

**OPEN**

THE UNIVERSITY OF  
**MELBOURNE**

**Electromagnetic Radiation  
Safety Committee**

2014/04

**MINUTES**

Electromagnetic Radiation Committee Meeting occurred on Wednesday 3<sup>rd</sup> December 2014, at 1.00pm on the Ground Floor, Meeting Room G11, Old Geology (Building 155).

Meeting opened at 1:05pm

Chaired by David Keizer

Minuted by Tom Cougan

**1 Attendance/Apologies****1.1 Attendees**

David Keizer (DK)

Ian Bouch (IB)

Jill Williams (JW)

Julie McNeice (JM)

Petronella Nel (PN)

Steve Guggenheimer (SG)

Susan Butler (SB)

Tom Cougan (Minute Secretary)

**1.2 Apologies**

Malka Halgamuge (MH)

Sam Montalto (SM)

Victor Russ (VR)

Ira Tedja (IT)

Matthew Bennett (MB)

Matthew Bennett has resigned from the University and therefore the committee. DK informed the committee of the effect of the BIP (Business Improvement Program) process on the Bio 21 Institute and asked committee members to express their availability in light of BIP related changes. All committee members in attendance expressed their availability to retain positions in the committee.

Action: A replacement for MB will be organised and the process to appoint to this position will begin in the new year. Members unable to remain in the committee should also inform the ERSC of this fact to ensure acceptable replacements can be found.

**2 Minutes of the previous meeting**

Minutes from 2014/03 were then accepted by SG and seconded by SB.

### 3 Review of incidents

#### 3.1 TLD badges

No abnormal results since last meeting.

SG confirmed this noting there were no reported problems.

#### 3.2 New Incidents

SG followed up on the troublesome laser printer in Engineering that had been producing a smoke.

SG described a situation in a Japanese laboratory wherein citizens are having ongoing radiation checks despite no exposure to radiation.

DK in conjunction with JM referred to an incident in Burnley that occurred in April 2014 in which a staff member was exposed to UV radiation resulting in burns to her body. The incident raises a number of issues particularly, as raised by PN, in relation to correct PPE (such as goggles and lab coats). This incident hasn't been closed and has taken time to reach the committees attention as JM was on leave at the time of the incident which severely slowed the reporting process.

Actions: SG has not heard from the relevant Engineering staff involved and will take steps to do so particularly regarding ventilation in this area.

SG intends to investigate this laboratory further as there are ramifications should his assessment yield damaging results.

At the next meeting SG and JM will produce a report regarding the outcome of this incident as well as a review of the Standard Operating Procedure within this laboratory.

### 4 Action items from previous meeting

#### 4.1 Information Session for DRSOs

SB stated there is no need to follow up any issues in the latter part of 2014. Any concerns regarding these sessions should be handled in the new year.

Action: Ongoing. SG and TC to contact the relevant departments to update the DRSO list. This process should note the name of the DRSO and their role. If any of these DRSO positions have had a new staff member take the position or are vacant it should be noted and altered on the list. Fulfilling this action should take place in 2015 once the relevant BIP related changes have taken place.

#### 4.2 Radiation Management Plans

SB informed the committee that there has been no new material or plans she has had to deal with since the last committee meeting. SB noted the potential influence departmental name changes may have on future Radiation Plan updates.

Action: SB to continue to review submitted Radiation Management Plans and provide assistance where required while taking into account the changes that will result from BIP.

#### 4.3 iProcurement

There are a number of BIP related changes to the Chemical Store at the University. The Chemical store will become one entity. This will result in changes to University Policy as this entity will oversee all materials running through the University. SG noted this policy change would also benefit the separate Radiation store. The BIP process means that the current Chemistry store will no longer function as such post February. This new entity will not use Themis but will utilise a new computer based program and will require registration for staff intending to use it. DK stated this system has already been in place but its use will become more widespread as a result of this new store structuring. The Bio 21 (which along with the Chemistry Building are the two locations for Chemical stores) will double in size as described

by DK. JW questioned the methodology when making standing orders but DK suggested it was better to keep this matter separate from the committee.

Action: Ongoing. DK noted that as the BIP process is implemented more information and planning will be available meaning both the committee and staff need to be aware of any major developments or changes.

#### 4.4 **Business Improvement Program (BIP)**

BIP issues will continue be dealt with as they arise. The effect of BIP on issues relating to the committee has been widespread with most agenda items affected by it in some way. As a result this action item was addressed as BIP related issues are being resolved throughout the greater work of the committee.

Action: Ongoing. As previously mentioned effort must be made to keep DRISO lists updated and with the appropriate personnel listed. The committee should be notified of any major changes.

#### 4.5 **Trialling new monitors and badges**

SB stated the need to reassess, in the new year, those staff that are badged at the University. This includes which personnel are involved, what requirements they have and remind those involved of their participation. Reminders of how to store and wear these badges is also an important factor. The need to complete this is heightened by examples where higher than normal doses have been recorded which has taken place on a few locations as noted by SB. SG informed the committee about new monitors that are being trialled in the radiation store. Their effectiveness and their results are to be assessed. DK, SG and SB started a discussion based around considering alternative methods of monitoring particularly those utilising USB technology. Using USB based monitors would make for more convenient data collection as their portability and data transfer capabilities are high. However SB raised concerns with this and identified a number of reasons including the large history of data, familiarity of staff with the current system and difficulties arising from marrying up USB results with those from the past as reasons that the current system is more effective. These she concluded are key reasons to maintain the current system. DK also added that ARPANSA, when scrutinizing UoM's results, double checks this data which ensures they are thoroughly analysed. Any new system would either need to utilise this ability to cross reference with ARPANSA or else create a new alternative to better provide support for its data. JW informed the committee she may take on the DRISO role within the School of Biology and questioned SB about the possibility of finger badges. SB noted the difficulties of consistent use and advised that they will be considered rather than implemented at this point. The use of radon and neutron monitors is an area the committee has previously discussed and is keen to follow up into the new year.

Action: Ongoing. The need for a coherent, efficient and effective monitoring system is an important consideration for the committee. The collection of data and those personnel being monitored are areas committee members should be aware of when considering any new technology or monitoring methodology. Any points of interest or interesting developments should be noted when the committee next meet.

#### 4.6 **ARPS conference**

SG noted, having been to a number of ARPS (Australasian Radiation Protection Society) conferences that this particular conference was one of the best he has attended particularly from a networking point of view. This was particularly relevant when discussing methods to store and dispose of radiation related waste. The Australian Safety and Non-Proliferation Office (ASNO) took part in these discussions. Methods of dilution in order to enhance the ability to store and dispose of radiation related waste formed an important part of this discussion. The conferences motto was "Line in the Sand" and referred in part to Radiation Safety versus Radiation Legislation which SG noted was an enlightening debate. This

included a focus on the “no limits threshold” and a discussion of the use of regulation for appearances rather than an actual safety measure.

Action: Findings and theories regarding the conferences will form part of the University’s and Committee’s thinking going forward. Closed Out.

4.7 **Magnet**

DK informed the committee a new CPR magnet will be commissioned on Monday December 8<sup>th</sup> at a cost of \$750,000. The next magnet to be installed will be 400MHz magnet that will be installed in February 2015. DK notified the committee of issues arising from a magnet within the Melbourne Brain Institute. Water has leaked underneath this magnet and has proved difficult to clean up as there is little to no clear access to fix this problem. The problem is exacerbated by the fact that this water risks quenching the magnet. DK suggested that University Services and Infrastructure can handle the problem in conjunction with Engineering. Factors to consider also include the related started-up costs for the magnet and the cost of helium used during the process.

Action: Ongoing. DK has suggested the magnet be shut down gradually in a controlled manor. He is happy to lend assistance to Engineering if they require additional information. The outcome of this issue should be discussed at the next meeting.

4.8 **Mobile Phone Tower**

As MH was an apology for this meeting this item was no discussed.

Action: The committee will again discuss the findings of the measurements and research conducted by MH at the committee’s next meeting.

4.9 **Laser Training**

SG noted that staff and students are highly aware that both Ionising and Laser training is available. The University of Auckland had a number of staff complete both training sessions and the feedback was positive. SG noted the importance of this relationship with an external University as a clear positive particularly in the recognition of the training courses externally.

Action: SG to continue to foster links with external Universities in regards to training attendance. TC was asked by the committee to compile training number statistics to present to the committee in time for the next meeting.

Meeting closed at 1.40pm

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**ERSC Meetings Scheduled for 2015**

Wednesday 4<sup>th</sup> March  
Wednesday 3<sup>rd</sup> June  
Wednesday 2<sup>nd</sup> September  
Wednesday 2<sup>nd</sup> December

**Distribution List:**

Electromagnetic Radiation Committee Members: David Keizer, Ian Bouch, Ira Tedja, Jill Williams, Julie McNiece, Malka Halgamuge, Matthew Bennett, Petronella Nel, Sam Montalto, Steve Guggenheimer, Susan Butler, Victor Russ.

Minute Secretary: Tom Cougan

Director, Occupational Health & Safety and Injury Management: Stefan Delaney

**Attendance Record 2014:**

<b>Member</b>	<b>Attendance</b>
Victor Russ	1/4
David Keizer	4/4
Ian Bouch	3/4
Ira Tedja	2/4
Jill Williams	4/4
Julie McNiece	2/4
Malka Halgamuge	2/4
Matthew Bennett	2/4
Petronella Nel	4/4
Sam Montalto	2/4
Steve Guggenheimer	4/4
Susan Butler	4/4