

COMMUNITY PARTICIPATION and REVIEW COMMITTEE (CPRC)

Background Briefing Paper

For Meeting Tuesday, 16 March 2010

This paper aims to provide an update on the topics that are normally discussed at CPRC meetings, as well as addressing actions and other items.

The matters covered in this briefing paper are:

1. Hexachlorobenzene (HCB) Waste Update
 - Export Application
 - HCB Waste Repackaging Plant
2. Car Park Waste Encapsulation (CPWE) Update
 - Approvals and Licensing
 - Project Progress
 - Community Consultation
 - Independent Expert Panel
 - CPWE Monitoring
3. Other HCB Related Waste at Botany
4. Community Consultation

1. HCB WASTE UPDATE

Orica continues to store HCB waste in accordance with licensing requirements to ensure that there are no unacceptable risks to human health and the environment.

1.1. Export Application

As the CPRC is aware, Orica lodged applications to export HCB waste to Denmark in November 2008 and the Danish Government has not yet completed its review. Whilst the progress of processing the application is slow, Orica remains confident of a positive outcome.

Bill Crowe from Orica and Damien Hall from the Australian Federal Department of Environment, Water, Heritage and the Arts (DEWHA) will provide an update on the status of the export application at the upcoming CPRC meeting.

1.2. HCB Waste Repackaging Plant

HCB waste repackaging operations commenced in mid 2007 and to date, over 70% of the waste has been repackaged. Repackaged waste is stored in licensed stores and shipping containers at the Botany Industrial Park (BIP). Repackaging will be undertaken at three locations at BIP. The table on the following page provides information about the current status of repackaging activities.

Independent Environmental Audit

At the upcoming CPRC meeting Hugh Madden (of Parsons Brinckerhoff Australia Pty Ltd) will provide a presentation on the results of the second independent environmental audit for the HCB Waste Repackaging Plant.

Repackaging Location	Waste	Operations Commenced
HCB Waste Repackaging Plant (known as Store J)	The bulk of the HCB waste stored on site will be repackaged here.	June 2007 Ongoing operations.
Stores G & H	Stores G and H primarily contain polymerised EDC plant waste materials and sludges.	March 2009. Ongoing operations.
Store E	Six vertical storage tanks filled with material from the demolition of the Solvents Plant and the Hexa Store at the Chlorine Plant. They contain low-level HCB contaminated waste.	Not yet operational

Approvals and Licensing

The HCB waste is repackaged in accordance with stringent operating conditions outlined in the Project Approval issued by the NSW Department of Planning (DoP) and Orica's Environment Protection Licence (EPL2148) issued by the Department of Environment, Climate Change and Water (DECCW).

Opportunities to improve safety, efficiency and environmental controls are identified as the project progresses and new conditions can be considered by DoP and DECCW as necessary. Whilst there have been no recent changes to the operating conditions for the HCB Waste Repackaging Plant, the following items are noted:

- Orica has identified an additional area near the Steam Stripping Unit which is suitable for HCB shipping container storage. DoP is considering whether a modification to the Project Approval is required for Orica to utilise that area.
- Orica awaits feedback from DoP regarding the proposal to regenerate carbon beds and treat contaminated waste waters from Stores G & H using the Groundwater Treatment Plant (GTP). Presentations on this proposal were made to the CPRC and the Community Liaison Committee in early 2009¹.

2. CAR PARK WASTE ENCAPSULATION (CPWE)

2.1. Approvals and Licensing

On 12 November 2009 Orica received conditional approval from the DoP to remediate the CPWE using Directly-heated Thermal Desorption (DTD) technology. Copies of the Project Approval were circulated to CPRC members on 17 November 2009 and are also available on the DoP and Orica websites.

In December 2009 DECCW updated the conditions of EPL2148 that stipulate the timetable for remediation of the CPWE and set reporting requirements in the lead up to and during the remediation works. Remediation is to be completed within two years of the commencement of Construction and Site Establishment works and regular progress reporting is still required, including submission of a completion report to DECCW and the CPRC.

During the assessment of the CPWE remediation proposal, it was agreed that a new EPL should be established for the CPWE project. Orica submitted a licence application to DECCW in February 2010.

¹As noted in previous CPRC briefing papers, that proposal also requested formalisation of the ongoing practice of sending stormwater gathered at the CPWE to the GTP for treatment. The water contains low concentrations of contamination and, as required, is safely added in batches to the groundwater feed at the GTP.

The Exemption from the Clean Air Regulation that was granted by DECCW for this project lasts for two years and will expire at the end of December this year. As remediation works will continue into 2011 an extension will be required. Orica will discuss this with DECCW.

2.2. Project Progress

The DTD plant selected for remediation of the CPWE is still in operation at the Lednez site at Rhodes.

Natural gas, townswater and electricity services to the DTD site at BIP have been upgraded. Thiess Services is preparing to commence site preparation works next month. Current scheduling sees the DTD plant coming to BIP in the second quarter of 2010, followed by Commissioning and Proof of Performance (CPoP) testing. Remediation works are scheduled to commence in November 2010 and be completed in 2011.

2.3. Community Consultation

Orica continues to collect information about the communication needs of residents and nearby businesses and stakeholders, for consideration when planning the consultation tools to be implemented during remediation of the CPWE. Orica will provide a summary of this feedback at the upcoming CPRC meeting.

2.4. Independent Expert Panel

The Project Approval for the remediation of the CPWE requires Orica to engage the services of independent experts to provide technical advice to the CPRC and other interested stakeholders for the duration of the CPWE remediation works. As the CPRC is aware a Terms of Reference for the Independent Expert Panel (IEP) has been developed and the following experts nominated:

IEP Member	Area of Expertise
Prof Brian Priestly	Human health risk assessment
Dr Peter Nadebaum	Environmental impacts such as noise, odour and water management
Dr Chris Clunies-Ross	Air emissions - impacts and assessment of monitoring results
Dr John McCracken	Process engineering: DTD technology, Proof of Performance trials, operation and plant performance

IEP contracts are now in place for Prof Priestly, Dr Chris Clunies-Ross and Dr John McCracken and under review by Dr Peter Nadebaum. Members will be asked to attend a project briefing and CPRC meeting during the CPWE commissioning period.

2.5. CPWE Monitoring

Orica conducts routine visual inspections of the car park site and its surrounds, and regularly monitors groundwater and air quality in the vicinity of the CPWE.

Groundwater Monitoring

Sampling round No. 20 was conducted in October 2009 and reporting finalised in December 2009. The results of this round were entirely consistent with the previous several monitoring rounds.

EPL2148 requires that at least two months prior to commencement of the CPWE remediation works Orica must provide DECCW with a groundwater monitoring program for the remediation period and thereafter. Orica submitted a proposed groundwater monitoring plan to DECCW for their consideration in February 2010. This proposed plan included the installation of a number of new and replacement monitoring wells, as some wells will be destroyed during the remediation works. Sampling round no. 21 is scheduled to occur in

April 2010. Its scope will be based on the groundwater monitoring plan that is to be finalised between DECCW and Orica.

Air Emissions Monitoring

Sampling for the 15-month air-monitoring program (Orica Botany Environmental Survey Air Emissions Sampling Program) occurred in July 2009. Orica submitted a report of the results to DECCW in January 2010.

The surface flux emissions and soil gas data collected in 2009 did not change the outcome of the assessment of risks associated with the vapour migration pathway for workers, recreational users and residents within the off-site areas above the groundwater plumes presented in the Consolidated Human Health Risk Assessment. Surface emissions at the CPWE were lower than or consistent with previous results.

Hexachlorobutadiene (HCB²) was detected at the monitoring point located in the rail corridor adjacent to the BIP, although previous monitoring at this location had had a higher laboratory detection limit. This requires further assessment in the next 15 monthly sampling round (due around October 2010).

3. OTHER HCB RELATED WASTE AT BOTANY

As regularly reported, Orica is investigating treatment options for areas of known or suspected soil contamination related to past storage of HCB waste. These areas are:

- *Pacific National Stockpile²*
- *Denison Street Landscaping Mound²*
- *Soil beneath the existing HCB Stores*

The appropriate treatment option for the Pacific National stockpile material is yet to be confirmed. Discussions regarding potential options are in progress.

The Environmental Biotechnology Cooperative Research Centre (EBCRC) commenced another field trial at the Denison Street landscaping mound in late November 2009 to further evaluate application of the treatment solution it has developed. The trial is expected to be completed in June 2010.

Investigations of soil beneath HCB stores will commence at a later date.

4. COMMUNITY CONSULTATION ACTIVITY

Since the November 2009 CPRC meeting, the following community consultation has been undertaken:

- Materials from the November 2009 CPRC Meeting and minutes from the August 2009 CPRC Meeting were uploaded onto the Orica website. Of the 2,752 visits to the Botany Transformation Projects website from 10 November 2009 to 7 March 2010, 509 visits were to HCB and CPRC related pages;
- 5,500 copies of the latest CPRC Newsletter were distributed to local areas in March 2010, after being reviewed by the CPRC. It provided updates on the export applications, the CPWE Remediation Project, the HCB Waste Repackaging Plant, the November 2009 CPRC meeting, and establishment of the IEP;
- Orica published a monthly column in the *Southern Courier* and a quarterly column in the *St George and Sutherland Shire Leader*. January and February 2010 columns provided information on the IEP and on the retirement of the CPRC Chair;
- No emails have been received through the CPRC community feedback webpage; and
- No 1800 phone calls relating to HCB matters have been received.

² Soil previously identified for treatment in the proposed Geomelt Plant - URS Australia Pty Ltd (2001), *Environmental Impact Statement: Proposed HCB Waste Destruction Facility at Botany, July 2001*.