



Orica Former ChlorAlkali Plant Mercury Investigations Update

Presentation for Community Liaison Committee

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18 December 2007

Human Health and Environmental Risk Assessment

Delays with completion of the Human Health and Environmental Risk Assessment (HHERA)

- Draft HHERA was received from URS Australia Pty Ltd (URS) and reviewed by Orica
- Orica noted that information relating to the manufacturing history was not included
- Consequently, the exposure scenarios in the draft HHERA did not reflect the manufacturing history
- Additional information has been included
- URS has recently advised that further groundwater sampling and modelling is required to complete the HHERA
- Orica has informed DECC of the delay

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Human Health and Environmental Risk Assessment (cont.)

The purpose of the additional groundwater sampling and modelling for the HHERA

- Reduce the uncertainties presented in the HHERA in regard to groundwater and create a more robust assessment
- Orica has informed the DECC of the additional groundwater sampling and modelling

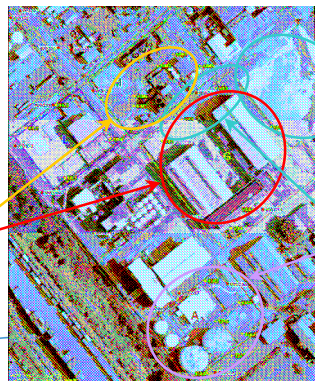
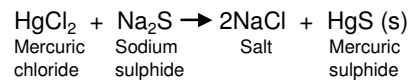
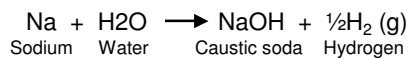
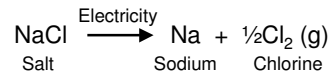
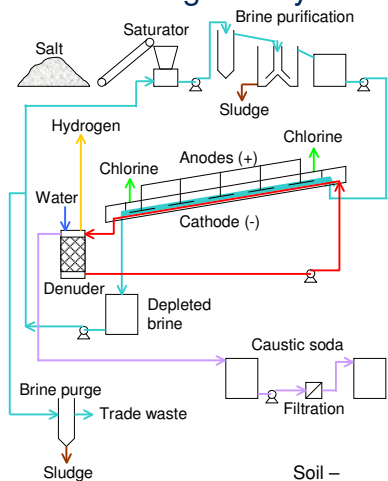
Next steps and proposed timing

- URS to complete additional groundwater sampling – January 2008
- URS or other to complete modelling – February/March 2008
- Completion of HHERA – March/April 2008
- Submission of HHERA to DECC – April 2008
- Presentation of HHERA at CLC meeting in June 2008



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Manufacturing History



Groundwater – Hg salts and Hg microdroplets



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Proposed Soil Washing Trials

Objective:

Assess whether this remediation technology is feasible to remediate mercury (elemental) contaminated soil at the former Chlor Alkali plant area, located at the Botany site

Why this technology:

- Remediation technology has been used to remediate a number of similar sites (former Chlor Alkali plants) in North America
- Trialled at Orica's former Chlor Alkali Plant in Yarraville, Victoria – unsuccessful due to high clay content in soil

What is this technology:

- Screening and washing the mercury contaminated soil with water
 - 'Treated' soil is tested to ensure it is suitable for reuse
 - Water is treated to ensure it is suitable for disposal

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Proposed Soil Washing Trials (cont.)

What the proposed soil washing trials involve:

- Notification of the proposed trials – DECC and City of Botany Bay Council
- Engaging the remediation contractor and an environmental consultant
- Additional soil sampling and preparation of a report (to be undertaken by the environmental consultant)
- Site establishment – including the establishment of the trial plant, amenities etc, likely to be March 2008
- Commencement of trials, likely to be March 2008:
 - excavation of mercury (elemental) contaminated soil from a number of test pits located within the former Chlor Alkali Plant area;
 - placement in soil washing trial plant;
 - collection and analyses of samples; and
 - preparation of a report – assess whether the technology is feasible

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Next Steps...

- Complete HHERA – April 2008
- Complete Soil Washing Trials – July 2008
 - NB: If trials commence March 2008
- Completion of Remedial Action Plan
 - NB: If trials indicate that soil washing is a feasible remediation technology and subject to completion of HHERA
- Remediation of contamination identified at the former Chlor Alkali Plant area
 - NB: Subject to planning or other approvals that may be required

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