

WESTERN CANADA MICROTOX USERS COMMITTEE MEETING  
MAY 10, 2007

Executive Royal Inn, Edmonton – Courtesy of Osprey Scientific

**Call to Order – John Ashworth called meeting to order at 10:07am**

Introductions – Thank you to Osprey Scientific for hosting event

Review/Modify Agenda – Ansar Q. moved to accept the additions listed below and Sharon L. 2<sup>nd</sup>. All were in favour.

4.1 What happened to diluent 6L1036?

5.4 Proposal for fees for next Round Robin

9.1 Alternate source for bacteria and reagent

9.2 pH adjusting solution

Approve Minutes of Previous Meeting, November 24, 2006 – Irene G. moved to accept the previous minutes as written, Anthony N. 2<sup>nd</sup> and all were in favour

Matters Arising

CAEAL participation – why are more companies not a part of WCMUC – because they already participate in CAEAL and can't afford to PT programs? Dave Wong spoke on behalf of CAEAL – CAEAL has a PT program and members are required to participate in CAEAL but it is only offered twice a year, which is the minimum requirement. WCMUC is a good supplement to PT and allows for quarterly testing. Being a part of WCMUC will allow for more involvement – if lab fails in CAEAL PT, they drop down into PS and if they fail again they lose the PT. It would allow them to participate while they find out the errors. It would be beneficial to organize PT schedule such that it compliments CAEAL's – if a lab fails and then one month later, WCMUC could provide a secondary source to get back on through fast track (proviso ii). Future attendance by Colleen Cotter would be greatly appreciated, but should go through Ken Middlebrook, as he is the PT Manager. Would need to ask ARC about Microtox PT Preparation to get included, and then CAEAL will recognize ARC as a PT preparation provider. Irene G. said that WCMUC could prove from records that members can measure standards and can actually also measure "real world". Irene to further investigate adding WCMUC preparation for future RR. \*\*Would have to beef up SOP practices\*\*. Will table decision to November meeting. This would also allow for Ken Middlebrook to come. Irene can then bring back to the table the information required. It is a good opportunity to boost membership because we offer PT and scientific expertise. Ansar Q. to invite Ken Middlebrook to next meeting.

New Business

Report from SDI – M550

Same functionality as M500 with onboard colour correction, smaller footprint, USB connectivity and would allow for multiple cooling blocks – perhaps up to two more.

Build instrument with powerful environment – touch screen capability, can support Windows Mobile

Both points will be cost driven as to which path is achieved.

Beta Testing – is almost complete and there will be new software. Questions, comments and concerns have been sent to IT. There will be a second round of testing and hopefully software will launch by end of the year. It will have updated protocols, which will mostly benefit US drinking labs. The original purpose using Win XP v. 1.18 didn't run at all. Win XP service packs were installed and problems disappeared. Microtox Omni v. 1.18 performance tested on Vista – works very well. User guides, manuals are all now branded as SDI instead of Azur. Substance won't necessarily have changed. There are 27 protocols listed, will try to provide cross-reference with sample type to protocol. Electronic training module has animation on how to run test.

Mutatox – resurrecting mutatox products, which had previously been discontinued in 2003. Mainly used in Europe – a new initiative called REACH is testing every potential hazardous chemical for mutagens. Creating a new Microtox biocides program – will help to track dosing.

New Marketing Manager – Michael Jones – new market materials: effluent, drinking and storm water.

Diluent Recall – end of last year SDI used a Refractometer to measure salt content and then would test to confirm as well as performance testing. Updated the processes using conductivity to test salt content. An error was made during manufacturing and too little salt was added (only 1.9%). Had high phenol results and phenol control would drop by 20%. Recalled diluent and reintroduced using the Refractometer – will run parallel the Refractometer and conductivity meter. There was only a problem between phenol and low salinity issue that was notices, but it would have affected organic based samples. Ionic content can affect results when measuring heavy metals – can use sucrose as diluent.

## **Break at 11:20am**

### Round Robin #36

Review Data – Samples were sent on the 15<sup>th</sup> and 19<sup>th</sup> and SDI was not sent samples due to border requirements. Sample 1 Liquid Cellutase was real world – high toxicity and high colour; Sample 2 was phenol standard (106mg/L) – most labs reported close to mean of 22mg/L; Sample 3 Soil diesel contaminated from UST was also real world – extracted – despite large prep variations were very repeatable & reproducible – results were based on extract

Open Discussion – Sample 1 – most dilutions were 1/10 or 1/25. Lab 7 reported only colour corrected data. Rejected data from Lab 5 both the EC@5 and EC@15. Good repeatability except for Labs 1 and 5. Colour corrected – for labs reported – not a lot of data due to high toxicity of sample. Sample 2 – Phenol – rejected data from Lab 3 and 9. The yellow highlights – Lab 4, 7 and 9 are above or below the long-term toxicity data of 13-26mg/L. Lab 9 – even though reported 15mg/L and is acceptable by the SDI limits, it is low compared to long-term history. Lab 4 – CI is large but would be diluent related. Good repeatability overall, Lab 3 and 7 have some issues. Sample 3 – Diesel Soil – Rejected data from Lab 7. Error bars are tight and repeatability is really good. Three labs did colour correction, however Lab 1 on did colour correction on Day 1. Most labs did not pH adjust and it wasn't really required to adjust the pH. Eleven labs received

sample and nine returned data. In regards to following instructions – all labs were required to back calculate and report to one decimal. John A. thanked Irene G. for expert handling of RR#36, encouraged by results for Sample 1 and 3 – values were very close despite sample matrices.

### **Break for Lunch**

Sample Type and Date for RR#37 – Desco CF to be provided by DMK with an EC50 of 20-50%, solids will be provided by ARC and Zinc will be the next reference standard. Next meeting will be November 16, 2007 which indicates that testing will be on September 20 & 21<sup>st</sup>, shipping to be September 13/17<sup>th</sup> and all data will be due back October 5<sup>th</sup>.

Proposal of Fees and Service for Sample Preparation for RR and Scientific Advisement. Irene G. submitted a proposal (see attached) and was moved by Ansar Q. to accept proposal as written. Anthony N. 2<sup>nd</sup> and all were in favour of accepting proposal as written through Spring 2009. In regards to CAEAL partnership, Irene to prepare SOP for WCMUC preparation, handling and analysis for compatibility with CAEAL's documentation requirements for a value up to \$1000. Ansar Q. moved to accept additional proposal, Dave W. 2<sup>nd</sup> and all were in favour.

Treasurer's Report – There are 10 memberships at \$500/membership and two subsequent memberships @\$300/subsequent plus additional for a total of \$5700 in fees. There is \$3900 in bank after RR. Will require funds to cover cost of lunch and hosting site as well as website hosting and maintenance. WCMUC needs to pursue supplement to CAEAL – to re-recruit people who have left. Motion to accept treasurer's report (see attached) as written by Irene G, 2<sup>nd</sup> by Sharon L and all were in favour.

Website – is as current as information provided. Hosting has been paid to the end of the year. Post Soil Science report from John Ashworth onto website. Would like to see all members cross-link WCMUC site with theirs. SDI has a new Microtox website – [www.sdimicrotox.com](http://www.sdimicrotox.com)

Election of Officers for 2007 to 2009 – There are three main positions: President, Treasurer and Secretary. Irene G. moved to accept that all positions are expanded for one year (2007-2008) and carry membership and group participation in CAEAL through RR 37 & 38. Ansar Q. 2<sup>nd</sup> and all were in favour. This leaves John Ashworth as President, Anthony Neumann as Treasurer and Geneviève Payeur as Secretary. There is an alternative proposal to change only one office position per annual year of RR.

### **Any other Business**

Alternative Reagent – a secondary company is doing R&D into producing the vibrio fisheri, are currently doing beta testing with two labs in Canada. After gathering data will reanalyze where they stand in the market. Have fallen behind in reaching target dates.

Acidifying with HCl – Using H<sub>2</sub>SO<sub>4</sub>, because of adding Cl- affecting NaCl. SDI, Azur and Microbic – HCl not adding any additional ions that aren't already present as per diluent and OAS. Irene's paperwork states HCl but one lab reported having used H<sub>2</sub>SO<sub>4</sub>.

#### Next Meeting

Time and Place – November 16, 2007 at 10am. Bodycote Testing Group to host meeting. Contact Anthony Neumann for directions

Topics for Discussion – CAEAL, Colour Correction, SDI.

Thank you to Osprey Scientific/ Barbara Bomersback for hosting this meeting.

Anthony Neumann motions to adjourn meeting at 2:08pm. Genevieve P. 2<sup>nd</sup> and all were in favour.

Attached: Proposal to WCMUC for RR #37 through 40 Fall 2007 to Spring 2009, Treasurer's Report ending April 30, 2007 and Attendance Sheet.

## Attendance Sheet

<u>Name</u>	<u>Company</u>	<u>Email Address</u>
Genevieve Payeur	Peace Analytical Laboratories	<a href="mailto:genevievep@palgrandeprairie.com">genevievep@palgrandeprairie.com</a>
Amanda Burt	Peace Analytical Laboratories	<a href="mailto:info@palgrandeprairie.com">info@palgrandeprairie.com</a>
David Wong	Epcor	<a href="mailto:dwong@epcor.ca">dwong@epcor.ca</a>
Janina Linton	Maxxam	<a href="mailto:janina.linton@maxxamalytics.com">janina.linton@maxxamalytics.com</a>
Barbara Bomersback	Osprey	<a href="mailto:barbara@ospreyscientific.com">barbara@ospreyscientific.com</a>
Sharon Lu	Epcor Water Services	<a href="mailto:slu@epcor.ca">slu@epcor.ca</a>
Irene Gaudet	AB Research Council	<a href="mailto:irene@arc.ab.ca">irene@arc.ab.ca</a>
	Vitrak Creative	<a href="mailto:idgaudet@telusplanet.net">idgaudet@telusplanet.net</a>
Lydia Goatcher	Epcor Water	<a href="mailto:lgoatche@epcor.ca">lgoatche@epcor.ca</a>
Jason Ambrosius	SDI	<a href="mailto:jambrosius@sdix.com">jambrosius@sdix.com</a>
John Ashworth	ALS	<a href="mailto:john.ashworth@alsenviro.com">john.ashworth@alsenviro.com</a>
Ansar Qureshi	AQSS	<a href="mailto:ansar@shaw.ca">ansar@shaw.ca</a>
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