



Planning

ASSESSMENT REPORT

Section 75W Modification Orica's Hexachlorobenzene (HCB) Waste Repackaging Facility

1. BACKGROUND

Orica Australia Pty Ltd (Orica) has been manufacturing chemicals at the Botany Industrial Park (BIP) since 1941. The BIP covers 74 hectares and is located in the suburb of Banksmeadow, in the Botany Bay local government area, see Figure 1.

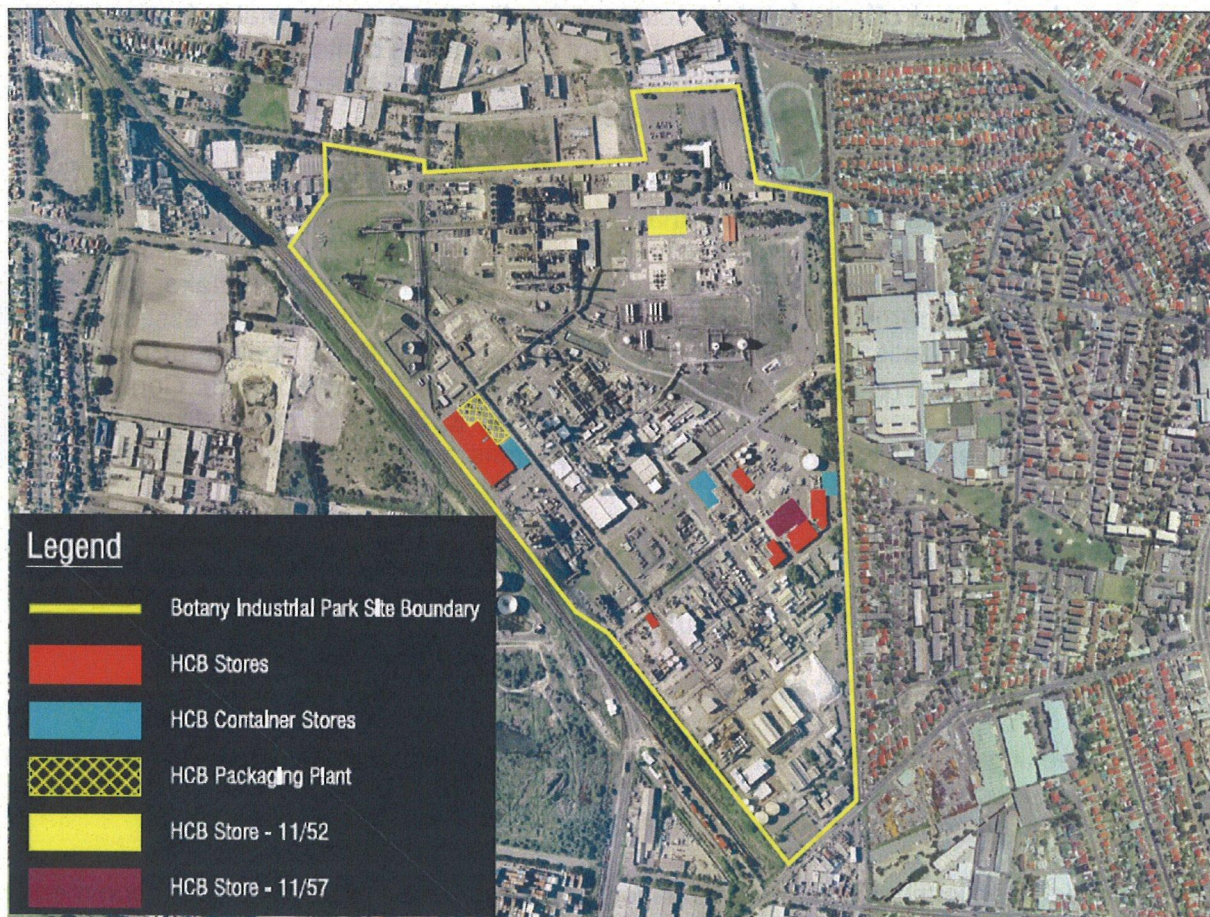


Figure 1: Location Map

Between 1960 and 1991, Orica operated a solvents plant producing chlorinated solvents for use as dry cleaning fluids and refrigerants. Hexachlorobenzene (HCB) waste was generated as a by-product of the solvents plant. Since 1960, the HCB waste has been stored at various locations across the Orica site with the intention of treating it in the future, once a suitable technology and site became available. Since the storage of HCB material, Orica have had to repackage the waste approximately every 5 years, as the waste storage drums deteriorate over time and regular repackaging campaigns are necessary to ensure safety.

Each repackaging campaign results in a larger volume of contaminated waste as the deteriorated drums form part of the waste. In addition, Orica needs to prepare the waste for eventual transport off-site for destruction.

Previous repackaging operations were conducted manually, however, on 12 August 2006, Orica was granted approval under Part 3A of the *Environmental Planning & Assessment Act 1979* (EP&A Act) to construct and operate a mechanical HCB repackaging plant at Botany. A total of 12,500 tonnes of HCB waste is stored on the site in approximately 50,000 drums and numerous tanks. The waste material ranges from concentrated HCB waste to low level HCB waste. The repackaging project repackages the HCB waste and stores it within shipping containers making the waste secure and ready for export.

Repackaging operations commenced in 2007 and to date, approximately 75% of the waste has been repackaged into shipping containers, ready for export. Figure 1 shows the HCB repackaging facility (yellow hatching), existing HCB stores (red) and the HCB material that has been repackaged into containers (blue and yellow).

At the time of the project approval, Orica envisaged that repackaged HCB waste would be progressively exported off site for destruction and estimated that the total volume of waste stored on site at one time would be in the order of 300 shipping containers, being the volume that would comprise one shipment. However, applications to export the waste have been delayed, with an application to Germany in 2007 unsuccessful.

After 18 months of deliberation, the Danish Environment Protection Agency issued a statement on 15th June 2010 indicating that it had granted permission for the HCB waste to be shipped to the Kommunekemia facility in Nyborg for destruction. The Commonwealth Minister for the Environment, Water, Heritage and the Arts can now make a decision regarding an export permit. In 2007 the Minister's Department finalised its assessment of Orica's export application, this application concluded that the shipping arrangements proposed by Orica met relevant international standards and were appropriate. Consequently it seems likely HCB waste will eventually be exported to Denmark for destruction. In the mean time however, until the export and import permits are granted, all repackaged waste must be stored on site.

Repackaging operations onsite are on-going. Other remediation works, such as for the car park waste remediation project, are also due to commence shortly and these remediation works are in the vicinity of HCB Store 11/52.

2. PROPOSED MODIFICATION

Orica is seeking to modify the project approval under Section 75W of the EP&A Act to relocate repackaged HCB waste from HCB Store 11/52 and allow for the storage of HCB Waste in shipping containers at an additional location on site, HCB Store 11/57.

As the export applications have been delayed, and other remediation works will commence shortly, Orica is proposing to rearrange some of the containers on site, by moving 152 containers of repackaged HCB waste from depot 11/52 to depot 11/57. Orica also proposes to store the remaining HCB waste (that is yet to be repackaged) at this depot, once it has been repackaged. Consequently Orica is seeking approval to store 324 containers of repackaged HCB waste at store 11/57.

The total volume of waste to be repackaged would not change as a result of the modification. It should also be made clear that the total volume of HCB stored on the site has not changed. Nonetheless, the repackaging process does increase the amount of waste due to the need to manage materials that become contaminated in the repackaging process,

including the existing packaging and items such as personal protective equipment. Orica had envisaged that repackaged HCB waste would be progressively exported off-site whilst repackaging operations were on-going, thereby reducing the volume of waste stored on site over time. Due to the delay of the export applications, all the waste is still on site, resulting in the need for additional storage areas to accommodate the repackaged waste.

3. STATUTORY CONTEXT

The Minister for Planning was the approval authority for the original project application and is consequently the approval authority for this application. However, on 25 January 2010, the Minister delegated his powers and functions as an approval authority to modify certain project approvals under section 75W of the *Environmental Planning and Assessment Act 1979* (the EP&A Act) to the Executive Director. This modification application meets the terms of this delegation and the Executive Director may therefore determine the application under delegated authority.

The proposed modification would not change the quantity of material to be repackaged; and it forms part of the necessary repackaging process to ensure safety, and to prepare the material for export. The Department has reviewed the extent of the proposed modification and considers that the scale of the development would not increase and environmental impacts would be adequately managed. Therefore, the proposed modifications to the project are not considered to be a 'radical transformation' from what was originally approved.

Consequently, the Department considers that the application should be assessed and determined under Section 75W of the EP&A Act rather than requiring a new development or project application to be lodged.

4. CONSULTATION

Under Section 75W of the EP&A Act, the Department is not required to notify or exhibit the application. Following a review of the application, the Department sought comments from the City of Botany Bay Council (Council) and the Department of Environment, Climate Change and Water (DECCW). Consultation with other government agencies and neighbouring sites was considered unnecessary as the environmental impacts of the proposal would essentially remain unchanged.

DECCW indicated that the current licensing regime is sufficient to control any environmental impacts associated with the additional container storage locations, including any air quality impacts. DECCW noted that storage of waste in shipping containers is not prohibited by the current licences and confirmed that it supports the repackaging works as a positive step in managing waste prior to removal from the site.

Council did not raise concerns with this modification, but raised questions about the overall timing for the removal of the HCB waste from the site and whether contingency measures have been considered should the export of HCB waste for destruction be denied. Council requested the modification application is not determined until these issues have been resolved and also requested that the HCB waste should not be allowed to be stored on site for more than 2 years.

The Department has considered the comments received from Council and DECCW in the assessment provided below.

5. CONSIDERATION

Storage of repackaged HCB waste on the Botany site was assessed as part of the original project approval. This modification considers storage of repackaged HCB waste in an additional location on the site.

Table 1 details the Department's assessment of the key issues associated with the modification to allow an additional container storage location.

Table 1 – Impacts

Issue	Consideration	Recommended Conditions
Land Use Safety	<ul style="list-style-type: none"> • Orica has notified WorkCover NSW of the additional storage location and has registered the site as a dangerous goods store. • The Department's Major Hazards Unit has considered the proposed location from a land use safety perspective and concludes that the increased risk from storing HCB waste at the proposed location is minimal. • The project approval contains a number of conditions for managing hazards associated with the project and the Department concludes that these are adequate for managing any hazards associated with the modification. 	No additional conditions have been recommended.
Air Quality	<ul style="list-style-type: none"> • Storage of HCB waste has the potential to generate fugitive emissions of HCB. • In previous advice on this issue DECCW noted that air emissions from the HCB repackaging facility and storage depots are currently regulated via two licences; an Environment Protection Licence (EPL) under the <i>Protection of the Environment Operations Act, 1997</i> and a licence under the <i>Environmentally Hazardous Chemicals Act, 1985</i>. These requirements are mirrored in the project approval and include routine air quality monitoring at all HCB storage locations. DECCW noted that neither licence prohibits the storage of wastes in shipping containers and also indicates that ambient air monitoring showed HCB below levels of concern. • DECCW has indicated it is satisfied that the existing licences are sufficient to control any environmental impacts associated with this proposed modification. • The Department concludes that the existing air quality monitoring program provides extensive and adequate monitoring of air quality emissions and is sufficient for monitoring any emissions associated with the modification. 	No additional conditions have been recommended.
Noise	<ul style="list-style-type: none"> • Noise would be generated from the transport and positioning of the shipping containers. • Noise impacts are consistent with those expected of working industrial sites and works would be carried out in accordance with the existing noise limits specified in the EPL. • No additional conditions are considered necessary for managing noise. 	No additional conditions have been recommended.
Waste	<ul style="list-style-type: none"> • There would be no waste generated by the additional container storage depots. 	No additional conditions have been recommended.
Visual	<ul style="list-style-type: none"> • The new container storage location is set back from the road and would be screened from view by the surrounding storage locations. • Consequently visual impacts are expected to be minimal. 	No additional conditions have been recommended.

6. CONCLUSION

The Department is satisfied that the proposed container storage location presents no discernable change in environmental impacts associated with the project. The proposed modifications are necessary for continued repackaging, to prepare the material for export. The modification would also allow for remediation works to commence in the north of the site, where HCB store 11/52 is currently located.

The Department notes Council's concerns regarding the ongoing storage of the HCB waste on the site and notes the previous modification gave approval for Orica to continue storing HCB waste on site for a maximum of 5 years from the date of that approval (10 July 2009). The Department does not consider this modification warrants a change to the existing time limit which extends to 9 July 2014.

The Department also acknowledges that Orica has now made some progress with its export application, as the Danish Government recently agreed to process the waste. While the Department understands that Orica still require permission to export the waste from Australia and import the waste to Denmark, the Department is satisfied that Orica is making progress.

In summary, the Department is satisfied that the proposed modification would allow the repackaging process to continue, ensuring the HCB waste is safely contained and prepared for export. The Department considers the proposal is in the public interest and should be approved.

7. RECOMMENDATION

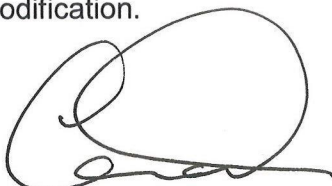
It is **RECOMMENDED** that the Executive Director, as delegate of the Minister:

- **approve** the proposed modification; and
- **sign** the attached notice of modification.



Chris Ritchie
Manager, Industry

12/7/10.



Chris Wilson
Executive Director
Major Projects Assessment

12.7.10