NSW ACCREDITED SITE AUDITOR SCHEME

Minutes for the Site Auditor Meeting – Friday 30 April 2021

Present

Auditors:
Adrian Hall - Online
Alyson Macdonald - In person
Amanda Lee - In person
Andre Smit - In person
Andrew Lau - In person
Anthony Lane - In person
Ben Wackett - In person
Brad Eismen - In person
Brad May - Online
Caroline Vernon - In person
Charlie Barber - Online
Chris Jewell - In person
Colin McKay - In person
David Gregory - Online
Fiona Robinson - Online
Frank Mohen - Online
Ian Gregson - Online
Ian Hosking - In person
Ian Swane - In person
James Davis - In person
Jason Clay - In person
Julie Evans - In person
Kylie Lloyd - Online
Lange Jorstad - In person
Louise Walkden - In person
Marc Salmon - In person
Mark Stuckey - Online
Melissa Porter - In person
Michael Dunbavan - Online
Mike Nash - Online
Paul Moritz - Online
Peter Beck - Online
Peter Lavelle - In person
Peter Ramsay - Online
Philip Mulvey - Online
Rod Harwood - In person
Ross McFarland - Online
Rowena Salmon - In person
Sophie Wood - Online
Tim Chambers - In person
Tom Onus - In person
Tony Scott - Online

NSW EPA:
Anthea White - In person
Elizabeth Watson - In person
Emily Potts - Online
Hamish Campbell - In person
Helen Prifti - In person
James Boyle - In person
Joanne Stuart - In person
Marina Leung - In person
Mark Hanemann - In person
Rose Cocks - In person
Sam Waskett - In person
Shelley Nancarrow - In person

Presenters (Affiliation):
Dennis Clemence (SafeworkNSW – in person)
Nicole Malone (Department of Planning, Industry and Environment – online)
Steven Nikolovski (Safework NSW – in person)

Apologies (Proxies):
Andrew Kohlrusch (none)
Graeme Miller (Zoe Smith - online)
Paul Steinwede (Lesley Limage – in person)
Rebeka Hall (Matt Rendell – in person)

Audit Panel:
Damien Davidson – in person
Donald White – in person
Graeme Batley - Online
Greg Davis – Apology

Jurisdictions:
Jianmin Zhang (EPA ACT – online)

This is a record of the meeting. Any directions or policy guidelines made as a result of these discussions will be formally released under a sperate cover.

1. Welcome and Meeting Objectives — Anthea White, NSW EPA

Anthea White welcomed all attendees and gave an acknowledgement of Country. She also welcomed the online attendees.

She noted that this was the first site auditors' meeting to be held at the EPA's new head office in 4PSQ (12 Darcy Street, Parramatta). She thanked the upcoming speakers for the day and introduced Sam Waskett, who is acting as a Senior Operations Officer, administering the site auditor scheme as part of the Contaminated Land Advice and Audit unit.

Anthea outlined the meeting agenda and discussed some general housekeeping requirements, including COVID-19 safety precautions.

2. Asbestos in Soil — Steven Nikolovski & Dennis Clemence, Safework NSW

Refer to presentation attached.

Steven Nikolovski introduced himself and his colleague Dennis Clemence from Safework NSW, and EPA Officer Hamish Campbell (seated in the audience) who works with them on asbestos issues.

Steven outlined the main reasons soil is contaminated with asbestos; naturally occurring, illegal dumping, poor demolition practices and inadequate remediation. He discussed the difference between friable and non-friable asbestos. Persons conducting sampling should wear the appropriate personal protective equipment and determine friability by the squeeze test. That is; when you squeeze it in your hands, does it crumble? This needs to be noted in the report and consideration given to how this information will be interpreted and used.

Steven noted that not all asbestos in soil that is bonded will eventually become friable but the friability test must be conducted. The roles of Class A and Class B asbestos removalists were distinguished.

Discussion

- It was asked how Safework treats a site that is predominantly contaminated with bonded ACM, but where there is a very small proportion that meets the definition of friable? Safework responded that this can be a class B asbestos removalist task, with the clarification that the friable amount must meet the minor contamination definition for friable asbestos. Sites with a combination of friable and non-friable asbestos could be dealt separately by a Class A and a Class B contractor. However, it was noted that it could be cost effective and time efficient to engage one contractor. A precautionary approach should be taken.
- Safework explained the term 'minor contamination' and informed the attendees that minor contamination must be determined by an independent competent person.
- SafeWork were asked to define a 'independent competent person'. Safework explained a 'competent person' is defined as a person who is appropriately trained, skilled and has knowledge of industry practices while being independent from the asbestos removal contractor.
- Safework discussed the controls required during remediation, and it was noted that the asbestos removal area may only be reoccupied once a clearance certificate has been issues.
- Safework explained when licence removal work has been carried out, there is a requirement for the asbestos removalists to notify SafeWork. For the first quarter of this year, SafeWork received just over 7000 notifications, at least 190 of these were notifications for non-friable asbestos in soil. Friable numbers are currently unknown. It was noted that waste classification reports need to indicate friability when reporting for disposal.

- Clarification about the 100kg threshold was asked – was it the mass of asbestos or mass of soil with asbestos contamination. Safework responded it was the mass of asbestos.
- Safework explained the guide to managing asbestos in or on soil will be updated shortly.
- It was noted if the location is a workplace, an asbestos management plan needs to be created where there is asbestos, even if asbestos is below HSLs. It was asked if working from home meant the home became a workplace? Worksafe clarified that a plan wasn't needed as the home was predominately for residential use.
- Clarification was sought: if the site is a commercial facility but asbestos is below HSLs, does it still need an asbestos management plan? Safework responded yes and explained the person conducting the business has this responsibility.
- It was raised that when there is friable/non-friable trace results in soils some people class this as friable with no consideration about if it can be released into the air and the soil characteristics e.g. clay vs sand. There is some uncertainty about how to deal with this. It was suggested a hygienist could provide advice.
- It was asked if a site is to be developed, would it be a workplace during development works? Safework responded yes.
- It was asked for clarification on whether environmental professionals can make the call on whether 7x7mm fractions are friable. Safework responded if they met the definition of a competent professional.
- It was asked if ACM has been identified within the soil, can the soil be stockpiled by an excavator operator? Safework responded no, the act of stockpiling material containing asbestos would still be considered asbestos removal and would be required to be removed by a licensed contractor. It was asked if test pits would be classed as stockpiles? Safework responded no, as this would be classed as sampling and identification. Asbestos controls should still be used to manage potential asbestos and dust release.
- It was asked what is the definition of minor contamination? Safework responded there is a Safework Australia document that supports this definition. This will be shared.
- It was suggested there is a conflict between what industrial hygienists and contaminated land professionals can do on site. More communication in industry is needed to communicate the roles and responsibilities of these groups.
- The EPA noted this is a complicated space to work in across multiple legislations. The EPA is working with Safework on the asbestos in or on soil guidelines. We want this to be practical for industry to apply.

3. Waste docket survey results **Helen Prifti, NSW EPA**

Refer to presentation attached

Helen Prifti introduced herself as acting director of the EPA's Environmental Solutions – Chemicals, Land and Radiation branch. She explained the EPA's restructure had led to the creation of her branch which now includes Contaminated Land Advice and Audit, Chemicals and Pesticides, Hazardous Waste and Dangerous Goods, Resource Recovery Innovation, Environmental Monitoring and Hazard Mapping and Radiation Units. These are all technical areas.

The EPA's Site Auditor Scheme Team have been advised by auditors of inconsistencies in data and information provided by consultants with regard to transport and disposal of contaminated waste at licenced facilities.

To better understand the issue a short survey of 8 targeted questions was sent out to all NSW auditors to understand, from an auditor's point of view, what the scale of the issue in the industry is. If a largescale problem was identified, the EPA would look into the possibility of

putting forward a case for change, in particular with regard to standardisation of waste documentation in NSW. The survey closed on 19 April 2021 and in total 19 auditors responded.

Eighteen of the auditors identified the issue of inaccurate information being provided on the dockets. One auditor found a total of 10 sites misaddressed. There were also inconsistencies identified by auditors when receiving receipts from the same landfills. Only 2 respondents found that storage of waste at transport company holding facility was an issue.

A survey response said poor quality dockets are hard to read, and lead to badly reconciled documents. Other issues identified include gaps in information, no EPLs listed, lack of itemised information, and lack of identification of waste. Auditors said there are inconsistencies caused by some reports expressing the volume of waste in cubic meters versus tonnes. Some dockets were found to completely omit addresses.

The survey asked whether auditors would like to see waste dockets standardised and whether this would allow a better audit of waste information. There was support for this and general agreement on the types of things that might be included on a standardised waste docket, including: the address of source sites, name of the transport company, the waste classification and description, the address of the receiving facility should be clearly marked (and not stated as a PO box), the EPL of a facility should be given, as well as the date and time the load received, weighbridge details and disposal costs. There was also support for information becoming available electronically / in digital form.

Discussion

- There was a suggestion that a reference number should be generated for the purpose of the waste classification document that is accompanying the waste.
- It was proposed by an auditor that on an ENM certificate it would be good to have a tick box asking if the landfill is licenced to receive this waste. That way you can check if the receiving facility is appropriate.
- It was asked what constitutes "itemised computer-generated info"? Is this information from on-site or from the landfill? What obligations are there to provide such data? In response the EPA clarified that when a landfill provides a receipt from its weighbridge, this should be in a consistent format, in numerical order. Some of the compliance issues identified in the survey include examples where you have a running series of dockets, but you are missing the one in between. There may be a series of trucks rolling through, but that's not necessarily evident. Having the dockets in numerical order can help you cross check the trucks.
- It was asked: we've been talking about what information should be provided on a waste docket, but ultimately, isn't this the responsibility of the waste generator? The EPA agreed that it is the generator's responsibility to provide accurate information about the waste, and that landfills also have a responsibility to provide accurate dockets. The survey was focussed on the work that auditors oversee. Information on waste should be provided for assessment by an auditor in a coherent way. That may mean the EPA develops a template and format in which people report that information, including the weighbridge docket, which is the landfill's responsibility. If a landfill is not providing this information when waste is brought in over the weighbridge it can indicate that there are other issues present, for example; fraudulent activities, levies, tax purposes, etc. The EPA is considering the development of a checklist or a table for reporting purposes. In the waste classification guidelines on our website there is already guidance on what a standard report should include.

- The EPA commented that we need to identify the scope of this problem. That's why the EPA ran the survey. The next steps are to consider if there is a need to take action and what that might look like.
- It was commented that landfills are a better target for compliance purposes. The EPA clarified that landfills have responsibilities to provide weighbridge dockets, but they are not responsible for many other things, such as writing the waste classification reports. An auditor agreed that the landfill is a better target to improve the standard of waste information. There are many parties involved in waste disposal and reporting for example; the developer, contractor, earthworks subbies, transport, etc. The developer is more interested in the building and the people actually doing the work are quite removed. The EPA clarified that the generator they were talking about may not be the person digging up the soil or transporting the waste. The generator is the generator of the report – the person overseeing the works.
- It was asked: how far do site auditors need to go to resolve discrepancies in the information provided on wastes? The EPA asked auditors to go as far as they can and to use their professional judgement. If work is poor, or if you haven't enough evidence, you need to make a call. Auditors can always seek clarification with the EPA if unsure.
- It was commented it would be nice if consultants provided a comprehensive report on all of these things. Often, they will say they were not engaged to track or classify waste and that it is outside of their scope of works. This creates an issue for auditors trying to assess where material went. The EPA commented that the person responsible has the statutory obligation that waste goes to an appropriate place.
- It was commented when there are major holes in waste documentation, the auditor guidelines require auditors to raise these issues with the EPA and document this in the audit. Auditors need to raise these issues with the EPA before we sign off on the audit.
- An auditor referred to the auditor guidelines and noted that an auditor can complete the audit despite the waste notification to the EPA but will need to document the notification in the site audit report and statement.
- It was commented that the cost of auditing handwritten documents is enormous. It was suggested that a streamlined modern approach for information is needed.
- It was commented that if you look at the waste supply chain the waste receiver is the service provider in the management of waste. There are obligations for landfills to comply with licence conditions and make sure that the waste has been received. Standardisation of information at the receiving facility would improve the auditor's ease of reconciliation between the generator's documents and the landfill.
- The EPA said if there is inconsistency with automated dockets, the EPA's levy audit team would like to know. The EPA welcomes feedback on this.
- It was noted that the EPA also checks compliance on waste reporting, and it was asked if the EPA had developed tools such as checklists which could be shared to help auditors reconcile the amounts generated at a site and received at a landfill. The EPA clarified that from the EPA's perspective, it is the generator's responsibility to provide accurate information. Many of the resource recovery orders state that this must be done. Some of the exemptions also include record keeping requirements for the landfill or receiver of the recovered material. The EPA's paper based and field-based assessments are not exactly the same as what an auditor does as part of an audit.
- It was asked: given Safework NSW takes a pragmatic approach to "minor contamination" from a WHS perspective, is EPA likely to consider "beneficial re-use" of "asbins" (asbestos in soils) e.g. for landfill cover as the ACT does? The EPA replied

that currently the legislation does not allow this to occur. It was clarified that asbestos impacted material cannot be considered to be reused in the ACT either.

- It was asked is WasteLocate reliable? Do you monitor this? The EPA commented that the EPA monitors this usage. The EPA offered to look into figures on noncompliance if requested.
- It was asked if asbestos containing soil was excavated on site and stockpiled, is the stockpiled material a waste? The EPA answered that asbestos waste is defined in the POEO Act as any waste that contains asbestos. The Act goes on to define waste and considers things like whether the substance is discarded, rejected, unwanted, surplus or abandoned, etc. Many of the provisions in the POEO Act are not triggered until the waste starts to move offsite. For example: waste disposal, application to land, licencing categories for landfills, the need for a resource recovery order and exemption, thermal treatment of waste, waste storage, etc. The substance is still a waste, regardless of whether it has been moved offsite, but the provisions may not have been triggered yet. Auditors should also consider that asbestos can cause land pollution and that the EPA can prosecute for land pollution offenses.
- It was asked if the waste review presents an opportunity to revisit the POEO position? The EPA stated that the waste Regulation review has been postponed, however when it resumes there will be the opportunity to consult and seek feedback. The asbestos provisions sit in the Act, not the Regulation, and amendments to the Act need to be a Cabinet decision. There would also be some tension between the use of asbestos containing soils as landfill cover and the federal legislation which would need to be resolved. It doesn't allow anything containing asbestos to be sold or reused.
- It was asked: a consultant referred to a NSW Health "No.12 Guidance for disposal and management of wastes from commercial mineral sands operations" but I can't find it. Has this NSW Health guidance been superseded by NSW EPA radiation guidance? The EPA said they would take this question on notice. An auditor said Circular 12: ARPANSA document 2008 and a NORM document which give these constraints. But he added that the guidance is not very clear.
- It was asked if the proximity principal offence has been repealed? The EPA clarified that it has not been repealed at this stage. As the Regulation review hasn't been undertaken the EPA can't comment on whether this will happen. The offence provisions are still within the legislation.

4. Contaminated Land Advice and Audit Team Update **Sam Waskett**

Refer to presentation attached.

Sam Waskett gave a brief overview of where the EPA's contaminated land management functions now sit, given last year's restructure. Regulation of contaminated land in now managed across four operational teams and the audit unit now sits in the Contaminated Land Advice and Audit (CLA&A) unit within the Environmental Solutions-CLR branch. There is no longer a centralised contaminated land management section, as staff have been split into functional areas. Anthea White is unit head of CLA&A. Contact details for the auditor's mailbox have not changed. Please continue to use this address.

Sam discussed Ecological Investigation Levels (EILs) being used in an urban setting, explained that work on the SEPP 55 Planning Guidelines is still progressing and gave an update on the private certifier training module being developed by the EPA, which will be piloted prior to finalise release later this year (tentatively in June) on the EPA's website and via Building Professionals Board CPD learning providers.

Sam explained that an auditor raised an issue of Councils not providing written approval for EMPs when they were not the Planning Authority responsible for issuing development consent, for example where the Land and Environment Court had issued consent. Sam invited auditors to discuss this issue and/or provide examples of where this has happened via a survey or email after the meeting. This information will be shared with the DPIE (Planning), so they can look into the matter further.

Discussion

- There was then discussion over the enforcement of an EMP and it was suggested that an auditor would only need planning authority approval if that authority actually needed to be involved. It was noted that if court decides a matter, local government can be distant in response.
- It was agreed the question of whether the authority needs to be involved in the enforcement was an important point because enforcement is an issue for EMPs. The opinion was offered by an auditor that if there is already a condition of consent requiring the EMP, then this is already enforced. It was also suggested that you can find an alternate enforcement mechanism in any case - for example, if asbestos is present, why not use WHS regulations requiring an asbestos management plan?
- The EPA said we are trying to clarify the issue regarding seeking written approval from authorities where compliance with a condition can only be ensured with the involvement of an authority, including considering what the purpose of including this requirement was in the auditor guidelines. Auditors must be confident an EMP can be reasonably be made to be legally enforceable. If an auditor is relying on an authority for enforcement of the EMP and the authority will not agree, can an auditor be satisfied that this will happen and therefore the site is suitable for a particular use?
- It was raised that there could be an issue with using the WHS regulation requirement for an Asbestos Management Plan as it doesn't necessarily mean the Plan an auditor audited will be implemented. It was asked that the EPA expand their list of appropriate mechanisms for enforcement.
- It was stated that the enforceability of EMPs has been an issue for 20+ years and needed a resolution. The EPA advised that there isn’t a simple way to resolve this.
- It was suggested that the solution to EMP enforceability is to propose a change to SEPP 55. An EMP should be category one remediation and therefore an EMP should require consent.
- It was raised that in terms of the requirement that an EMP be legally enforceable, the person responsible for implementing the EMP may not be doing so. There is no one monitoring and enforcing. This is a flaw in the system.
- It was suggested that EMPs would be much more likely to be enforced if Site Audit Statements were more easily available to the public. There are lots of interested parties out there who can bring pressure for maintenance / enforcement of EMPs.
- It was suggested the EMP enforcement issue could be resolved if the EPA was more willing to issue maintenance orders where there is an EMP.
- The EPA notes (post meeting) that ongoing maintenance orders (OMO) can only be issued where a site has been subject to a Management Order or an approved Voluntary Management Proposal issued under the *Contaminated Land Management Act 1997*. For the vast majority of EMPs produced OMO could not be used.

5. Standard Conditions – Contaminated Land **Nicole Malone, Planning NSW**

Refer to presentation attached.

Nicole Malone presented remotely via Microsoft teams on standardised development consent conditions for Councils. Planning have undertaken consultation to develop standard conditions of consent. This is an initiative under the planning reform action plan, intended to create consistency across Council areas. The standard residential conditions are soon to be released, along with a guide for writing conditions of consent. The guide will cover most residential developments, but not everything.

Planning have recently run a series of workshops on these conditions, including contaminated land conditions, with Councils. The conditions are being revised in relation to comments received from Councils.

The next steps for this project include seeking feedback from site auditors. There is a meeting on 11 May which auditors are invited to attend. Pending feedback, the standard contaminated land conditions will be further refined.

Discussion

- It was suggested that certified contaminated land consultants should be required by the standard contaminated land conditions of consent.
- It was commented that it is not always known at the time when development consent is granted if there will be an EMP. It was suggested a standard condition that indicates "if" an EMP is required it will be enforced through the development consent conditions.
- It was asked if this document will be issued for public comment? Planning responded it has been engaged in targeted consultation. It is not going out for public consultation at this stage.
- It was asked if Councils get to opt out of standard conditions – how can we ensure consistency? Planning clarified there will be mandatory conditions that Council cannot opt out of. For the residential conditions there is an opt in period which starts from the release, until they become mandatory. Council can opt to use them during this time. This will be used as a testing ground. None of the conditions at this early stage are mandatory. As for the model conditions, these will be optional, but Planning will strongly encourage councils to use them.
- It was asked if there will be mandatory conditions for Planning? Planning answered that these conditions are for local and regionally significant development. Standard conditions exist for SSD and SSI. There is a review of those occurring separately, but this current project is for Councils and planning panels. It was expressed that auditors would like to provide input on the state significant conditions as well.
- Clarification was sought about one of the draft model conditions which required *issuing site audit statement prior to occupation certificate.* It was suggested a SAS needed to be issued prior to a construction certificate. It was recommended Planning consider whether SASs should be issued prior to the constructed form above ground commences. Planning noted this feedback.
- It was noted Councils and other approving authorities often issue draft consent conditions for review. It was recommended that guidance is provided which advises the consent authority to consult the auditor too, although there may be less need for this if there are standard contaminated land conditions.

6. Land & Resources Policy — Joanne Stuart, NSW EPA

Refer to presentation attached.

Joanne Stuart gave a policy update. Contaminated land policy and waste policy have been combined and now sit in a new section called Land & Resources Policy at the EPA.

Joanne explained the EPA received 44 submissions, made up of 700 itemised comments, in response to the public consultation on the draft revised Sampling Design Guidelines last year. The EPA has made further changes to the revised guidelines on issues raised. JBS&G have been engaged to lend expert support for complex issues. There will be workshops to discuss these changes; one for Councils and the other for contaminated land professionals. If any auditors are interested in attending, please send an expression of interest through the auditor's mailbox.

Joanne also discussed the draft EMP Practice Note. Targeted consultation has been undertaken. The majority of submissions supported the content, subject to some amendments.

A review of the EPA's Contaminated Land Consultant Certification Policy is being undertaken. Joanne explained the scope of the review, which includes the diversity of practitioners, their availability, the administration of the schemes, and importantly whether the policy has lifted the quality of work. The EPA received 56 submissions in response to the review and a consultation summary will be published. Further consultation is being undertaken with the two recognised schemes themselves. The outcomes of this further consultation will be published at a later date and the policy amended if required.

There have been recent amendments to the CODES SEPP which introduced requirements for notification of contamination to the EPA and Council. These new provisions do not impact on s.60 notification requirements under the *Contaminated Land Management Act 1997*. The new notifications will ensure unexpected finds of contamination are appropriately managed during complying development.

The POEO Waste Regulation review is soon to commence. Timing is expected to be in September 2023. The EPA will consult with stakeholders prior and would like to hear from auditors about what should be considered during the remake. Joanne reminded the auditors that issues which sit in the POEO Act itself can't be addressed in the Regulation remake, however the EPA would still like to be made aware of them.

Discussion

There were no questions.

7. PFAS NEMP 2 — Anthea White, NSW EPA

Refer to presentation attached.

Anthea discussed the PFAS NEMP 2.0 and explained that it has not been formally approved under s.105 of *Contaminated Land Management Act 1997*, however the EPA has endorsed the NEMP and expects auditors will refer to this in their work.

The PFAS NEMP refers to consultation with the environmental regulator on the development of site-specific criteria and the reuse of soil impacted with PFAS. Anthea asked auditors to

please consult with the EPA in regard to these areas as we would like a better understanding of what is happening in industry. Please send any enquiries to the auditor's mailbox.

Discussion

- It was asked if there was any update on the 99% species protection number? The EPA responded that they weren't aware of an update. There was an online comment which said the Water Quality Guidelines have been revised but haven't been released yet as they are consulting with other government departments.

8. Open UCL Calculator — Tim Chambers, Phreatic Consulting Pty Ltd

Tim Chambers presented on a new online statistical summary tool to examine contaminated sites data sets called OpenUCL. Its development coincided with the revision of the Sampling Design Guidelines. Marc Salmon and Alex Mikov were also involved in developing the tool.

This online tool for the analysis of statistical data is similar to ProUCL. However, this version includes automatic graphical analysis and is tailored to Australian contaminated site assessments. The approach used in OpenUCL is designed to be consistent with the Sampling Design Guidelines. It is a free to use software.

Tim stepped the attendees through the website interface as a demonstration of the new tool's capabilities.

Website link to Open UCL Calculator: www.openstatsonline.com.

Discussion

- It was asked: has sensitivity analysis been done to see how much variation there is in the result for UCL, depending on whether you use LOR, 0.5xLOR or zero for "non detects"? The response was this had not tested, but that it could be tested with real data. It would also depend on the data distribution.
- It was asked: how will this deal with data which are neither normally or log-normally distributed? It was clarified that Open UCL gives information on normality tests. Under the heading "other", true and false values are given to check if data is normal or lognormal. There are several possible outcomes:
    - If normal is true, lognormal is false, then treat the data as normal
    - If normal is false, lognormal is true, then treat the data as lognormal
    - If normal is true and lognormal is true, then you do not have enough data points to have confidence in the distribution. You made require further samples or you could look at using Chebyshev for non-parametric data.
- It was asked: is there any ability to set an upper threshold to limit how many non-compliances there are? For example: maximum values, number of samples above thresholds. It was explained that assessment criteria is not included in the standard OpenUCL platform, however you can customise OpenUCL to include this.
- It was commented that OpenUCL has a departure from ProUCLin that you can choose how to treat results below LOR. However, the makers of ProUCL strongly advise against using the half LOR method. For what reason is this included in Open UCL then? it was commented that this is an initial version and that the three most common approaches used in industry has been used.
- It was asked: which programming languages were used? It was explained Open UCL was written in "R" coding language. This is used in statistical programs and research. It is open source. "Shiny" makes OpenUCL online and interactive. Users wishing to

customise the code would need to know how to use these languages. Although there is an open source licence on this, you would need to acknowledge the original authors.

- It was asked: what happens to data files? Is there a clearing house? It was specified that the data is anonymous. It times out after 1 minute and the data is discarded. There isn't control where the servers are. If contractual conditions limit data from leaving Australia, you should run a local copy.

9. Other business **Anthea White, NSW EPA**

- No other business items were raised.

- The presenters and everyone attending in person and online were thanked, and the meeting was closed.

- Next meeting date to be confirmed.