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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



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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](mailto: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](http://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*

en/nm/id/lw/mr/tr

Event Code  
**FKA2322**

**Explaining the waste hierarchy through short lived and long lived waste**

### 4 EASY WAYS TO REGISTER

Energy Customer Services

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Web: [www.ibcenergy.com/disposal](http://www.ibcenergy.com/disposal)

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### VENUE DETAILS

The Hatton

51-53 Hatton Garden  
London EC1N 8HN

Tel: +44 (0) 20 7242 4123

Email: [hatton@etcvenues.co.uk](mailto:hatton@etcvenues.co.uk)

Web: [www.etcvenues.co.uk/venues/the-hatton](http://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

**TERMS AND CONDITIONS** Attendance at this Event is subject to the IBC Energy Delegate Terms and Conditions at [www.informaglobalevents.com/IBCEnergytermsandconditions](http://www.informaglobalevents.com/IBCEnergytermsandconditions). Your attention is drawn in particular to clauses 6, 8 and 14 of the IBC Energy Delegate Terms and Conditions which have been set out below.

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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) <b>SAVE £600</b>	<input type="checkbox"/> £2898 (+VAT@20% = £3477.60) <b>SAVE £400</b>	<input type="checkbox"/> £3098 (+VAT@20% = £3717.60) <b>SAVE £200</b>
Disposal of Radioactive Waste Seminar only	6-7 Dec 2012	<input type="checkbox"/> £1299 (+20%VAT) = £1558.80 <b>SAVE £200</b>	<input type="checkbox"/> £1399 (+20%VAT) = £1678.80 <b>SAVE £100</b>	<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 \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

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**Booking Contact** Mr/Mrs/Ms

Job title/Dept \_\_\_\_\_

Telephone \_\_\_\_\_

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**£200 Discount**

### STEP 3: PAYMENT DETAILS

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