

## Workshop on the safe storage and disposal of redundant mercury

13<sup>th</sup> & 14<sup>th</sup> October 2009

St Anne's College, Oxford (UK)

### Programme

Registration desk open from 11.30

| Timing   | Format   | Presentation / activity  | Speaker / persons involved  |
|--|--|--|---|
| <b>Day 1 – Tuesday 13<sup>th</sup> October</b> |  |  |   |
| 12.15 - 13.00                                  | -  | <i>Buffet lunch</i>  | -   |
| 13.00 - 13.10                                  | 10 min presentation                                    | Welcome, workshop aims and structure   | Dr. Bruce Howard (Oxford University)  |
| 13.10 - 13.15                                  | -  | Introductory comments from the Chair   | Professor Jane Plant (Imperial College, London)   |
| 13.15 - 13.45                                  | 20 min presentation followed by questions              | Policy context and regulatory framework for mercury storage and disposal                 | Mr. Stephen Cane (UK Defra) & Dr. Mike Roberts (UK Defra)                                 |
| 13.45 - 14.15                                  | 20 min presentation followed by questions              | Underground storage and disposal in a salt formation based on elemental mercury          | Dr. Thomas Brasser (GRS mbH, Germany), Mr. Alexander Baart (K+S Entsorgung GmbH, Germany) |
| 14.15 - 14.45                                  | 20 min presentation followed by questions              | Underground storage and disposal in hard rock based on a chemically-stable mercury solid | Mr. Lars Olof Höglund (Kemakta Konsult AB, Sweden)  |
| 14.45 - 15.00                                  | -  | <i>Coffee</i>  | -   |
| 15.00 - 15.15                                  | 10 min presentation followed by questions              | Overview of mercury stabilisation processes  | Ms. Sonja Bauer (BiPRO GmbH, Germany)   |
| 15.15 - 15.40                                  | 20 min presentation followed by questions              | Stabilisation of mercury for final disposal by formation of mercury sulphide             | Ms. Miriam Ortheil (DELA, GmbH Germany)   |
| 15.40 - 16.05                                  | 20 min presentation (video link) followed by questions | Design of mercury storage containers   | Dr Stephen Pawel and Mr. Adam Carroll (Oak Ridge National Laboratory, US)                 |
| 16.05 - 17.05                                  | 60 min group discussion around set questions           | Breakout groups to discuss operational phase of underground repository                   | All participants  |
| 17.05 - 17.45                                  | 40 min feedback and discussion                         | Group leader report back and discussion  | Breakout group leaders and all participants   |
| 17.45 - 17.50                                  | -  | Overview of day 2  | Dr. Bruce Howard  |
| 19.30 - 21.30                                  |  | <i>Reception and dinner (St Anne's College)</i>  |   |

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|--|---|---|---|
| <b>DAY 2 – Wednesday 14<sup>th</sup> October</b> |   |   |   |
| 9.00 - 9.10                                      | -   | Introduction to the day / reflections from day 1  | Professor Jane Plant  |
| 9.10 - 10.10                                     | 15 min presentations, each followed by 5 min discussion | <p><i>Factors to be considered in evaluating the post-closure risks arising from a disposal facility</i></p> <p>Evaluating the Post-closure Safety of Geological Disposal of Long-lived Radioactive Wastes</p> <p>Groundwater Chemotoxic Screening for Radioactive Waste Disposal</p> <p>Assessing the behaviour and fate of mercury should it be released from a disposal facility</p> | <p>Professor Alan Hooper (Independent Consultant, UK)</p> <p>Mr. Steve Williams (Nuclear Decommissioning Authority, UK)</p> <p>Mr. Lars Olof Höglund (Kemakta Konsult AB, Sweden)</p> |
| 10.10 - 11.40                                    | 90 min group discussion around set questions            | <p>Breakout groups to discuss post-closure phase of underground repository</p> <p><i>Coffee available 'on the run'</i></p>  | All participants  |
| 11.40 - 12.20                                    | 40 min feedback and discussion                          | Feedback from breakout groups   | Breakout group leaders and all participants   |
| 12.20 - 12.50                                    | 20 min presentation (video link) and discussion         | Containerized elemental mercury – above ground storage considerations   | Mr. Bill Hermes (Oak Ridge National Laboratory, US)   |
| 12.50 - 13.00                                    | -   | Final comments from the chair   | Professor Jane Plant  |
| 13.00 - 14.00                                    | -   | <i>Lunch and departure</i>  | -   |
| 14.00 - 16.00                                    | -   | <p>Sub-group for discussion of how available knowledge on mercury storage and disposal may be applied outside Europe and the US</p> <p>(participation needs to be pre-booked)</p>   | Led by Dr. Bruce Howard   |