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Disposal of Radioactive Waste Seminar

Operational and cost efficiency of
the disposal of short lived and
long lived waste

Thursday 6 – Friday 7 December 2012
The Hatton, Hatton Garden, London, UK



Gain in-depth knowledge on:

- ✓ Challenges and opportunities for disposal at different site types including **granite** and **clay**
- ✓ Producing and streamlining **cost estimates** for disposal operations
- ✓ The practical changes and impact of **Exemption Order Review** and since its implementation
- ✓ Comparison of **deep geological repositories** including the future scene
- ✓ Implementing **public and stakeholder engagement programmes** for site authorisation
- ✓ Exploring the different disposal options for **low level, intermediate level** and **high level waste**

Your course leaders include:

- **Gabriela Siraky de Taccone**
WASSC Coordinator
IAEA
- **Adam Meehan**
Project Consultant
EnergySolutions Ltd
- **Andrea Borwick**
Development Project Manager
FCC Environment
- **Dr Tim McEwen**
Geological Consultant
McEwen Consulting
- **Lucy Bailey**
Post-closure Safety Manager
Nuclear Decommissioning Authority
- **Michelle Wise**
Director, Consultancy Services
NSG Environmental Ltd
- **Patrik Fors**
Consultant
Vattenfall

Join us online



IBC Nuclear



@IBCEnergyEvents



EnergyEventTV

Book the **Predisposal & Characterisation and Disposal of Radioactive Waste** Seminar's together
and **save an extra £200**



Disposal of Radioactive Waste Seminar

From technical processes to socio-economic considerations including cost and stakeholder implications, this two day course is designed to provide a comprehensive focus on the disposal issues associated with LLW, ILW and HLW.

Featuring:



Chairman's Tutorial:

This in-depth session will take you through the issues involved in public acceptance including key objections and overcoming these through stakeholder engagement



Spotlight Session:

Focusing on deep geological disposal of radioactive waste, this presentation will guide delegates through the challenges and opportunities of disposing of HLW



Quickfire Exchange:

Meet your expert lecturers and other delegates. Find out what their current role is and what their learning incentives are

Hear what attendees of 2012 IBC Nuclear Courses have to say so far....

"A well-managed, varied and thought provoking course providing content at very appropriate technical level"

(M Walker, Calibration Manager, JF Nuclear Ltd)

"Good variety of course material fully enjoyed the whole week"

(S Hill, Health Physics Advisor, Sellafield Ltd)

IBC Nuclear Events Promotional Opportunities

There are a number of sponsorship opportunities associated with IBC Energy's Nuclear Events giving your organisation the chance to demonstrate your expertise, products and services in line with the training course objectives.

For further information or to discuss individual requirements, please contact **Lauren Wilcox** on +44 (0)20 7017 7674 or e-mail Lauren.wilcox@informa.com.

DAY ONE – Thursday 6 December 2012



09.00 Registration and **Icebreaker Breakfast**
Join us for breakfast to meet other attendees and mingle with your peers and speakers

09.30 Chairman's welcome and **quick fire exchange**
Take this opportunity to introduce yourself and learn about your peers. The course objectives will be outlined at the end of this session

Very short lived waste, VLLW, LLW & ILW

09.40 **Understanding the management of very low level (VLLW) and low level (LLW)**

- Exploring VLLW and LLW
- Evaluating the developments in managing LLW and ILW
- Assessing the disposal opportunities

10.45 Morning tea and networking break



11.15 **Disposal of VLLW into Lillyhall landfill site**
Andrea will be discussing the acceptance and disposal of very low level waste into the Lillyhall Landfill site.
Andrea Borwick, Development Project Manager, **FCC Environment Ltd**

12.00 **Understanding the management and disposal of intermediate level waste**

- Challenges associated with ILW disposal
- Waste acceptance criteria and changes needed
- Future developments for ILW disposal

Michelle Wise, Director, Consultancy Services, **NSG Environmental Ltd**

12.45 **Discussion session with course leaders on morning sessions**
Your chance to ask questions and discuss specific issues raised during the early morning sessions

13.00 Lunch

Policy, regulation and costing for waste disposal

14.00 **Radioactive waste and spent fuel policies and strategies**

- Framework for waste and spent fuel
- Understanding from generation through to disposal
- Transparency and public participation

Gabriela Siraky de Taccone, WASSC Coordinator, **IAEA**

14.45 **The impact of the Exemption Order Review on disposal**

- An overview of the Exemption Order Review
- Practical changes and its impact since implementation
- Opportunities arising from changing legislation
- Future policy

- 15.30 Afternoon tea and networking break
- 15.50 **Estimating costs for managing waste and the impact on final decision**
- Requirement for adequate funding for disposal of waste
 - Difference in cost estimates between low and very low level waste and high level waste
 - Obtaining funding through joint ventures
- 16.20 **Discussion session with course leaders on afternoon sessions**
Your chance to ask questions and discuss specific issues raised during the afternoon sessions
- 16.30 Chairman's closing remarks and close of day one

DAY TWO - Friday 7 December 2012

- 09.00 Morning tea & coffee
- 09.30 Chairman's opening remarks

Disposal of high level wastes and the role of geological repositories

- 09.40 **Preparing a post-closure safety case**
- Why a geological repository? – the multi-barrier approach
 - The challenges of preparing a generic safety case
 - Strategy for developing a site-specific safety case and the key stages in the regulatory process
- Lucy Bailey**, *Post-closure Safety Manager*, **Nuclear Decommissioning Authority**

- 10.10 **Interactive Session: Preparing a post-closure safety assessment**
- This exercise will ask delegates to identify the issues they believe would need to be considered in a post-closure safety assessment.
- Lucy Bailey**, *Post-closure Safety Manager*, **Nuclear Decommissioning Authority**



- 10.40 **Discussion session with course leaders on morning sessions**
Your chance to ask questions and discuss specific issues raised during the afternoon sessions

- 11.00 Morning tea

- 11.30 **Deep geological disposal of radioactive waste and the process**
- Disposing of waste in deep geological repositories
 - Identifying alternative repository systems for different waste types
 - The future scene for waste repositories
- Dr Tim McEwen**, *Geological Consultant*, **McEwen Consulting**



- 12.30 **Discussion session with course leaders on morning sessions**
Your chance to ask questions and discuss specific issues raised during the afternoon sessions

- 12.45 Lunch

- 13.45 **The Swedish approach to granite disposal of waste**



- Granite repository research and current sites
- Geological settings including chemical and physical settings
- Waste packages needed for disposal at granite sites

Patrik Fors, *Consultant*, **Vattenfall Nuclear**

- 14.30 **Disposal in clay formation**
- Considerations of Opalinus Clay properties
 - Challenges for the disposal of long lived waste in clay
 - Future opportunities for clay formation repositories

- 15.15 Afternoon tea

Public acceptance issues

- 15.45 **Speaker's Tutorial: Public Acceptance**
Closely examine the key issues involved with public acceptance of disposing of radioactive waste. Learn about the key objections and how to overcome these with the support of key stakeholders
- Adam Meehan**, *Project Consultant*, **EnergySolutions Ltd**

- 16.00 **Stakeholder and public engagement programmes**
Compare and contrast the approaches and lessons learnt from two recent public and stakeholder engagement programmes in support of licensing and disposal. Hear about the challenges encountered along the way and solutions and best practice options available.
- Adam Meehan**, *Project Consultant*, **EnergySolutions Ltd**

- 16.40 **Discussion session with course leaders on afternoon sessions**
Your chance to ask questions and discuss specific issues raised during the afternoon sessions

- 16.50 Chairman's closing remarks

- 17.00 Close of Course

Book the **Predisposal & Characterisation and Disposal of Radioactive Waste** Seminar's together and save an extra £200!

The Predisposal & Characterisation Seminar examines the management of predisposal processes including pre-treatment, treatment, conditioning, characterisation, storage and transportation.

For more details visit
www.ibcenergy.com/characterisation

Predisposal & Characterisation of Radioactive Waste Course

Monday 3 - Wednesday 5 December 2012, London

**Available to delegates from the same company. Subject to approval*



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Disposal of Radioactive Waste Seminar

Thursday 6 – Friday 7 December 2012

The Hatton, Hatton Garden, London

VIP CODE:

en/nm/ld/tw/mr/tr

Event Code
FKA2322Explaining the
waste hierarchy
through short lived
and long lived
waste**4 EASY WAYS TO REGISTER**

Energy Customer Services

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Email: energycustserv@informa.comWeb: www.ibcenergy.com/disposalScan with
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QR Reader App:**VENUE DETAILS**

The Hatton

51-53 Hatton Garden

London EC1N 8HN

Tel: +44 (0) 20 7242 4123

Email: hatton@etcvenues.co.ukWeb: www.etcvenues.co.uk/venues/the-hatton**ACCOMMODATION DETAILS**

Reduced Rate Hotel Accommodation: the cost of the accommodation is NOT included in the event fee. To book accommodation, at a reduced rate, near the venue, please visit the following link: <http://www.HotelMap.com/M3CFW>

SPECIAL REQUIREMENTS

Please list below any special requirements you may have

TERMS & CONDITIONS

FEE: Bookings made within 2 weeks of the Seminar start date must be accompanied by a credit card confirmation.

ARE YOU REGISTERED? You will always receive an acknowledgement of your booking. If you do not receive anything please call us on +44 (0)20 7017 5518 to make sure we have received your booking

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Changes to the Conference IBC Energy may (at its sole discretion) change the format, speakers, participants, content, venue location and programme or any other aspect of the Event at any time and for any reason, whether or not due to a Force Majeure Event, in each case without liability.

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STEP 1: SELECT YOUR PACKAGE (please tick option)

	DATES	REGISTER BY 5 October 2012	REGISTER BY 2 November 2012	REGISTER AFTER 2 November 2012
Predisposal & Characterisation Course & Disposal of Radioactive Waste Seminar*	3-7 Dec 2012	£2698 (+VAT@20% = £3237.60) SAVE £600	<input type="checkbox"/> £2898 (+VAT@20% = £3477.60) SAVE £400	<input type="checkbox"/> £3098 (+VAT@20% = £3717.60) SAVE £200
Disposal of Radioactive Waste Seminar only	6-7 Dec 2012	<input type="checkbox"/> £1299 (+20%VAT) = £1558.80 SAVE £200	<input type="checkbox"/> £1399 (+20%VAT) = £1678.80 SAVE £100	<input type="checkbox"/> £1499 (+20%VAT) = £1798.80

* Available to delegates from the same company. Subject to approval. The VAT rate is subject to change and may differ from the advertised rate. The amount you are charged will be determined when your invoice is raised. Savings include Multiple Package & Early Booking Discounts. All discounts can only be applied at the time of registration and discounts cannot be combined apart from early booking discounts which are available to everyone. All discounts are subject to approval. Please note the conference fee does not include travel or hotel accommodation costs. We are happy to accept a replacement delegate for the whole event; however delegate passes cannot be split or shared between delegates under any circumstances.

£200 discount available for 3rd and subsequent delegates from the same company
☐ I am unable to attend but please reserve me ____ set(s) of the Seminar documentation @ £399
STEP 2: DELEGATE DETAILS**1st Delegate** Mr/Mrs/Ms

Job title _____

Department _____

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Address _____

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Nature of Business _____

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STEP 3: PAYMENT DETAILS
☐ Enclosed is a **Cheque** made payable to **Informa UK Ltd** (Ref: FKA2322)

☐ For payment by **Bank Transfer** (excl. US\$ & HK\$) Informa UK Ltd, Account Name: IIR Ltd. Account Number: 01825550
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To make payment by Credit Card: To ensure we provide the highest level of security for your credit card details we are unable to accept such payments via email or fax which ensures that these details are never stored on our network. To make payment by credit card on-line, please enter your credit card details in our secure payments website that you will use when making your booking via the event website (the event web address is near the top of the booking form). Alternatively call our customer service team on +44 (0)20 7017 5518

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