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Request to Modify Major Project 06_0028: HCB Waste Repackaging Plant - Modification 6 — Response to submissions

This letter has been prepared to address submissions received from local government and government agencies regarding the Request to Modify Major Project 06_0028: HCB Waste Repackaging Plant - Modification 6 (the Report), lodged by Orica Australia Proprietary Limited (Orica) with the Department of Planning and Infrastructure in February 2012. The Report provided an assessment of the likely impacts from the installation of a shed and annexe at Depot 11/51 and relocation of repackaged HCB waste (the Proposal) at Orica's controlled land at the Botany Industrial Park (the BIP). This letter has been prepared based on information provided by Orica and should be read in conjunction with the Report.

Following lodgement of the Report, submissions were requested and received from the following government bodies:

- Department of Planning and Infrastructure (DP&I), dated 16 March 2012.
- City of Botany Bay Council, dated 6 March 2012.
- Environment Protection Authority (EPA), dated 19 March 2012.
- WorkCover NSW, dated 20 March 2012.

The purpose of this letter is to clarify a number of outstanding issues and provide additional information requested in these submissions. All government submissions have been categorised and addressed according to the key issues raised. These key issues broadly pertain to:

- project description
- project risks
- post approval requirements.



1. Response to Submissions

1.1 Project description

1.1.1 Proposal scope and purpose

Submissions: DP&I

At what point was Store 11/51 created?

What is the existing footprint of depot 11/51?

Workcover lists the depot as being roofed, was there ever a roof over depot 11/51?

What type of HCB will be stored, only high level or mixed?

City of Botany Bay Council

Ultimately, the proposed storage areas will reach capacity and further storage areas will need to be built on-site. The proposed modification is not considered as a viable or suitable long-term solution to the handling of the HCB waste. Orica is to address this issue and establish a plan for the continued storage and management of the HCB waste.

As discussed in the Report, the Proposal seeks to provide an additional enclosed storage facility for HCB waste held at the BIP. Drums of HCB waste would be relocated from existing approved HCB stores and depots across the BIP to the Site, known as Depot 11/51. Orica does not seek to increase the total amount of waste stored at the BIP and only seeks to relocate existing quantities of HCB.

Depot 11/51 was created in 2006, and was approved as part of Modification 3 of Major Project 06_0028. The existing footprint of Depot 11/51 is shown in Figure 3.1 of the Report and is described in Appendix B of the Supporting Documentation for Modification 4 of Major Project 06_0028. Depot 11/51 does not and never has had a roof, but drums of HCB waste have been enclosed within shipping containers on site.

The Proposal entails installation of a roofed shed and annexe on an expanded Depot 11/51 footprint. It is proposed that Depot 11/51 would occupy the expanded footprint shown in Figure 3.1 of the Report.

Both high (concentrated) and low level waste would be stored in the relocated FSB shed and the adjoining annexe, arranged to facilitate inspections and ongoing monitoring. Depot 11/51 is presently an approved location for storage of high level HCB waste.

The Proposal is desired in part to provide easier monitoring access to waste stored at the BIP. Long term HCB waste storage on Site is not considered desirable. However, the Proposal is a viable and suitable solution for short to medium term storage and handling of HCB waste at the BIP. The Proposal is intended to facilitate a continuation of appropriate risk management procedures until appropriate arrangements can be finalised for disposal.

Storage of HCB waste at the BIP is conducted in accordance with existing Orica procedures and protocols, which have been used to manage similar transportation and relocation of HCB waste on Site and are summarised and extracted in the approved EA for Major Project 06_0028. Previous modifications 3, 4 and 5, which entailed providing additional container storage areas and relocation of shipping containers on Site, were conducted in a safe and efficient manner in accordance with these procedures and protocols. As such, it is not considered necessary to establish additional plans for the continued storage and management of the HCB waste.



1.1.2 Relocation of shipping containers and drums of HCB waste from Depot 11/51 during construction

Submissions: City of Botany Bay Council

[The Report] did not indicate whether these shipping containers require temporary relocation during the construction period. Orica should provide clarification on this issue, prior to project approval. If temporary relocation is required, further Part 3A modification may be necessary and Council should be notified appropriately.

As the proposal includes the establishment of a new foundation slab at Depot 11/51, it is inherent in the Proposal that all shipping containers presently stored at Depot 11/51 would need to be temporarily relocated during the construction period. As such, temporary relocation of shipping containers is encompassed within this modification, and would not require a separate modification.

During installation of the relocated FSB shed and annexe, the majority of shipping containers presently stored at Depot 11/51 would be temporarily relocated to Store A, where they would be unloaded. Store A has sufficient temporary capacity to provide storage for the majority of the anticipated volume of HCB waste to be relocated from Depot 11/51.

The remaining shipping containers presently stored at Depot 11/51 would be temporarily relocated to the site of the proposed annexe during the preparation of foundations. This site is not currently an approved store, but would be notified to WorkCover as part of the new Depot 11/51 footprint. Once the foundation slab is laid and the shed is installed at Depot 11/51, these shipping containers would be transported back to Depot 11/51 and relocated to the new shed.

Transportation within site boundaries between existing stores and the re-packaging area was assessed in the approved EA for Major Project 06_0028, and a transport procedure has accordingly been implemented for all on Site HCB transportation. Transport of the shipping containers would be entirely on internal roads and involve controlled movement using a 25 tonne forklift. This process is the same as used to move the shipping containers to Depot 11/51 initially, and was previously used in the approved modifications 3, 4 and 5.

1.1.3 Relocation of shipping containers and drums of HCB waste to Depot 11/51

Submissions: DP&I

The assessment states that repackaged drums would be transferred from other approved sites. From which sites?

As identified in the Report, the relocated FSB shed and new annexe are intended to store repackaged HCB waste currently stored at Depot 11/51 and other approved depots and stores at the BIP. Drums of HCB waste are likely to be transferred to Depot 11/51 from Depots 11/52 and 11/54, and Stores A, B, C, D, and F. The sources of HCB waste for Depot 11/51 as modified are shown in Figure 1.



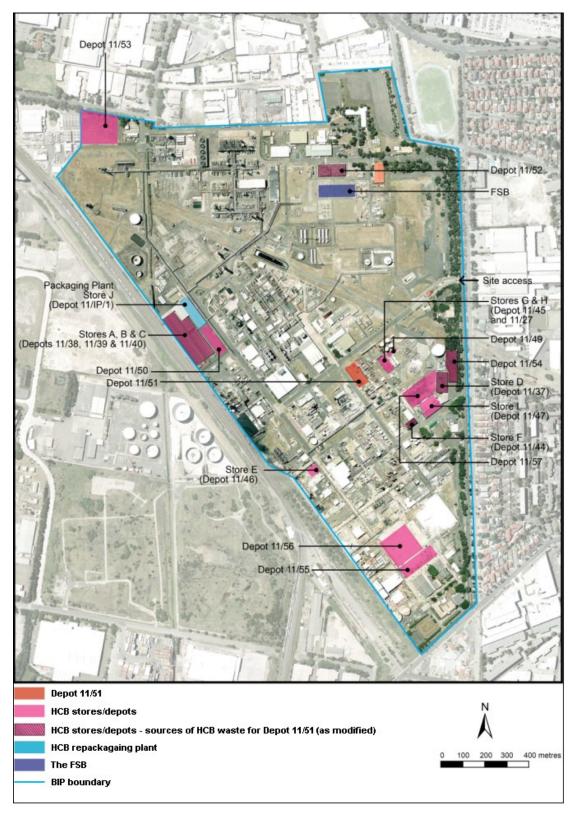


Figure 1 Sources of HCB waste for Depot 11/51

This process would involve lowering densities of HCB waste stored at Depot 11/54 and Stores D and F. As shown in Figure 1.1, these stores are amongst the cluster of stores/depots closest to residential land uses on Denison Street. The Proposal entails moving the waste to a central location in the BIP and removes a substantial volume of HCB waste from storage at these locations.



Transport of these drums of HCB waste would involve transporting shipping containers from those depots and stores to Depot 11/51 for unloading. As discussed in section 1.1.2 below, transportation of these shipping containers will also be entirely on internal roads and involve controlled movement using a 25 tonne forklift, as has been previously used on Site.

1.2 Risks

1.2.1 Potential for contamination of used shipping containers

Submissions: City of Botany Bay Council

The report fails to outline the steps or process of managing and treating the shipping containers if contamination is found. As a precautionary measure, Council recommends a plan be adopted for the treatment of contaminated shipping containers.

As identified in the Report, the Proposal would make available a number of shipping containers currently located at Depot 11/51 and used for storage of drums of HCB waste. The drums of HCB waste stored in these shipping containers were repackaged and tightly sealed at the HCB Waste Repackaging Plant. As stated in section 4.2.5 of the Report, no HCB leakage is anticipated given it is packaged as dry solid waste in secured export approved drums. As such, no contamination of the shipping containers is expected.

As stated in section 3.1 of the Report, all shipping containers would be inspected prior to return to their suppliers. In the event that contamination of the shipping containers has occurred, Orica commits to thorough decontamination and testing of any affected container. As appropriate, Orica would implement a plan to treat any contaminated shipping containers identified as part of the Proposal.

1.2.2 Change in risks from altered ongoing storage arrangements

Submissions: DP&I

What is the increase in risk (if any) from the storage of a higher volume of HCB?

City of Botany Bay Council

[T]he [Report] fails to consider the cumulative impact of the additional HCB waste to be stored at Depot 11/51 (from 6,000 tonnes to 11,000 tonnes) and [its] proximity to nearby residential areas

WorkCover NSW

The modification application should have compared the risks with the current arrangement against the risks after the proposal is actioned

The Proposal involves a consolidation of waste storage at Depot 11/51 and does not entail an overall increase in HCB storage on Site above approved levels. Whilst Depot 11/51 would store a greater volume of HCB waste, there is no known additional risk associated with higher concentrations of repackaged HCB waste.

As identified in the approved PHA for Major Project 06_0028, risks associated with ongoing storage of HCB at all storage locations would occur under two main scenarios: transport of HCB materials to storage locations and risks from impingement on storage locations by external fires on HCB stores. The qualitative risk assessment conducted for the approved EA did not identify these scenarios as potentially significant hazardous incidents. A subsequent qualitative risk assessment worksheet submitted for Modification 4 identified hazards from external fires and sabotage or terrorism as of medium risk. Risks from external fire can be appropriately managed by maintaining separation distances from flammable/combustible inventories and application of cooling water from adjacent hydrants. Risks from sabotage or terrorism can be appropriately managed using screening of employees as per current Orica practices for potentially hazardous materials, and maintaining existing site security practices.



The Further Independent Review: Orica HCB Waste Stockpile — Safe Interim Storage and Destruction (Independent Review Panel 2006) identified the most extreme (and most unlikely) risk associated with proposed storage as arising from a fuel tanker or aircraft crash at the Orica site. That report indicates that the risk from such an event is proportional to the amount of fuel released, and is not linked the amount of HCB waste stored at that location. Furthermore, Section 6.5 of the approved PHA for Major Project 06_0028 reiterates that consolidating storage across the site reduces the locations in which such an event may occur, and therefore the risks of an extreme event.

The proposed storage arrangements are considered advantageous because they would provide ease of access to those drums of HCB waste stored at Depot 11/51. At present, storage of drums of HCB waste tightly packed shipping containers restricts access for detailed inspection. The proposed storage arrangements for Depot 11/51 would provide greater accessibility to drums of HCB waste for ongoing inspection and monitoring. The proposed storage arrangements are considered advantageous in that they would provide for ongoing inspection and monitoring of the integrity of the drums storing the HCB waste. As such, the Proposal is considered likely to entail an overall reduction of risk over current storage arrangements.

In summary, it is intended that this Proposal would allow Orica to more readily identify and rectify any issues that may arise from ongoing storage of HCB waste at the BIP.

1.2.3 Requirement for a PHA

Submissions: City of Botany Bay Council

Council requests Orica prepare and submit for detailed assessment a separate preliminary hazard analysis addressing the above issues, prior to project approval... as the [Report] fails to consider the cumulative impact of the additional HCB waste to be stored at Depot 11/51 (from 6,000 tonnes to 11,000 tonnes) and [its] proximity to nearby residential areas.

WorkCover NSW

Noted need for greater information on ongoing storage phase.

As discussed in the Report, preparation of a separate PHA is not considered to be necessary for the Proposal, in accordance with *State Environmental Planning Policy No 33—Hazardous and Offensive Development*. As discussed in the Report, the *Hazardous and Offensive Development Application Guidelines: Applying SEPP 33 ('Applying SEPP 33')* indicates a PHA may be required for a modification in two broad situations:

- where it is 'considered potentially hazardous or potentially offensive in its own right'; and
- where it is 'not potentially hazardous in [of itself], but interact[s] with the existing facility in such a way that cumulative hazards (or offence) from the facility may be significantly increased'.

It is considered that the Proposal does not require preparation of a PHA in either situation.

Firstly, this modification is not 'considered potentially hazardous or potentially offensive in its own right'. The Proposal involves a change to the HCB waste storage configuration at the BIP, but does not involve additional overall waste generation or storage over existing approved levels (Major Project 06_0028). As stated above at section 1.2.2, whilst Depot 11/51 would store a greater volume of HCB waste, there is no known additional risk associated with higher concentrations of repackaged HCB waste. The HCB to be stored at Depot 11/51 is dry waste and is not inflammable. Depot 11/51 is approved for the storage of high level HCB waste, and would continue to be suitable for storage of such waste.



Secondly, this modification does not 'interact with the existing facility in such a way that cumulative hazards (or offence) from the facility may be significantly increased'. The Proposal is intended to reduce cumulative hazards by providing greater access to drums of HCB waste stored on Site for ongoing inspection and monitoring purposes. As noted above, storing HCB waste in higher concentrations at Depot 11/51 would not raise risk levels within the BIP. The levels of risk associated with the Proposal are consistent with those involved in the ongoing storage of HCB waste at the BIP.

The Proposal also entails lowering densities of HCB waste stored at Depot 11/54 and Stores D and F, which are amongst the closest stores/depots to residential land uses on Denison Street. These stores are presently used to store low level HCB waste. It is anticipated that the consolidation of storage entailed in the Proposal would reduce risks to residents of Denison Street.

Finally, it is noted that Modifications 3, 4 and 5 did not require preparation of a PHA. As discussed in this letter, those modifications involved the transportation of HCB within the BIP and establishment of new HCB stores.

1.3 Post approval arrangements

1.3.1 City of Botany Bay Council requirements

Submissions: City of Botany Bay Council

City of Botany Bay Council has requested the following conditions of consent, which are addressed in turn:

 Restriction of the storage of the repackaged HCB waste at Depot 11/51 for a maximum of 5 years, or as specified in a suitable management plan submitted addressing the storage and management of waste on-site.

The Proposal is designed to provide a viable and suitable solution for short to medium term storage and handling of HCB waste at the BIP. Orica accepts this submission.

A plan to be adopted for the treatment of contaminated shipping containers.

In the event that contaminated shipping containers are identified, those shipping containers would be subject to thorough decontamination and testing. As appropriate, Orica would implement a plan to treat any contaminated shipping containers identified as part of the Proposal.

 Restriction of truck movements during the construction period between 10am to 3pm (Monday-Friday) and 10am to 1pm (Saturday).

Based on the small number of off-site truck movements proposed during the 10 week construction period, it is considered unnecessary to restrict truck movements to these times. Construction contractors would be briefed to observe road rules, and where practicable, avoid travelling during before- and after-school peak times.

Construction Environmental Management Plan (CEMP) to be prepared for the construction phase.

Orica accepts this submission and would prepare a CEMP as stated in section 4.2.7 of the Report.

1.3.2 WorkCover NSW requirements — consultation

Submissions: WorkCover NSW

WorkCover NSW has requested the following condition of consent:



Prior to commencement of any work relating to the proposal, the proponent must consult with the Major Hazard Facilities Team of WorkCover in relation to any revisions and updates to be made to the Safety Report and supporting documents in order to comply with the Work Health and Safety Regulation 2011, specifically in response to clauses 363, 534 and 559 or 569 of the Regulation.

Orica accepts this submission.

1.3.3 Environment Protection Authority — requirements monitoring

Submissions: EPA

EPA have requested that Orica continues to ensure appropriate management methods, controls, inspections and monitoring is applied to fugitive air emissions from HCB stored on Site.

Orica is mindful of its requirements under EPL 2148, and would continue to carry out all licensed activities as currently undertaken at the BIP. Of note, dry waste storage of HCB does not generate fugitive air emissions. Inspection and monitoring undertaken at the BIP is sufficient to inspect and monitor issues arising from storage of HCB waste under the Proposal.

2. Conclusion

This letter has been prepared to clarify a number of outstanding issues and provide additional information requested in submissions from the DP&I, City of Botany Bay Council, EPA, and WorkCover NSW, regarding the Report for the proposed Modification 6 of Major Project 06_0028.

As stated in the Report, the Proposal is considered consistent with all relevant planning and environmental legislation and will result in minor or negligible environmental impacts that will be confined to the Site. The risk associated with the Proposal is minimal and in line with continued HCB waste storage operations at the BIP.

Having regard to the Report and this letter, it is therefore recommended that approval is granted to the modification of project approval 06 0028 described in the Report.

Yours sincerely

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