



Association of **U**niversity **R**adiation **P**rotection **O**fficers

July 2016

AURPO NEWSLETTER

Editor **T.J.Moseley**

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RRPPS INSTRUMENT CALIBRATION SERVICE

RRPPS is the Radiation Protection Service within the Imaging and Medical Physics Group of University Hospitals Birmingham NHS Foundation Trust.

We provide a high quality traceable calibration and repair service for a wide range of radiation protection instrumentation -
electronic personal dosimeters, contamination monitors and dose / dose rate monitors.



Our experience in radiation instrument calibration dates back to the late 1980s.

Protection instruments are calibrated in our purpose built laboratories in accordance with the NPL Measurement Good Practice Guide No. 14, The Examination, Testing and Calibration of Portable Radiation Protection Instruments.



We have been a member of the Ionising Radiations Metrology Forum (IRMF) since its inauguration in 1990 and regularly participate in national inter-comparisons organised by this group.



We can arrange the carriage of instruments (including transit insurance) to and from RRPPS.

RRPPS is independent of any instrument manufacturer, so you can be assured of our unbiased expertise in all aspects of instrument calibration and repair.



A 10 day turnaround is offered although instruments can usually be calibrated sooner in urgent cases.



As part of our comprehensive calibration service we also offer a repair service.

RRPPS operates a management system accredited to BS EN ISO 9001:2015.

**For a quotation or further information please contact Tracie Such on
0121 371 7000 or email rrppsadmin@nhs.net**

EDITOR'S INTRODUCTION

Welcome to the July Newsletter. Please find inside more information re this year's conference in Loughborough. I look forward to seeing many of you there. If anyone is interested in a game of golf on the Thursday morning please get in touch with me so that I can arrange something.

We have Peter Burgess giving us a presentation on practical radiation monitoring on the Tuesday afternoon at Conference. Pete would welcome further requests from members that identify monitoring problems they have encountered and would like advice on options and solutions. We have, so far, identified hand-held XRF devices, pulsed radiation fields, confounding factors such as RF interference and contamination monitoring in the presence of elevated dose rates. Peter has also been requested to say something about 'Clearance monitoring' and specific examples in that area would be useful.

Roy Sheppard (Sheppard Instruments and formerly Mini Inst) has now fully retired and I would like to thank him on behalf of AURPO for all his help over the years. Perhaps it is a coincidence but Birmingham RRPPS would like to draw to your attention the service they can offer in instrument repair and calibration – see their ad after 'Contents'.

The Small User Liaison Group met early in July and we have an excellent report on this meeting, which is invaluable in keeping us up to date with regulatory matters, many thanks to Michael Lockyer of UCL.

PS Don't forget to renew your subscription –see reminder from Treasurer.

NB Next Newsletter will be out early December - so deadline for contributions is 30th November.

T.J.Moseley

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AURPO Certificate of Professional Development in Radiation Protection

This course has been developed by the Scottish Centre for Occupational Safety and Health (SCOSH, University of Strathclyde) and the Association of University Radiation Protection Officers (AURPO) in collaboration with the Health and Safety Executive (HSE) and RPA 2000.

The aim of the course is to assist those people wishing to attain greater knowledge and understanding of radiation protection matters and is a good grounding for a university RPO. The course is benchmarked against the HSE criteria for the 'Core of Knowledge' required for a Radiation Protection Adviser and the EA/SEPA syllabus for RWA accreditation.

- 9 month programme commencing September 2016
- Study by distance learning with online tutor support
- Available to those with relevant qualifications and work experience currently working in radiation protection or related fields.

Deadline for 2016/2017 course is 26th August 2016. Course commences 12th September 2016.

Course Fees for 2016/17 are £1700. For further information and an application form see -

<http://www.strath.ac.uk/cil/cpd/healthsafety/radiationprotection>

or *Tel* 0141 548 4828 *email:* scosh@strath.ac.uk

MEMBERSHIP NEWS

Membership Secretary is Sonia Nuttall (somchairuk1@hotmail.co.uk)

No new members since last newsletter.

Treasurer's Report

I have fully taken over the role of AURPO Honorary Treasurer from Gillian as of the 1st April 2016 although I was elected at the AGM in September 2015. This is because the financial year starts each year from 1st April and ends at 31st March of the following year. It was more sensible that I left Gillian to finish her duty at the end of the financial year that she had started and Gillian will be the one who will present 2015 Balance sheet of AURPO and the Treasurer's Report for the AGM in September 2016.

Thank you all members who have already renewed their AURPO Subscription but there are still many members who have yet to renew. Please be reminded that the membership subscription must be paid by the 30th September each year. AURPO has kept our subscription very low compared to other professional organisations. I hope you find that the money is well spent. You will find the renewal subscription form at the end of this newsletter.

If you are paying by BACS, it is very important that either your name or the invoice number is the reference for the transferred payment. Also that the same is quoted on the Remittance Advice and that a copy is sent to the Treasurer, preferably by e-mail. It has become quite difficult and sometimes time consuming for me to do detective work to find out where the payment is from because we have quite a lot of members and also we may have more than one member in each organisation.

I look forward to seeing many of you at the Conference in September.

Best wishes

Sonia Nuttall
AURPO Honorary Treasurer
26 June 2016

Sonia Nuttall

Annual Conference and AGM 2016

The AURPO Conference will be held on Tuesday 6th and Wednesday 7th September 2016 at Holywell Conference Centre at Loughborough University (Holywellpark.co.uk)



Delegates wishing for more information should please email conference@aurpo.org.uk

Exhibitors wishing to register, please email exhibitions@aurpo.org.uk

Accommodation will be available in Burleigh Court Hotel and Spa within Loughborough University campus, just a 5 minute walk to the conference centre (BurleighCourtHotel.co.uk)

The Scientific Programme will start on Tuesday lunchtime and the AGM of the Association will be held at the end of that session. On Tuesday evening there will be a social event at Burleigh Court with a sports theme, and fancy dress is encouraged. The Scientific Programme will continue through Wednesday, and the proceedings will be completed by the Conference Dinner on Wednesday Evening. This will be held at the Quorn Country Hotel, in the heart of Leicestershire with views over Quorn countryside. The original part of the hotel dates back to the 17th Century and is in the middle of the historic village of Quorn. (Dress code is strictly formal.)



Full details were in the invitation letter that you should have received. – *latest on Scientific Programme - see below.*



AURPO Annual Conference and AGM 2016
Holywell Conference Centre at Loughborough University
Provisional Programme

Tuesday 6th September 2016

- 1.30 Introduction & Welcome – Richard Taylor, Chief Operating Officer of Loughborough University
- 1:40 - 2:40 Practical Radiation Monitoring - Pete Burgess, Radiation Metrology Ltd
- 2:45 - 3:30 Afternoon tea/coffee Exhibition
- 3:30 - 4:25 Practical implementation of transport of RAM in the UK - Lindsey Cairns, ONR (Transport)
- 4:30 - 5:30 AURPO Annual General Meeting

Wednesday 7th September 2016

- 9:00 - 9:10 Introduction
- 9:10 - 9:55 The risk of cancer from low level occupational exposure to ionising radiation - Richard Haylock, Public Health England
- 9:55 - 10:30 Justification of DEXA in sports application (or similar) - Matthew Dunn, Nottingham University Hospitals NHS Trusts
- 10:30 - 11:00 Refreshments/Exhibition
- 11:00 - 11:35 Performing CT Imaging for the first time - Dudley Ibbett, Derby Teaching Hospital NHS Foundation Trust
- 11:35 - 12:10 Transposition of the EMF directive and employer compliance in practice - Nigel Cridland or Adam Lowe, Public Health England
- 12:10 - 12:45 IRPA Report - Christine Edwards, MBE, University of Central Lancashire
- 12:45 - 14:00 LUNCH/Exhibition
- 14:00 - 14:35 Hazardous Waste - Chris Murdock, Peak RPA
- 14:35 - 15:10 Changes to RSA in Scotland plus its implications UK wide - Speaker tbc, Scottish Environment Protection Agency
- 15:10 - 15:40 Afternoon break/Exhibition
- 15:40 - 16:15 Changes in Uranium/Thorium accounting requirements, implementation of a new UK wide accounting system - Lawrence Johnston (or other), ONR (UK Safeguards Office)
- 16:15 - 16:50 Implementation of BSS for 2018 - Julia Laverty, HSE

Further Information

Booking form

Please download from the website:

http://aurpo.org.uk/images/conferences/2016/2%20AURPOconference2016_Bookingform.doc

or e-mail: conference@aurpo.org.uk for a copy.

Contacts:

Conference Organisers:

Julie Turner land line 01509222599 mobile 07766441396

Burleigh Court Hotel reception 01509 633030

For further information on the exhibition please contact: exhibition@aurpo.org.uk.

Postal communications:

Julie Turner, University Radiation, Biological and Chemical Safety Officer
Health & Safety Service, Corporate Services
FM Building,
Loughborough University,
Loughborough, LE11 3TU.

Payments:

Cheques: Please send to **Julie Turner**

BACS: Please notify intention and e-mail the Remittance Advice to
conference@aurpo.org.uk

Queries

If you need any information that is not contained within this document or you have any doubts, please do not hesitate to contact us at conference@aurpo.org.uk

PRESIDENT'S REPORT

My first job is to remind you to register for the 2016 Conference, exhibition and AGM, if you have not already done so. The Scientific & Technical Committee has put together a very interesting scientific programme, and Julie Turner, (our Local Conference Organiser in Loughborough) has arranged excellent accommodation; not to mention a fun social programme. We have had a good take up by exhibitors and sponsors, and so the exhibition which Jim Hunter is organising will be a very useful way of making contact with all those people who supply us with what we need to do our jobs.

AURPO has contributed to discussions on an options appraisal document that was prepared by SRP to be presented to the HSE and the EA. The subject of this document is possible changes to the process of attaining Radiation Protection Expert (RPE) qualifications and to the establishment of a qualification process for Medical Physics Experts. As such, it could have a significant effect on AURPO members who are, or want to be, RPAs, RWAs or MPEs and so we are asking for your views. You should be aware that the first draft was issued late in April and there was only time for one brief meeting before the document had to be submitted to the regulators; by a deadline that had been agreed with SRP. Neither AURPO nor IPEM were prepared to say that they agreed with all of the views expressed in the document. You can find the document in the members section of the AURPO web-site under the GUIDANCE tab. (If you do not know how to access the members section please contact websitehelp@aurpo.org.uk). Please let me have your thoughts on the content of this options appraisal by email to enquiries@aurpo.org.uk

In 2017 our conference will be in Hull; UK city of Culture for that year. Hosted by the University of Hull with Tim Coldwell acting as our Local Organiser, to whom we are very grateful for volunteering. Tim has already started planning the event, which will be held in Staff House, which is two minutes' walk away from the brand new Courtyard accommodation which will be opening this September, and will be where we will stay. In fact I get the impression that virtually all the facilities that we will use will have been recently built or refurbished. More news will be coming soon.

It is becoming more and more important to organise our conferences well in advance; as venues get booked up years ahead. We have been discussing 2018 already but the venue that was under discussion has unfortunately turned out to be a no-go this time. So, if you are inclined to offer to host this very popular event in 2018, please let me, or any other member of the Executive Committee, know. You would not be left on your own, the Executive will provide as much help and/or guidance as you need. You can always collar one of the Executive at the conference in September to find out what is involved, if you are not sure.

I look forward to seeing as many of you as possible in Loughborough in September, and don't forget that you can put on your favourite sports outfit for the Social Evening on Tuesday, if you want to.

John Makepeace

Useful AURPO Contacts

Secretary

All formal enquires for information of comment by the AURPO should be emailed to the AURPO's secretary: secretary@aurpo.org.uk

Enquiries

Informal enquiries, and information about the Association and its activities: enquiries@aurpo.org.uk

Membership

For enquiries about any aspects of membership, including Affiliate Membership (for commercial organisations): membership@aurpo.org.uk

News

For contributions to the newsletter, and communications to the editor: news@aurpo.org.uk

Conference

For general enquiries about the AURPO conference: conference@aurpo.org.uk

Exhibitions

If you would like information about exhibiting at our conferences, or sponsorship opportunities for these events: exhibitions@aurpo.org.uk

Treasurer

If you have an AURPO financial matter to discuss, please contact our Honorary Treasurer: treasurer@aurpo.org.uk

Mail base (Hasnet-rad)

If you would like to be included on the Hasnet-rad mail base, please contact the administrator: hasnet-rad@aurpo.org.uk

Website

If you would like to give feedback or comment on the content/layout of the website, have suggestions for additional content or are having difficult accessing your account: websitehelp@aurpo.org.uk

HSE News

Provisional annual data for work-related fatal accidents in Great Britain's workplaces was released on 6th July.

The long term trend has seen the rate of fatalities more than halve over the last 20 years. However, provisional figures indicate that 144 people were killed while at work in 2015/2016 – up from 142 in 2014/5.

The Health and Safety Executive has called on all sectors to learn lessons to ensure workers return home safe from work.

The new figures show the rate of fatal injuries in key industrial sectors:

- Forty three workers died in construction, the same as the average for the previous five years.
- In agriculture there were 27 deaths (compared to the five-year average of 32).
- In manufacturing there were 27 deaths (compared to five-year average 22), but this figure includes three incidents that resulted in a total of eight deaths.
- There were six fatal injuries to workers in waste and recycling, compared to the five-year average of seven, but subject to considerable yearly fluctuation.

There were also 103 members of the public fatally injured in accidents connected to work in 2015/16, of which 36 (35 percent) related to incidents occurring on railways.

Comparisons of fatal injuries by country or region are based on where the accident occurred. After taking industrial composition into account, those regions and countries with seemingly higher rates are not (statistically) different to the rest of GB. In 2015/16 the highest fatal injury rates across all countries and regions were Wales (0.93 per 100,000 workers); Scotland (0.60); and Yorkshire and the Humber (0.58). Due to the relatively small numbers and to reduce some of the yearly fluctuation, when averaged across a five-year time period to 2014/15 those regions with the highest fatal injury rates were also Wales (0.81), Scotland (0.73) and Yorkshire and the Humber (0.70).

The statistics again confirm the UK to be one of the safest places to work in Europe, having one of the lowest rates of fatal injuries to workers in leading industrial nations.

HSE has also released the latest available figures on deaths from asbestos-related cancer. Mesothelioma, one of the few work related diseases where deaths can be counted directly, contracted through past exposure to asbestos killed 2,515 in Great Britain in 2014 compared to 2,556 in 2013.

A more detailed assessment of the data will be provided as part of the annual Health and Safety Statistics release in early November. As this draws on HSE's full range of sources, including changes in non-fatal injuries and health trends, and will provide a richer picture on trends.

Further information on these statistics can be found at

<http://www.hse.gov.uk/statistics/fatals.htm>

When do I need to notify HSE?

If you intend to start work with ionising radiation for the first time you need to let HSE know **at least 28 days before** you start work. This is a requirement of the [Ionising Radiations Regulations 1999 \(IRR99\)](#). The Regulations may also require additional notifications for certain occurrences and work practices, such as carrying out site radiography.

Starting work with ionising radiation for the first time

If your work falls into any of the categories below, please click on the link to find out what you need to notify and to take you to the reporting form.

- If you are going to start work with ionising radiation for the first time, you are required to notify HSE at least 28 days before commencing work, unless your work falls into an exempt category. Details of the work that you do not need to tell HSE about can be found here (see [Work not required to be notified](#)).

Use form [IRR6 - Notification of ionising radiation activities](#) to notify HSE that you intend to start work with ionising radiation

Notifying changes to a previous notification

- Radiation employers need to inform HSE when the details of a previous notification are no longer correct, such as when:
 - the employer's details or those of their premises change
 - the source category changes
 - the source is to be used at a different premises

For example, if an original notification covered the use of an X-ray set but you decide to start using radioactive materials, you would need to notify this change to HSE.

Changes to a previous notification - use form [IRR6 - Notification of ionising radiation activities](#)

- Planning to undertake site radiography Site radiography contractors need to give HSE at least seven days advance notification of the proposed work. For further information on site radiography, click her to visit the industrial radiography web pages.

Site radiography, use form [IRR3 - Notification of intention to carry out site radiography](#)

Other notifications required under IRR99

Other reasons you may need to notify HSE under the IRR99 include:

- Nursing homes etc, when a patient has been given a radioactive medicinal product and are staying in, for example, a nursing home it is sufficient if notification is made by the nursing home as soon as practicable before the first instance of a patient arriving there.
- applications for individual prior authorisation to use electrical equipment intended to produce X-rays or use accelerators (other than electron microscopes) (see regulation 5)
- where a radiation employer suspects or has been informed that an overexposure has occurred (see regulation 25)
- notifications of certain occurrences such as losses, spillages or releases of certain quantities of radioactive substances (see regulation 30)

- where an employer suspects or has been informed that a person, while undergoing a medical exposure, was exposed to ionising radiation to a much greater extent than intended, as the result of a malfunction or defect in radiation equipment (see regulation 32(6))
- If you need to notify HSE or gain authorisation for any of these reasons please e-mail: irrnot@hse.gsi.gov.uk

(The above are extracts from the HSE's website on work with ionising radiations – check out - <http://www.hse.gov.uk/radiation/ionising/index.htm> for further information)

EA, DEFRA & DECC MATTERS (inc Transport News)

The 46th SULG meeting was held on 5th July. You may find the following of interest:-

SEPA Update

The Regulatory Reform Act is still out for consultation until the end of July (see previous newsletter for details). The Scottish Government requires approval of the Act by the new Environment Secretary. There should also be a second consultation on the details of the regulatory regimes in the near future in the form of various workshops. One proposal under consideration for the medical sector is for the issuing of 'corporate' permits to regulate hospitals, rather than having lots of different permits for individual hospitals. David Nicholson encouraged users to look at the SEPA consultation when it comes out and assess whether any ideas are worth taking on board (or bad ideas) for England. Isabelle Watson emphasised that the BSSD wasn't driving the RRA, rather the desire to improve RSA93.

NRW (Wales) update

Permit reviews are ongoing and guidance documents are also undergoing review. One incident was mentioned where a sealed ¹⁵³Gd source was found to be externally contaminated with ⁵⁷Co (at a low level). This has also been previously reported in England.

DAERA (Northern Ireland) update

DAERA is undergoing restructuring on behalf of the government. The team is currently small (50% attended SULG ie one person!). The RSA93 regime is still used, with a proposed move in 2019 to a new regime (EPR-based), NI has its own HSE and will be producing its own version of IRR later in the year.

ONR Transport Update

The update was presented by Anna Mayor, ONR Principal Inspector for Transport. A summary was presented of inspection findings and issues:

DGSAs

- The DGSA certificate doesn't prove competence, and competent advice can be lacking
- Evident in advice and guidance provided by DGSAs on Class 7 matters
- Requirement for an annual report from the DGSA to the company/institute management

- Content can vary between 'tick box' to 'over concise', some reports even done by phone!
- Class 7 often a minor component

ONR is working with DfT to produce a standard template for the DGSA report and guidance as what to expect from a DGSA.

ONR is legally uncertain as to possible sanctions against DGSAs, most duty holders are, apparently not intelligent customers!

Emergency arrangements

- Lack of awareness of responsibilities of both consignors and carriers
- Training for all staff identified in emergency plan
- Testing of arrangements (when last done will be asked)
- Instructions in writing available in full, ADR 2013 version valid until 30 June 2017
- Must NOT reference NAIR
- Reliance on RADSAFE is insufficient (can be part of it)

Packages

- Inspection and maintenance regimes for packages – damage
- Marking and labelling of packages
- Availability of certification and evidence for approvals for Type A packages (ADR 5.1.5.2.3)

Awareness of Regulations (CDG and ADR)

- General; awareness of regulations for other than the drivers (especially in hospitals)
 - Packing, loading, labelling, unpacking etc
- Training for drivers using special provision (up to 10 packages, not exceeding TI of 3) – lack of understanding that these limits mustn't be exceeded
- Carriers and consignors unaware of CDG – emergency arrangements

ONR has published guidance for non-nuclear sector duty holders:

- Transporting radioactive material – guidance on emergency arrangements <http://www.onr.org.uk/transport/emergency-arrangements-guidance.pdf>
- Transporting radioactive material – security guidance on the carriage of Class 7 radioactive material <http://www.onr.org.uk/transport/security-guidance-imc-sector.pdf>
- Guidance for Consignors and Carriers of Class 7 Dangerous Goods Who Wish to Transport Such Goods into and within Great Britain (GB) via Road and Rail. <http://www.onr.org.uk/transport/transport-guidance-overseas-consigners.pdf>

ONR Matters of Interest:

Tech-Ops 880

For use as a Type B package:

- It must comply with the current Certificate of Approval
- 3rd party source assemblies can be used, providing the assembly meets the requirements of the certificate

For use as a Type A package:

- Consignor must always be able to provide documentary evidence of compliance with Type A requirements when required by ONR

- 3rd party assemblies can be used if evidence of compliance can be provided by the consignor ie information in addition to that of QSA Global's own evaluation which refers to tests with QSA assemblies only

ONR following up with UK third party source supplier.

There was a joint ONR/EA inspection of a duty holder in May, and there are also plans for a joint ONR/SEPA inspection. There was a request for SULG members to request feedback from any joint inspections to bring to the next SULG meeting (December).

Guidance is in preparation for the non-nuclear sector on RP matters (vehicle and package contamination monitoring and measurement of TI).

There is also agreement in principle for an Agency Agreement between ONR and the police concerning prohibition notices for CDG Class 7 (previously an HSE/Police agreement) now awaiting sign off.

ONR has undertaken Stakeholder work with presentations at a variety of meetings/conferences and meetings/engagement with eg DfT, Border Force, DECC, Royal Mail

BSSD Consultation

ONR needs to be able to demonstrate to the Challenge Panel that they have consulted and sought data from a range of organisations in assessing the economic impact of proposed changes to CDG in order to implement BSSD; this process consists of a ppt presentation and a number of questions/cost calculations.

The message following the Brexit vote was business as usual. Technical comments or suggestions on the proposals can be made at the same time as the CDG cost questions/cost calculations, with responses by July 31st. There will be formal consultations on the proposals in early 2017.

Compliance Classification Scheme (CCS) Update

Amber Bannon summarised non-compliances over the 2015-16 financial year. There were 902 compliance visits over this period, with 138 non-compliances at 77 visits (8.5% compared to 12% for the previous financial year).

These were broken down as:

66 Category 4 (no impact)

- 27 warnings
- 34 advice/guidance
- 5 no further action

71 Category 3 (minor impact)

- 54 warnings
- 17 advice/guidance

1 Category 2 (significant non-compliance; potential for serious or permanent harm)

No Category 1 (likely to cause loss of life)

Notifications and reporting

- Failure to submit annual form
- Failure to notify prolonged period away from base location (mobile sources)*

General points following the above were that procedures are useless if people don't know about them/aren't trained in them or don't follow them. E-learning is increasing but generally training (or lack of) is the biggest problem (also noted by ONR). Jo Nettleton raised the question as to what organisations are doing about this. Refresher training is also necessary and training managers need to be involved. As is always the case senior managers must be 'on board'. Again, SULG members were asked to raise these issues with their organisations and report back to the next SULG meeting.

DECC Update

This was presented by Colin Mackie, concentrating on BSSD implementation. DECC, Delegated Authorities and the regulators are working to develop a joint analysis and implementation plans for consultation in 2017. The government is committed to implementation of the BSSD in 2018. The presentation highlighted a number of key themes:

Waste clearance and exemption

- Impact study complete
- Policy preference is to align UK legislation with IAEA General Safety Requirements (GSR)
- GSR is generic but makes provision for nationally specific factors to be accounted for when calculating new values

Graded approach

- New 'notification' tier; not viewed as necessary to incorporate this into EPR
- Discussions underway across government to ensure overall requirements are streamlined

Management of radioactive sources

- Implications of D values assessed (deregulatory impact)
- Interactions between EPR/RSA and IRRs – working to develop a streamlined approach
- New 'duty to inform for scrapyards (offence not to do so?)
- Interactions with wider work on the management of sources

Import/Export

- Clarification of import control arrangements may be needed
- Robust arrangements are currently in place but not licensing

Reference levels

- A new and complex concept
- Emerging consensus that a general duty should be created, with specific reference level ranges to be set in the regulations
- Significant role for PHE (guidance on how to use the levels)

Transition from an emergency to an existing exposure situation

- Need to clarify the powers for management of exposures after an emergency period (ie when REPPIR no longer applies)

The next steps were outlined:

- It is important to ensure that proposals are developed in line with Euratom and IAEA BSSD requirements and guidance (not binding on the UK but this is our policy position)
- Complete the analysis of key gaps (end of July)
- Address outstanding/cross-cutting issues (Autumn)
- Draft legislation (Autumn)
- Publish draft proposals for consultation (early 2017)
- Implement revised legislation (2018)

EA is planning to adapt the changes into EPR10. The EA has also requested feedback from members re their views on the impacts of the EU Referendum. Joe Nettleton told the meeting that 'Brexit units' have been set up by government departments to look at the implications.

Environment Agency Update

A strategic review of charges, due to be carried out in April 2017 has been moved back to 2018. The plan is still to hold a public consultation, but post this process and changes to charges won't occur until after April 2018.

RWA grandfather rights finished at the end of June 2016. If permit compliance is otherwise good, and the RWA has submitted their application to RPA2000 or the operator is in the process of appointing a certified RWA this is likely to be considered a minor issue but significant non-compliance would obviously influence that consideration. Around 60 sites currently don't have appointed RWAs. *(see below for RWA Update)*

It is worthwhile reiterating the position statement on the EU referendum result sent to EA staff by the Chief Executive and Acting Chairman:

"..our duty as public servants is to help deliver what the British people have voted for, with the professionalism for which we are rightly respected. There will be no immediate change on the ground. A long period of negotiation lies ahead. We will remain a member of the EU until we leave it. The EU laws and policies that we implement will continue to apply until they cease to have effect..... While there will be many uncertainties over the coming months and many changes to come, some things won't change. Our citizens will continue to want to live in a country which is clean, green, beautiful and prosperous: that's what we're here to deliver. The Environment Agency's mission, to create a better place for people and wildlife, will remain just as important as ever. Finally, all change brings opportunity. As work begins to design a future for the UK outside the EU, we have an opportunity to help shape that thinking and to look for new arrangements which can deliver even better outcomes for the people and places we serve."

In the light of the above it is the EA position that it is business as usual with respect to BSSD implementation, with no need for significant changes to their regulatory approach.

Reporter - Michael Lockyer UCL 18/07/2016

RWA Update - "The environment agencies have published the latest RWA Update which includes information for permit holders on the environment agencies' approach for permit/authorisation holders on Radioactive Waste Advisers whose grandfather rights have lapsed."

<http://www.sepa.org.uk/media/219311/rwa-update-june-2016.pdf>

from Angela Wright, SEPA

Further Transport News

STC had a transport query on the use of recommended working lives (RWLs) and the status of special form certificates (SFs). Gus chased this up with Lindsey Cairns of ONR who gave us the following helpful response -

There is precious little direct mention of RWLs in transport legislation. ONR's approach in the past has been risk-informed, contingent on the physical / chemical form of the material and the nature of the radiation emitted. There is not a one-size-fits-all answer sadly.

As you may be aware, in making a decision regarding Special Form status/certification, a safety case will come in to ONR as Competent Authority to assess. The assessment is of the design and will consider source performance through the duration of the proposed certification period. Deviation from any of the working assumptions/conditions of the safety case would potentially call SF status into question. Pertinent information in relation to the safety case will feature via customer information passed down the supply chain, and would typically cover use, maintenance, lifetime etc. The RWL is the output of an ageing assessment, and age is a consideration particularly at design review where there is operational experience available. [As I understand it, 'ageing' guidance is being discussed currently, and will be featuring in future IAEA transport guidance.]

In general terms then :-

If the material is no longer Special Form certified, or has been involved in an incident which may challenge its containment, then it will need to be shipped in a package appropriate for non-special form material of the relevant radionuclide and activity. If the material is SF certified but outside the RWL and is an alpha-emitter, the effects of pressurisation need to be considered, though in reality, as I understand it, this tends to present little challenge to integrity of most SF sources over typical timeframes of use. If the material is SF certified but outside the RWL and is capable of presenting a chemical challenge to the integrity of the source, the effects need to be considered and justified where appropriate.

As to the form 'consideration' may take – this may include 'performance through time' information from the source manufacturer, formal assessment of the source (I understand there are organisations that can do this) or other more local arrangements like the ones you mention. Considering transport (the physical movement aspect rather than the much broader CDG definition) is a practice as defined by IRR99 for which HSE is the relevant regulator on non-nuclear sites, then presumably continued 'use' would require consideration as part of those obligations too (IRR99Reg 27 refers.)

So, in summary, ONR transport inspectors will look first for a source to be compliant with the design, and to have valid SF certification. The age of a source in relation to its' RWL is very much a secondary consideration but there will be conditions of source use (the more extreme I'd suggest) which would very reasonably bring claims to SF status into question. In these circumstances, inspectors are likely to explore this further with a dutyholder along the lines I have described.

For information on SF certification see –

<https://rampac.energy.gov/home/package-certification-information/certificates/dot-iaea>

Transport of CDG

The following information on new Govt guidance material on CDG has been forwarded by Gus Zabierek (STC Chairman).

Requirements and guidance for businesses involved in the carriage of dangerous goods.

<https://www.gov.uk/government/publications/security-requirements-for-moving-dangerous-goods-by-road-and-rail>

Documents

[Security guidance on the carriage of dangerous goods by road and rail](#)

PDF, 1.09MB, 75 pages

[Security plan template \(annex 1\)](#)

ODT, 24.5KB

[Security risk assessment template \(annex 6\)](#)

ODT, 13.4KB

[Driver security advice sheet \(annex 7\)](#)

[Guidance for the design and delivery of security awareness training for the carriage of dangerous goods by rail and road](#)

PDF, 557KB, 22 pages

[Dangerous load card](#)

PDF, 1.02MB, 2 pages

Detail

Guidance for the security of dangerous goods by road

This guidance which was originally published in 2005, is currently being revised and is due to be published shortly. It will reflect regulatory changes and incorporate the guidance for carriage by rail.

Dangerous load card

Please use this version of the 'Dangerous load card' and securely dispose of any previous versions you may be holding.

Supplementary security guidance

For further supplementary guidance on security and the carriage of dangerous goods, refer to the:

- Centre for the Protection of National Infrastructure's [personnel security resource list](#)
- [UK National Counter Terrorism Security Office \(NaCTSO\)](#) which encourages businesses and individuals to report suspicious activities and transactions involving chemicals, fertiliser and equipment of security concern
- Health and Safety Executive's [security requirements for manufacture and storage of explosives](#), providing information about the security of Class 1 explosives
- [Planning Portal](#) website which includes a planning guide that will help you determine whether planning permission is required for any new physical security measures
- Cabinet Office's [business continuity guidelines](#) for information about how to manage and plan for security risks
- [Centre for the protection of National Infrastructure](#) for guidance on physical site security

Supplementary guidance on carriage by road only

A revised training film on the security of high consequence dangerous goods titled 'Lockdown' has been produced to replace the older version 'The security of dangerous goods by road' (2005). It has been updated to include the latest security requirements and best practice throughout the journey of dangerous goods on both road and rail. The film is designed to educate viewers on the mandatory elements of the ADR / RID regulations (Chapter 1.10). It is helpful for new starters or for refresher training. Helping staff identify the risks and how to mitigate them. A printable training aid is also available on the DVD to help provide a structure and written documentation of the training. To [request your copy of the DVD contact us by email](#). The film is also available for industry members who have access to the dangerous goods extranet page.

The security requirements explained

Regulation 5 of the [Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009](#) (and as amended) applies the security provisions of ADR and RID for national journeys. Regulations 7 and 8 also contain additional security requirements for Great Britain. These regulations are subject to agreed derogations as set out in the [Carriage of Dangerous Goods: Approved Derogations and Transitional Provisions](#).

The security requirements are split between 2 levels. At a general level:

- dangerous goods shall only be offered to people, companies or organisations that have been appropriately identified
- temporary storage sites shall be properly secured
- drivers shall carry a means of photographic identification
- security training awareness shall be provided

A higher level of security measures should be taken for high consequence dangerous goods. A security plan must be adopted, implemented and complied with in these circumstances. High consequence dangerous goods are those which have the potential for misuse in a terrorist incident and which may, resultantly, produce serious consequences such as mass casualties or mass destruction.

These requirements do not apply to the carriage of civil nuclear material (as defined by the Nuclear Industries Security Regulations 2003) and non-nuclear radioactive materials. The transport of such material is regulated by the [Office for Nuclear Regulation](#) in accordance with the standards developed by the International Atomic Energy Agency.

Enforcement of the security requirements

The Department for Transport and the Office for Nuclear Regulation enforce the security requirements of ADR and RID in Great Britain. For enquiries on legislation concerning Northern Ireland please contact the [Health and Safety Executive Northern Ireland](#).

Background to the carriage of dangerous goods by road and rail

Businesses involved in the carriage of dangerous goods by road and rail are required to take security measures to safeguard against acts of terrorism. This requirement is in accordance with chapter 1.10 of the [European Agreement concerning the International Carriage of Dangerous Goods by Road \(ADR\)](#) and [Appendix C of the Convention concerning International Carriage by Rail](#).

NEWS FROM PHE (HPA- Radiation Protection Division)

Relevant PHE publications since the last newsletter.

[PHE-CRCE-024: home owner knowledge of radon areas where full radon protection is expected](#)

A survey of owner occupiers of new homes in areas of high radon risk sought to understand the extent to which the occupiers were aware of, and had taken action on, radon. A minority of householders reported that they had key information and advice on radon, suggesting there is scope for improvement.

Recommendations are made to improve householder awareness and improvements are suggested to online information sources along with a potential means to remind home owners about radon after they move into a new home that may have radon protection.

[PHE-CRCE-025: doses in radiation accidents investigated by chromosomal aberration analysis XXV: review of cases investigated, 2006–2015](#)

During the period 73 people suspected of being overexposed to ionising radiation were referred to Public Health England (and its predecessor the Health Protection Agency) for biological dosimetry.

Although the vast majority of cases were suspected occupational overexposures, the most serious case concerned a 2-year-old boy who sustained radiation burns during CT scans performed outside the European Union, which were incorrectly repeated numerous times. The cases included in this summary bring the total number of individuals examined since the laboratory was established in 1968 to 1092.

A number of new biological dosimetry techniques have been developed within the last 10 years. These are briefly summarised in this report and represent a large improvement in the laboratory's ability both to perform accurate routine biological dose estimations and to provide rapid response triage dose estimates following a mass casualty event.

[PHE-CRCE-026: ionising radiation exposure of the UK population: 2010 review](#)

In this review, the eighth in this series, the per caput dose to the UK population in 2010 from all significant sources of ionising radiation was estimated to be about 2.7 mSv. This dose is the same as the per caput dose reported in the previous review for exposures occurring in 2003.

The per caput dose to the UK population from exposure to ubiquitous radiation in the environment in 2010 was about 2.3 mSv, or about 84% of the dose from all sources of radiation. This was dominated by exposure to natural sources of radiation, particularly radon gas. Anthropogenic radiation in the environment, from the historic testing of nuclear weapons in the atmosphere and from the routine discharge of radioactivity by industry, contributed less than 0.2% to the per caput dose to the UK population.

The per caput dose to the UK population not due to exposure to ubiquitous radiation in the environment was about 0.4 mSv, or about 16% of the dose from all sources of radiation. This was almost entirely the result of patient exposure during diagnostic medical examinations.

Occupational exposure continued to contribute significantly less than 1% to the per caput dose to the UK population.

PHE-CRCE-027: environmental radioactivity surveillance programme: results for 2014

This report is the latest of a series in which the results of Public Health England's environmental radioactivity surveillance programme are presented. It contains the measurement data for the year 2014.

Within the main programme, samples of airborne dust and milk are collected routinely from selected locations within the UK, the Channel Islands and the Isle of Man. The activity concentrations of various radionuclides are measured.

In general, the radionuclides detected result from nuclear weapons tested in the atmosphere in the 1950s and 1960s and from the nuclear reactor accident at Chernobyl in the Ukraine in 1986, although the programme is able to detect any other sources of significant contamination. The results indicate that concentrations of artificial radionuclides in the general environment remain at the low levels observed in recent years.

In addition to the main programme, samples of airborne dust have been collected in the vicinity of the Sellafield nuclear fuel reprocessing plant in west Cumbria. The results are consistent with those published by the site operator and other government agencies.

PHE-CRCE-028 Radon in workplace basements: an analysis of PHE measurement results and recommendations on when to test

This report uses the pre-mitigation radon results in basements of around 3500 workplaces that have been measured with passive monitors as part of the PHE routine measurement service. The dataset has been analysed with respect to the nature of work undertaken by the employer and by the radon potential of the workplace address. Statistical tests run to assess agreement with lognormality (the distribution typically demonstrated by radon datasets) showed that the data could be used to refine advice to employers on measuring radon in workplace basements.

NB All CRCE documents are now found on the Gov website at –

<https://www.gov.uk/government/collections/radiation-phe-crce-report-series>

In fact all PHE and former HPA reports have been transferred to the Gov site and can be found at –

<https://www.gov.uk/topic/health-protection/radiation>

NEWS from NPL

NPL ENVIRONMENTAL RADIOACTIVITY PROFICIENCY TEST EXERCISE 2016

We are pleased to inform you that the 2016 NPL Environmental Radioactivity Proficiency Test Exercise (PTE) will begin shortly. This will be the 22nd in a series of similar exercises carried out by NPL since 1989. The exercises are designed to help users identify analytical problems and to support accreditation.

Full details of this exercise can be found in the [Invitation Letter](#).

The Participation Fee for the PTE is £245; additionally, there is a charge of £455 for each sample ordered. Dispatch costs will be advised; any sites requiring special arrangements for delivery must advise on the [enquiry form](#) and will be charged accordingly. Full charges including dispatch costs will be confirmed by an NPL Quotation on receipt of a completed [enquiry form](#).

[Further information](#) or [request additional information](#)

Conference on Applied Radiation Metrology (CARM2016)

1-3 November 2016
National Physical Laboratory

[Submit a talk title](#)

We're pleased to announce that the 2016 Conference on Applied Radiation Metrology (CARM2016) will take place at NPL, Teddington, on 1-3 November 2016.

The themes of the conference are:

- Measurement of radioactivity for site characterisation - why it is important and new approaches to on-site and rapid measurements
- Radiation protection and the measurement of airborne radioactivity (incorporating IRMF and ARMUG)
- Nuclear data for the nuclear industry and nuclear medicine

If you are interested in giving a presentation at the conference, please contact [NPL events](#) with the provisional title of your talk by **30 June 2016**.

There will also be an industrial exhibition throughout the conference.

Registration will be open from **5 July 2016**.

BOOKS AND PUBLICATIONS

HSE

A guide to the Control of Electromagnetic Fields at Work Regulations 2016

<http://www.hse.gov.uk/pubns/books/hsg281.htm>

ICRP

ICRP, 2016. Radiological Protection from Cosmic Radiation in Aviation. ICRP Publication 132. Ann. ICRP 45(1), 1–48.

ICRP, 2016. Proceedings of the Third International Symposium on the System of Radiological Protection. Ann. ICRP 45(1S).

United Nations Environment Programme

New Resource on Radiation Effects and Sources from UNEP (based on UNSCEAR)

Health Physics

June issue includes:

Outdoor Exposure to Solar Ultraviolet Radiation and Legislation in Brazil: Silva, Abel A.

July issue includes:

Vitamins A, C, and E May Reduce Intestinal ²¹⁰Po Levels after Ingestion: Kemp, Francis W.; Portugal, Frank; Akudugu, John M.

August issue includes:

Forecasting the In Vivo Behavior of Radiocontaminants of Unknown Physicochemical Properties Using a Simple In Vitro Test: Griffiths, N.M.; Coudert, S.; Moureau, A

Journal of Radiological Protection

Improved communication, understanding of risk perception and ethics related to ionising radiation: Tanja Perko, Wolfgang Raskob and Jean-Rene Jourdain

IAEA Safety Standards

Managing the Unexpected in Decommissioning

IAEA Nuclear Energy Series No. NW-T-2.8

This publication explores the implications of decommissioning in the light of unexpected events and the trade-off between activities to reduce them and factors militating against any such extra work. It classifies and sets out some instances where unexpected findings in a decommissioning programme led to a need to either stop, or reconsider the work, re-think the options, or move forward on a different path. It provides practical guidance in planning and management of decommissioning taking into account unexpected events. This guidance includes an evaluation of the experience and lessons learned in tackling decommissioning that is often neglected. Thus it

will enable future decommissioning teams to adopt the relevant lessons to reduce additional costs, time delays and radiation exposures.

Electronic version can be found:

<http://www-pub.iaea.org/books/IAEABooks/10786/Managing-the-Unexpected-in-Decommissioning>

Forthcoming Events - BIR IRMER Update

BIRs upcoming event is “**IRMER update**” to be held on the 26th September 2016 at the Royal Society of Medicine, London.

For further information please contact the organiser - Malini Banerjee <Malini.Banerjee@bir.org.uk>



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AURPO Membership Subscription Form 2016 - 17

The Association Annual Subscription of £35 (£10 for retired members) is due on the 1st July 2016. Members who attend the Annual Conference in September may pay the subscription fee at the time of registration. *Please fill in the form below and send it to me, regardless of the method of payment, or not renewing your membership.*

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NB. Invoices will *not* be sent unless specifically requested. POs alone *are not* requests for an invoice and are considered for information only. **Please note that it is now a condition of membership that all subscriptions must be paid by 30th September**, so unless paying via the Conference, please pay as early as possible.

Thank you

Sonia Nuttall

Honorary Treasurer

Email: treasurer@aurpo.org.uk