Present: Professor David Mee (in the Chair), Munirud Dean, Dr Bo Feng, Mrs Kim Lamb, Mr Doug Malcolm, Dr Micah Nehring, Mr Eddie Platt, Mr Bojan Vlacic, Professor Mingxing Zhang.

Apologies: nil.

Minutes: The minutes of the meeting held on 28 October 2013, having been previously circulated, were taken as read and confirmed.

Business Arising out of the Minutes

Business arising out of the minutes (meeting 3.2013)
- A gas storage area has been installed outside of the AEB.
- There was no further action required on the electrical incident.
- The laboratory audit schedule would be updated and audits would commence shortly.

Business arising out of the minutes (meeting 4.2013)
- OH&S matters are to be raised at Divisional and RHD liaison meetings.

Items in progress

<table>
<thead>
<tr>
<th>Meeting</th>
<th>Item</th>
<th>Action required</th>
<th>Responsible Officer</th>
</tr>
</thead>
<tbody>
<tr>
<td>4/2013</td>
<td>6</td>
<td>2012 Internal OH&amp;S Audit – implementation in progress</td>
<td>KL</td>
</tr>
</tbody>
</table>

1. Review of Incidents, Inspections, Audits and Monitoring

A. Incidents

1. AEB 414 (incident number 7400)

On 23 October 2013, a member of UQMP reported that a ceiling panel in the Advanced Engineering Building, Room 414 fell on to a bench where a student was working. Property and Facilities Section were notified.

2. AEB 122 (incident number 7650)

On 1 January 2014, a member of UQMP inducted a new staff member into the laboratory. They entered the lab and closed the door. The door handle stopped working and turning the handle did not disengage the door latch. A call was made and someone with a key came and unlocked the door. Prior to this event, the door handle had been in working order. The cause for failure was poor installation of the door handle mechanism. This was reported to Property and Facilities Section as a defect.

3. AEB 612 – Water Leak (incident 7566)

On 9 January 2014, the plasma furnace room (AEB, room 612) was flooded after business hours when a cooling system hose connection to the plasma furnace came off. The cooling system had a mains water make up supply which continued to run for a prolonged period. There was damage to the plasma furnace electrical system. Most of the water appeared to have gone down the floor drains in room 612 and into the adjacent plant room. Nevertheless, inspections of the lower levels revealed leaks through the slab around tundishes, floor drains and other penetrations in both the level 6 and level 5 slabs. The damage on the lower levels appeared to be limited to the level 5 laboratory directly under 612; however, there was also a small amount of water evident in the level 5 plant room, level 4 plant room and the communication room 407. The incident was referred to UQ’s Insurance Officer and the loss adjuster carried out an inspection. This matter was referred to WATPAC who constructed the building and the outcome of the insurance claim was not yet known.
1. Review of Incidents, Inspections, Audits and Monitoring (cont’d)
   A. Incidents (cont’d)

3. AEB 612 – Water Leak (incident 7566) (cont’d)

   One of the Faculty Workshop Group members, Peter Khan, had met with the Faculty Workplace Health and Safety manager in August 2013 regarding the high pressure water being supplied to the machine.

   Members noted the following –
   ▪ There was an emergency stop button; however, it was located in a room managed by Property and Facilities Division which was kept locked.
   ▪ The floor drain in the lab was located in a high part of the lab and the water did not drain away.
   ▪ Laboratory staff needed to be able to switch the water off after hours to avoid this happening again in the future.

   The Faculty Workplace Health and Safety Manager would discuss the matter with Professor Zhang and draft an email for the Head of School to send to the Director of Property and Facilities Division.

4. Picric Acid

   On 14 November 2013, the University’s OH&S Division circulated a Hazard Alert regarding dehydrated picric acid. The notice was emailed to “MechMining Everyone” on 15 November 2013 with a request that any users consult the Faculty’s Workplace Health and Safety Manager. Picric acid was stored in AEB 413 and at the time, there was 100ml of picric acid in the room. A risk assessment was provided for the Faculty’s Workplace Health and Safety Manager’s review. The Faculty Workplace Health and Safety Manager advised that the picric acid was being stored correctly (email of 12 March 2014). While it was not essential, the Faculty's Workplace Health and Safety Manager suggested that picric acid be stored in a locked cabinet.

5. Concrete: Frank White Building

   On 5 February 2014, the Head of Division of Mining Engineering reported that pieces of concrete were falling off of the outside of the Frank White Building. Property and Facilities Division sent contractors to attend to the matter. Ulex Construction was commissioned to apply a concrete repair mortar to the affected areas; this was completed in late February 2014.

6. New laboratory set ups (43-004, 43-005)

   Professor Jin Zou’s group was allocated laboratory space in the Frank White Building, Rooms 004 and 005. The research group recently ordered some new equipment which required installation and commissioning. Property and Facilities Division had assisted with the requirements for Room 004 which included installation of new power points and associated electrical work. On 28 January 2014, the group was asked to install safety door charts and to ensure all relevant training, risk assessments, and a chemical inventory were completed. The School’s laboratory manual template was also provided to the group by the School Manager. Professor Zou advised that Dr Zhigang Chen would work on these requirements.

   On 29 January, the Faculty WH&S Manager went to Room 005 to assist and discovered a number of health and safety breaches including improperly labelled substances, an unchained gas cylinder, clinical waste, an unknown amount of liquid nitrogen, equipment not tested and tagged, and possibly inadequate PPE. Professor Zou asked Dr Chen to action this as soon as possible. Dr Chen advised by email that they had not begun experiments in the lab and advised that the equipment had recently been installed and tested. Dr Chen advised that he was overseas until 6 February and indicated that he would discuss the lab and associated safety requirements with the Faculty Health and Safety Manager on his return.
1. Review of Incidents, Inspections, Audits and Monitoring (cont’d)

A. Incidents (cont’d)

6. New laboratory set ups (43-004, 43-005) (cont’d)

The liquid nitrogen was in excess of what was permitted in the lab in the absence of adequate controls so it was taken outside and allowed to evaporate. The Head of School wrote to Professor Zou on 29 January and asked him to ensure that the lab was established and functioning under approved safety principles. The Faculty Health and Safety Manager indicated he would meet with Dr Chen regarding safety requirements.

On 26 February, the School Manager met with Professor Zou and Dr Chen. Also in attendance was the School Manager (Chemical Engineering) and Mrs Marion Dunstan, the School of Chemical Engineering’s safety manager who attended to assist with the setup of the laboratory and to walk Professor Zou and Dr Chen through the safety checklist. Equipment has now been tested and tagged.

The following issues were identified.

- Equipment had been installed and commissioned by vendors who were not inducted by Property and Facilities Division. Note: this was clarified in the 24 February 2014 School Newsletter.
- There was a possible need for an oxygen sensor which was not identified prior to the purchase and installation of the equipment. Note: this would be ordered if required.
- Detailed risk assessments for the use of liquid nitrogen had not been implemented and followed. Note: discussion held on 26 February 2014.
- There was a possible lack of awareness regarding setting up a new lab and commissioning new equipment. Note: discussion held on 26 February 2014.
- There was a need to fully document requirements for laboratories in advance of placing an order for equipment. Note: in process.
- Incorrect chemical labelling. Note: discussion held on 26 February 2014.

Members discussed ways the School could proactively assist staff to set up new laboratories and noted that the School has published a laboratory manual template, there was an equipment proforma to be completed when equipment was ordered as part of a grant application, and the finance staff made every effort to identify equipment at the point of purchase.

It was resolved that --

- the School Manager would develop a process to enable staff to know where to seek assistance.
- this is matter would be raised, and feedback from staff sought, at divisional meetings and the RHD staff/student liaison meeting.
- the performance review should also include a discussion of incidents that incurred which involved the staff member.
- the two laboratories (43-004 and 43-005) be audited.

7. Chemical Storage – AEB

As part of the move to the AEB, excess chemicals for Professor Mingxing Zhang’s group have been stored in the University’s Chemical Store. The manager of the store has asked for these stocks to be reduced. In addition, there were excessive amounts of these goods stored in the laboratory which was above the amounts allowed under the legislation. The School Manager and the Manager of the Chemical Store, Mr Anthony Fowler, met with Professor Zhang on 14 March 2014 and the following was agreed –
1. Review of Incidents, Inspections, Audits and Monitoring (cont’d)
A. Incidents (cont’d)

7. Chemical Storage – AEB (cont’d)

- Professor Zhang would arrange for the disposal of 22kg of aluminium powder straight away. This would make the lab compliant.
- Anthony Fowler would keep the other chemicals in the Chemical Store for the duration of 2014 with the following provisos -
  o When the AEB storage area was available, Professor Zhang would move as much of the powders as possible from the Chemical Store to the AEB store.
  o Every three months (mid-June 2014, mid-September 2014, mid-December 2014) Anthony Fowler would review the material in the Chemical Store to see that it was reducing steadily.
  o Any material left in the Chemical Store by 15 December 2014 would be disposed of by Anthony Fowler.
- The School (and Faculty) were invited to send staff to the Chemical Store to see how chemicals were stored and segregated.
- Anthony would visit the lab to help Professor Zhang and his staff/RHD students with storage, segregation, etc as an educational exercise.
- The research group would, from now on, only order 1kg amounts (or less) of the class 4 powders and maintain limits as set out in the regulations.
- The School Manager would talk to the Faculty Facilities Manager to see how users of the AEB store will be identified and how that area will be managed.
- The School Manager would also talk to the Faculty Facilities Manager to see if there are other storage cabinets that we can use to store these materials. This would be a short term solution to help Anthony.
- Professor Zhang would check with other AEB users (e.g. Glenda Zemanek) to see if she or others were able to store some materials in their lab while the oversupply was being used.

The chemical storage area in the AEB was designed to store chemicals to be used as a “just in time store” to replenish chemicals as they were required. There would be an induction process and usage would be monitored in accordance with the approved hazardous area classification in the AEB.

8. AEB – Fire Alarm

On 17 March 2014, there was a fire alarm and evacuation in the AEB at approximately 5:15pm. The smoke detectors will be changed to thermal sensors. The location of the break glass sensor was being investigated as was the fire panel labelling.

B. Audits

1. Pinjarra Hills Audit

The University’s OH&S Division undertook an audit at the Pinjarra Hills site in mid-2013. The School would provide any required assistance with the Corrective Action Plan. One item raised was been rectified.

2. Lab Audits

At the meeting of the School’s OH&S Committee held on 26 August 2013, it was agreed to institute an annual laboratory audit for all labs within the School. Members noted a Faculty-wide process was being developed and a new timeframe would be determined.
Members noted the responses to the 23 August 2013 laboratory audit of the Corrosion Laboratory (49-517) which was provided by the Laboratory Manager on 4 November 2013.

<table>
<thead>
<tr>
<th>Question</th>
<th>Corrective action Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is training provided on the use of PPE?</td>
<td>Staff have been trained in the proper use of PPE. Old PPE have been replaced with what is required according to the MSDS.</td>
</tr>
<tr>
<td>Is PPE maintained and stored correctly?</td>
<td>PPE is now stored near the fume hood and safety glasses are near the door. Disposable gloves are near the sink and different types of gloves are available for specific chemicals. Paper towels are now in the dispenser.</td>
</tr>
<tr>
<td>Is general storage for chemicals sufficient, including security?</td>
<td>There are now sufficient shelves for chemical storage and these are arranged and stored safely based on the compatibility and segregation chart.</td>
</tr>
<tr>
<td>Are emergency procedures available?</td>
<td>EAIT Facilities to source and distribute emergency procedure cards.</td>
</tr>
<tr>
<td>Are emergency contact telephone numbers provided?</td>
<td>EAIT Facilities to provide telephone numbers.</td>
</tr>
</tbody>
</table>

C. Monitoring

1. First Aid Boxes

First aid boxes located within the School were restocked in January 2014. This review was done annually and was organised by the School Office. A larger box was placed in the first aid room in the AEB, Room 506. A request to include the location of first aid kits in the Faculty’s Interactive Space and Resource Database (ISRDB) has been submitted.

2. Testing and Tagging

There were two recent issues where the Faculty’s Workplace Health and Safety Manager had identified electrical equipment that was either out of date with testing and tagging requirements or the testing had not been done. There also appeared to be an issue with the business process of testing and tagging particularly when new equipment is commissioned. The School Manager was working with the Deputy Manager, Faculty Workshop Group and the School’s Finance Manager on this. Electrical goods would be checked during lab audits and spot checked during the asset stocktake as back up measures.

Members requested that the testing and tagging schedule needed to be published and users advised in advance of the visit so they could make the equipment available for testing.

3. Risk Assessment Drop in Sessions

The Faculty’s Workplace Health and Safety Manager has begun to hold “drop in sessions” to assist staff and RHD students with the completion of risk assessments. These commenced on 10 March 2014 and would be held fortnightly. Reminders were placed in the School’s newsletter. Members were asked to remind colleagues of this initiative.

4. UQ Mine

Members a report on the UQ Mine was sent by the Executive Dean to all staff in the Faculty on 13 March 2014.
5. **Removal of Asbestos – Level 3 Frank White Building**

Members noted that a certified and licenced asbestos removal contractor would be removing asbestos from Level 3 of the Frank White Building for a 2-3 week period, commencing in late March 2014. The work was being managed by Property and Facilities Division in conjunction with the UQ OH&S Division. The Project Manager from Property and Facilities Division, Mr Stephen Ingham, advised there was no need to vacate other levels of the building during this time.

Occupants of the building were advised by email on 17 March 2013 of the following:

- While some work (wrapping and removal from ceilings) would be done during working hours, the majority of it would be done out of hours.
- Egress from other levels of the building would be maintained and access to the Ladies’ toilet on Level 3 should also be available.
- Occupants were advised to direct questions or concerns to the project manager, Mr Stephen Ingham.

2. **Undergraduate Student Access to Laboratories and Teaching Spaces**

UQ has published guidelines that applied to all laboratory practical classes at UQ and to all undergraduate students (the University considered undergraduate students “in training” and accordingly, has several expectations for staff and students. The guidelines were on the University’s OH&S Division’s web site and should be read by course coordinators, teaching staff, technical staff and undergraduate students prior to the students’ participation in the practical. Students were also required to sign a form indicating they understood their responsibilities before they commenced work in the lab. At present, staff were asked to take completed forms to the School Office (in bulk please). This advice was sent to teaching staff on 5 March 2013 and a reminder has been placed in the School’s Business Process Calendar for reminders to be sent each semester. Course coordinators were asked to ensure that this occurs in relevant courses and that casual staff (e.g. demonstrators) were informed of their responsibilities as it relates to their course.

Members noted that coursework thesis students were classified as “workers” under the legislation and accordingly, needed to be treated as staff for their OH&S training.

Members noted that -

- the School would work with the Faculty and the School of Chemical Engineering to develop an on line form for use by students.
- a process for an effective thesis student induction was required.

3. **OH&S Goals Review**

Each year, the School was required to submit a review of its performance against the 11 OH&S goals of the University to the OH&S Division. Members endorsed the review and noted the following -

**Highlights**

- The School has improved its compliance with the general workplace induction and on line fire safety training (97.56% completed) (Goal 11).

**Areas for improvement**

- Attendance by supervisors at the relevant OH&S course (Goal 2). The School’s OH&S form, which was used as part of the annual performance review, was updated to collect these training records.
- The University needed a system that measured training completed against the training needs analysis so we could measure compliance with other training not required of all staff (Goal 3).
- The School needed to be able to measure incident reporting and risk assessment approvals at the School level via the Reportal (Goals 6 and 9).
- The School did not yet have a formal annual OHS Workplace Assessment Inspection process. This is being worked on across the Faculty. (Goal 10).
4. **OH&S Management Plan**

Each year, the School was required to submit a review criteria found in the OH&S Management Plan. Members noted that the areas of risk were lack of attendance at supervisor training courses and irregular workplace safety inspections and audits.

Members endorsed the 2014 Management Plan which would be sent to the Faculty and the OH&S Division.

5. **Fire Wardens**

Members noted the current fire wardens in buildings where School staff were located. The fire wardens for the Hawken Engineering Building had not yet been finalised for the year. The Faculty Workplace Health and Safety Manager was progressing the matter as well as ongoing maintenance and training of the wardens.

6. **Terms of Reference and Composition.**

Members noted the terms of reference and composition of the School’s Executive Occupational Health and Safety Committee.

7. **Communications on OH&S Matters**

Members noted the communications sent to during the period 23 October 2013 – 18 March 2014.

*Emails*

- 4 November 2013: (Mech Mining All staff): circulation of a web link to the Student Services site “Dealing with Distressed Students”.
- 16 December 2013: (Mech Mining Everyone): University closure over the Christmas/New Year holiday – information for those working during the break.
- 9 January 2014: (Mech Mining All staff): reminder to do the annual “On line Fire Safety training”. This was sent by email merge to staff with the date of their last training date (example saved on the server).
- 15 January 2014: (Mech Mining All staff): reminder of staff and supervisor OH&S training requirements.
- 10 February 2014: (Mech Mining Everyone): notice of OH&S courses in February 2014 (as published in the UQ Online newsletter.
- 5 March 2014: (Mech Mining All staff): UQ guidelines regarding laboratory practical classes (undergraduate students).
- 6 March 2014: (Mech Mining All staff): UQ OH&S notice on oven heated reaction vessels.

*School Newsletter*

- 24 February 2014: reminder to arrange a safety induction (facilities@eait.uq.edu.au) before contractors come on to campus (e.g. to install equipment).
- 6 March 2014: OH&S notices “Unsafe Storage” from 20 February 2014 and “Import Permits – non conformities” from 21 February 2014 and “Right of Entry for “WHS permit holders”.

*OH&S Notices*

- 15 November 2013: Picric Acid (emailed to MechMining Everyone)
- 12 February 2014: Oven Heated Reaction Vessels (follow up on April 2013 notice). Emailed to MechMining all staff on 6 March 2014.

8. **Faculty OH&S Minutes.**

Members noted the Faculty OH&S minutes of the meeting held on 20 November 2014.