

Program

Recycling of Metals arising from Operation and Decommissioning of Nuclear Facilities

Studsvik, Nyköping, Sweden, April 8th-10th 2014

Tuesday April 8th

	Arrival
10.30 – 12.00	Registration Horsvik
11.00 – 12.15	Lunch Horsvik
12.30 – 13.00	Symposium opening Studsvik auditorium
12.30 – 12.35	<i>Welcome</i> Arne Larsson, Studsvik Nuclear AB
12.35 – 12-45	<i>Opening</i> Michael Mononen, CEO Studsvik AB
12.45 – 13.00	<i>Symposium information</i> Anders Appelgren, Studsvik Nuclear AB
13.00 – 14.00	Invited presentations Studsvik auditorium
13.00 – 13.20	<i>Overview of the IAEA supported decommissioning and waste management activities</i> Vladimir Michal (presenter), Vladan Ljubenov, International Atomic Energy Agency (IAEA)
13.20 – 13.40	<i>Clearance, reuse, recycle, disposal as VLLW</i> Claudio Pescatore, OECD Nuclear Energy Agency (OECD/NEA)
13.40 – 14.00	<i>Management of Materials from the Decommissioning of Nuclear Reactors</i> Georg Braehler, World Nuclear Association (WNA)
14.00 – 14.30	Coffee break

Entrance hall

Tuesday April 8th (continuation)

14.30 – 18.00	Session A Regulations and recommendations Studsvik Auditorium Session chair Maria Lindberg, Studsvik Nuclear AB
14.30 – 15.00	<i>Clearance and recycling – how can radiation protection and application of the waste hierarchy be optimised?</i> Henrik Efraimsson, Anders Wiebert, Simon Carroll (presenter), Swedish Radiation Safety Authority (SSM)
15.00 – 15.30	<i>Regulatory Aspects of Clearance and Recycling of Metallic Material forming Part of Buildings of Nuclear Facilities in Germany</i> Stefan Thierfeldt (presenter), Stefan Wörlen, Philip Harding, Brenk Systemplanung GmbH
15.30 – 16.00	<i>Example of establishing the recycling of scrap metal as a waste management option within German regulations</i> Matthias Bodenstein, Johannes Delfs, TÜV NORD SysTec GmbH & Co KG Oliver Karschnick, Ministry of Energy, Agriculture, the Environment and Rural Areas of Schleswig-Holstein (MELUR)
16.00 – 16.30	<i>Application of Regulation for recycling metals arising from Decommissioning of an Italian Nuclear Facility</i> Giovanni Varasano, Leonardo Baldassarre (presenter), Edoardo Petagna, Sogin Spa
16.30 – 17.00	<i>Suspension on Release of Uncontaminated Scrap from DOE Radiological Areas Current Status and Strategies for Management</i> Richard Meehan, Xavier Ascano, U.S. Department of Energy (DOE) <input checked="" type="checkbox"/> Presentation cancelled
17.00 – 18.00	Group discussions Rooms at Horsvik
18.30 – 22.00	Dinner buffet Horsvik

Wednesday April 9th

08.15 – 11.15	Session B Minimising waste amounts taking benefit of characterisation and categorisation Studsvik auditorium Session chair Håkan Lorenz, Barsebäck Kraft AB
08.15 – 08.40	<i>Clearance of materials, some experience from the UK</i> Pete Burgess, Nuvia Ltd Alan Fisher, RSRL Ltd
08.40 – 09.05	<i>Impact of metals recycling on a Swedish BWR decommissioning project</i> Arne Larsson (presenter), Per Lidar, Gunnar Hedin, Niklas Bergh, ndcon
09.05 – 09.30	<i>Management of metal arising from an Italian Nuclear Facility: techniques for clearance and unconditional release</i> Leonardo Baldassarre (presenter), Giovanni Varasano, Salvatore Gaetano Bruno, Sogin Spa
09.30 – 09.50	Coffee break Entrance hall
09.50 – 10.15	<i>Characterisation of contaminated metals using an advanced statistical toolbox</i> Per Lidar (presenter), Arne Larsson, Studsvik Nuclear AB Yvon Desnoyers (presenter), Geovariances
10.15 – 11.15	Group discussions Rooms at Horsvik
11.15 – 12.15	Lunch Horsvik

Wednesday April 9th (continuation)

12.15 – 15.15 **Session C (parallel)**
Decontamination and melting of metals for clearance, reuse or volume reduction
Studsvik auditorium
Session chair Gunnar Hedin, Westinghouse

12.15 – 12.45 *Technical possibilities to support separation of radioactive elements from metallic waste*

Johan Björkvall, Guozho Ye (presenter), Swerea MEFOS AB
Maria Lindberg, Studsvik Nuclear AB

12.45 – 13.15 *Laser decontamination of metallic*

Fabrice Moggia (presenter), L Objois, V Toulemonde, AREVA

13.15 – 13.45 *Nuclide distribution in the metal recycling process*

Per Lidar (presenter), Maria Lindberg, Patrik Konnéus, Arne Larsson,
Studsvik Nuclear AB

13.45 – 14.15 *Assessment of radioactivity inventory - a key parameter in the clearance for recycling process*

Klas Lundgren (presenter), Arne Larsson, Studsvik Nuclear AB

14.15 – 15.15 Group discussions including coffee

Rooms at Horsvik

12.15 – 15.15 **Session D (parallel)**
Sustainability and public acceptance
Horsvik
Session chair Britt-Marie Drottz Sjöberg, Norwegian University of Science and Technology, NTNU

12.15 – 12.45 *The importance of recycling*

Jöns-Petter Svensson, KAABS Nordic AB

12.45 – 13.15 *Metal Recycling in the UK - a decade of developments*

Joe Robinson, Studsvik UK

13.15 – 13.45 *Recycling of rare metals from the decommissioning of nuclear facilities*

Frank Charlier (presenter), Jan Philipp Dabruck, Aachen University

13.45 – 14.15 *Considerations for Disposition of Dry Cask Storage System Materials at End of Storage System Life*

Rob Howard (presenter), Bret van den Akker, Oak Ridge National Laboratory

14.15 – 15.15 Group discussions including coffee

Rooms at Horsvik

Wednesday April 9th (continuation)

15.15 – 18.00 **Session E**
Optimization of Waste and Materials Disposition – Policy, Strategies and Techniques
Studsvik auditorium
Session chair Claudio Pescatore, OECD/NEA

15.15 – 15.40 *Waste management for decommissioning of nuclear power plants - An EPRI decommissioning project report*
Richard McGrath (presenter), Richard Reid
Electric Power Research Institute (EPRI)

15.40 – 16.05 *The Legal and Policy Framework for Waste Disposition*
The Legal and Policy Framework for Waste Disposition
Jonathan Leech, Dentons UKMEA LLP

16.05 – 16.30 *Ensuring robust decisions and deployable solutions in UK LLW management*
Matthew Clarke, Nuclear Decommissioning Authority (NDA)

16.30 – 16.55 *Optimization of Waste and Materials Disposition in France – Policy, Strategies, and Techniques*
Michel Dutzer, Andra

16.55 – 18.00 Group discussions
Rooms at Horsvik

19.30 – 22.30 **Dinner reception**
Nyköping castle

Thursday April 10th

08.15 – 11.00	Session F Best practice in management of metals for clearance and recycling Studsvik auditorium Session chair Arne Larsson, Studsvik Nuclear AB
08.15 – 08.40	<i>Utilization of External Capacities as an Integral Component of Concepts for Residues and Dismantling Using the Example of the CARLA Plant</i> Thomas Kluth, Siempelkamp Nukleartechnik GmbH
08.40 – 09.05	<i>Gained experiences concerning the treatment of radioactive metal scrap from German NPP's</i> Boris Westerwinter (presenter), Niemma Buckanie, Gesellschaft für Nuklearservice mbH (GNS)
09.05 – 09.30	<i>Treatment of Berkeley boilers in Studsvik – Project description and experiences</i> Dave Saul, Gavin Davidson, Studsvik UK Bo Wirendal, Björn Amcoff (presenter), Studsvik Nuclear AB
09.30 – 09.50	Coffee break Entrance hall
09.50 – 10.15	<i>Some Impact of Melting Scrap for the Decommissioning of Nuclear Power Plant Stade</i> Georg Bacmeister, E.ON
10.15 – 11.00	Panel discussion Auditorium
11.00 – 12.00	Summing up of sessions and group discussions Symposium closing Studsvik auditorium
12.00 – 13.00	Lunch Horsvik
13.00 – 17.00	Guided tours on Studsvik site Coffee available in Entrance hall

Poster session

Available throughout the whole symposium

Entrance hall

From non-disposable to disposable, treatment of pyrophoric or gas forming waste forms for disposal

Carl Österberg, Maria Lindberg, Studsvik Nuclear AB

Management of zirconium rod claddings with the process of electrochemical breakdown

Yury Pokhitonov, V. G. Khlopin Radium Institute

Treatment and conditioning of metallic intermediate level waste

Per Lidar, Tommi Huutoniemi, Eva Blank, Studsvik Nuclear AB
Mattias Elfving, SKB

RPV in-situ segmentation combined with off-site treatment for volume reduction and recycling

Arne Larsson, Per Lidar, Studsvik Nuclear AB
Per Segerud, Gunnar Hedin, Westinghouse Electric Sweden AB

Setup for electrochemical decontamination of metal surfaces

A Belozub, D Shafikov, A Klyushkin, V Suzdalev, Mikhail Alyapyshev,
V. G. Khlopin Radium Institute

Foam decontamination of metals

D Shafikov, A Belozub, A Klyushkin, A Shafikova, V. G. Khlopin Radium
Institute

Segmentation and packaging reactor vessels internals

Joseph Boucau, Westinghouse Electric Belgium SA

Poster cancelled

Decontamination with wet blasting of components in nuclear power station for service or free release

Per Fagerström, Fagerström Industrikonsult AB

Poster session (continuation)

Proven concepts for LLW metals - Treatment for waste minimization and recycling

Björn Amcoff, Bo Wirendal, Studsvik Nuclear AB

Metals Characterisation by Facility Characterisation in support of Site Remediation and Decommissioning Projects

Gemma Laurie, Megan Carroll, Sellafield Ltd

Beneficial Re-Use of Metal from Decommissioning of Power Reactors

Troy Eshleman, Graham Raw, Barry Moloney, EnergySolutions