 15 minute was 11.0% after rejection of outlier data.

Sample 3 was potassium dichromate at a concentration of 159.4 mg/L Cr<sup>6+</sup>. The non pH adjusted mean EC<sub>50</sub> 15 minute was 19.6%. The back calculated value is 31.2 mg/L Cr<sup>6+</sup>. Colour correction for this sample did not produce much of a change, with the non pH adjusted mean EC<sub>50</sub> 15 minute was 21.1%. The back calculated value is 33.6 mg/L Cr<sup>6+</sup>.

**b. Colour correction (John Ashworth)**

Deferred to the next meeting.

**c. Open discussion**

SDI to get dichromate EC values.

The technicians present found samples easier than normal samples.

pH values seem out of control for some labs. The range was 5.5 to 8 for an initial pH. The labs need to pay closer attention to their pH technique.

Suggestion for technicians to test pipettors and weigh out water to determine pipetting technique.

**d. Determine sample type and date for RR # 41**

Next samples will be shipped Sept 24 (September 17 for international) with analysis on October 1 and 2. Results to be reported by October 22. One sample will be a repeat of this round robin sample - wool dye with added phenol supplied by John. A second sample will be potassium dichromate - NO pH adjustment for this sample. The final sample will be a stable pulp mill sample from John Ashworth.

**5 Treasurer's Report**

John discussed the financial summary in Anthony's absence. (attached) M/S/C

**6 Any other business**

**a. Round Robin Proposal Extension**

Moved by John, seconded by George to extend ARC's contract for providing RR samples for 2 more round robins (RR 41 and 42)

**b. Other**

Chinook Environmental a new member - contact Anthony for more information about membership.

An update bibliography is available from SDI.

<http://www.sdix.com/TechSupport/bulletins/Toxicity%20Index.pdf>

**7 Next meeting**

**a. Time and place**

Thursday, November 19, 2009 at 10:00. Maxxam

**b. Topics for discussion**

George and John to forward the questionnaire. Items for the agenda:

Workshop

Colour correction - where did that formula originate?

Delta tox Demo; Update on Model X

G50 regulations update

**9. Adjourn**

Meeting was adjourned at 14:15.

Irene Gaudet

Acting Secretary

Attachment 1

List of Attendees:

<b>Name</b>	<b>Organization</b>	<b>e-mail</b>	<b>Phone</b>
Irene Gaudet	Alberta Research Council Vittrak Creative Services	<a href="mailto:irene.gaudet@arc.ab.ca">irene.gaudet@arc.ab.ca</a> info@vittrakcreative.com	780-632-8266 780-603-1681
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