

ORICA BOTANY

CAR PARK WASTE ENCAPSULATION
REMEDIATION PROJECT – PROJECT
APPROVAL 06_0197
MODIFICATION 6 – RESPONSE TO
SUBMISSIONS

01 OCTOBER 2015



Orica thanks the Department of Planning and Environment, City of Botany Bay Council, and the Environment Protection Authority for their feedback on the Proposal, and appreciates the opportunity to address the matters raised. The following table summarises the responses to each matter. Where applicable, updates to the Proposal application and supporting material have been made.

To meet some of the comments provided and add clarity, a naming convention has been applied to the revised Proposal application and this Response to Submissions. These are:

- Existing stockpiles of validated material, being
 - Stockpile A, and
 - Stockpile B; and
- Destinations for reuse of the validated material, being
 - Destination A (spread and compacted material),
 - Landscaped Mound B, and
 - Landscaped Mound C.

Item	Department of Planning and Environment – 8 September 2015	Orica response
1	Please provide a plan which shows both the trees that Council has approved for removal and the additional trees that are proposed to be removed. Have the trees under proposed stockpile B already been approved for removal?	<p>There are no trees situated on the proposed Landscape Mound B.</p> <p>The vegetation visible from the aerial photos in this location are small grasses and shrubs that have grown on the second stockpile of validated material (Stockpile B), established during the soil treatment stage of the Car Park Waste Encapsulation (CPWE) Remediation. The soil was subject to hydromulching in 2012 as erosion and sediment control.</p> <p>Stockpile B will be subject to works to allow it to remain in its current location as a permanent landscaped mound (Landscape Mound B). The works include:</p> <ul style="list-style-type: none"> ▪ Placement of material surplus to the spreading and compaction of the main stockpile; ▪ Construction of retaining walls and battering; and ▪ Revegetation. <p>Figures showing the extent of the:</p> <ul style="list-style-type: none"> ▪ area where vegetation clearing has already been approved under DA/486/2010; and ▪ area where further clearing is required under this Proposal (Modification 6) <p>have been included in Annexure B of the revised Proposal.</p>
2	Please provide details of any proposed landscaping.	<p>Following construction, the Proposal Area will be incorporated into a landscape services program. The service includes inspection, watering, reseeding and planting, trimming and snipping on a regular basis. The Landscape Plan is under development. A draft has been provided to the Department separately. The current plan is as follows.</p> <p><i>Destination A</i></p> <p>The spreading and compaction of the main stockpile of validated material (Stockpile A) will occur on Destination A. Destination A will have retaining walls installed, and sections of</p>

		<p>battered edges that will be turfed with Kikuyu grass which will be maintained under the aforementioned Landscape Plan. No additional landscaping is necessary for this portion of the works. As the Department is aware, Orica is currently negotiating divestment conditions with an interested party on the land referred to as Destination A, being Part Lot 104 DP 1192400 (a figure has been provided to the Department separate to this response). Any future works and development, including landscaping, shall be managed by the new owner and is separate to this Proposal.</p> <p><i>Landscaped Mounds</i></p> <p>Landscaped Mound B will be timber edged and mass planted with the following shrubs:</p> <ul style="list-style-type: none"> ▪ Acacia Longifolia ▪ Acacia Saligna ▪ Allocasuarina Glauca ▪ Leptospermum Laevigatum ▪ Melaleuca Armillaris ▪ Melaleuca Stypheloides <p>Landscaped Mound C will be turfed with Kikuyu grass.</p>
3	Can you confirm how many heavy vehicle movements are expected, particularly in relation to the ENM.	<p>Approximately 6000m³ of virgin excavated natural material (VENM) will be brought to site to overlay the spread and compacted validated material at Destination A. This is to</p>
4	How much ENM will be brought to the site?	<ul style="list-style-type: none"> ▪ meet the expectations of the Accredited Site Auditor responsible for the area; and ▪ assist in stabilisation. <p>It is proposed to use truck and dog vehicles to deliver the VENM. This will require approximately 500 vehicle movements in total, over the space of approximately 1 month (subject to weather and project schedule). This equates to approximately 25 truck movements per day. These volumes are well within the typical flows of the local area. Orica maintains that the potential traffic impact on the overall traffic volumes in the local area is negligible.</p>

5	How will the batters be stabilised? Please describe the proposed erosion and sediment control during operation, will the sediment basin be used for construction only?	<p><i>Destination A</i></p> <p>The spreading and compaction of the main stockpile of validated material (Stockpile A) will occur on Destination A and will be overlaid with VENM to assist in stabilisation.</p> <p>Batters will be grassed (as described in item 2). The Destination A erosion and sediment controls applied during construction, including the sediment basin, shall remain in place for surface water management, and erosion and sediment control, until future development plans are finalised. Future development on the land, once divested (Destination A on Part Lot 104 DP 1192400), shall be managed by the new owner and is separate to this Proposal.</p> <p><i>Landscaped Mounds</i></p> <p>Following construction, the Landscaped Mounds and batters will be subject to landscaping (inspection, planting, turfing, inspection and maintenance) as described in item 2 or stabilised with retaining walls.</p>
6	Section 4.2.1 states that approximately 35,000 cubic metres of the validated material will be used in this location. Please clarify which location you are referring to.	The spreading and compaction of the 35,000m ³ of validated material (situated at Stockpile A) will occur on Destination A. The validated material will be cut from this stockpile and spread outwards, overlaid with approximately 250mm of VENM and compacted.
7	Can you please label the stockpiles on any plan as landscaped mounds.	Figures have been updated accordingly.
8	Can you please re-label Figure 5 to show the existing BIP boundary and the proposed BIP boundary.	Figures have been updated accordingly.
9	What is the proposed size of the landscaped	Subject to final design, the proposed sizes are as follows:

	mounds? From a visual perspective, can you explain what will be seen from adjacent viewing points.	<ul style="list-style-type: none"> ▪ Landscaped Mound B – 140m long x 50m wide x 5m high ▪ Landscaped Mound C – 120m long x 50m wide x 2.2m high. <p>Finished works will sit:</p> <ul style="list-style-type: none"> ▪ below the height of the landscaped setback area running along Denison Street; and ▪ at approximately the same level as Corish Circle. <p>Limited views of batters and retaining walls will exist from the Botany Industrial Park access gates (Gate 3 on Denison Street and Gate 4 on Corish Circle). Otherwise the Landscaped Mounds will not be visible from the street.</p>
10	How will ongoing onsite stormwater management be affected?	<p>Orica does not anticipate the BIP stormwater management to be affected. Existing infrastructure and practices will be retained, with the addition of the sediment basin which will remain in place for surface water management, and erosion and sediment control, until future development plans are finalised.</p> <p>Any future development on the land to be divested (Destination A on Part Lot 104 DP 1192400), shall make considerations for stormwater management and be subject to a separate proposal.</p>
Item	Department of Planning and Environment – 9 September 2015	Orica response
11	Have you consulted with Qenos regarding the relocation of the internal road? If so, are they amenable to the relocation?	Orica has consulted with Qenos on the Proposal, including the relocation of the internal private access road. Qenos is satisfied with the Proposal.
12	For which lot has Orica entered into a contract of sale? Could you identify it on a plan?	Orica is currently negotiating divestment conditions with an interested party on the land referred to as Destination A, being Part Lot 104 DP 1192400. A figure has been provided to the Department separately.

13	Can you confirm that noise limits in the Project Approval would not be exceeded.	<p>The noise limits of the Project Approval are the same as specified by Environment Protection Licence (EPL) 2148 and will be built into the Environmental Management Plan (EMP) for the works.</p> <p>The noise limits will be complied with.</p>
14	The EA states that construction is permissible any time as long as it is not audible at the nearest accepted receptors. Please note that the conditions require endorsement by the Director-General (now Secretary) for any out of hours construction.	<p>Orica recognises the construction hours permissible under the Project Approval and EPL 2148 and will build these into the EMP for the works. No construction works will occur outside of the standard hours specified without prior endorsement of the Director-General (now Secretary). The Proposal has been updated accordingly.</p>
Item	Department of Planning and Environment – 21 September 2015	Orica response
15	The Department will need to see written consent from Qenos, permitting work occurring on their land, prior to finalising determination.	<p>Written consent has been received from Qenos. This has been provided to the Department separately.</p>
Item	Department of Planning and Environment – 23 September 2015	Orica response
16	Please provide a justification for why the modifications are proposed.	<p>The proposed modification allows the re-use of validated CPWE materials as was first considered (and approved) in the original Project Consent. The material would otherwise be sent to landfill or occupy valuable BIP land as stockpiles permanently.</p> <p>For these reasons the relocation of an internal private access road and the installation of retaining walls and other minor works described in the Proposal are required, as is the removal of some vegetation, primarily with short or very short safe useful life expectancy. The impacts, however, are considered minor in what is otherwise an overwhelmingly positive</p>

		<p>Project and, therefore, the Proposal is considered to be in the interest of the local community and the public.</p> <p>Having regard to this assessment, it is therefore recommended that the Department approve this Modification subject to relevant conditions of consent.</p>
17	Please show the proposed hardstand on the figure showing the proposal.	A bitumen and concrete hardstand area already exists to the north of Landscaped Mound B. Orica will be carrying out repairs to the existing surface as a maintenance activity. The area has been shown in Figure 4 of the Proposal.
18	Please describe exactly how much soil is being placed in each landscaped mound.	<p>Due to the irregular shape of the current stockpiled materials, accurate estimates can only be provided. Stockpile A is approximately 50,000m³ and Stockpile B is approximately 5,000m³. The indicative distribution of the proposed reuse of the validated material will be as follows:</p> <ul style="list-style-type: none"> ▪ Approx. 35,000m³ will be used on Destination A; ▪ Approx. 15,000m³ will be used on Landscaped Mound B; and ▪ Approx. 10,000m³ will be used on Landscaped Mound C.
19	Why Orica is relocating the road?	Orica is relocating the internal private access road to allow for continued access between two primary internal private access roads without the need to use Denison Street, once the material is placed in Destination A.
20	Is the road a key access point for the rest of the BIP, who currently uses it?	<p>The internal private access road (both existing and proposed) is a secondary road linking two primary internal private access roads without the need to use Denison Street.</p> <p>The two primary internal private access roads are 10th Avenue (running the north-east to south-west direction from Gate 3 on Denison Street), and 11th Street (running in an east west direction from Gate 4 on Corish Circle).</p> <p>The internal private access road is used by staff and contractors working on site.</p>

		Figure 5 of the Proposal has been updated to better present access.
21	Why are you seeking to adjust the boundary of Lot 104 DP 1192400?	There is a change in elevation approximately 8.6 metres west of the current proposed western boundary of Lot 104 DP 1192400 (shown in Appendix D of the Project Approval) that lends itself to being a natural boundary between lots.
22	What are the reasons for the particular placement of landscaped mounds?	<p>Orica and Qenos have considered land within the BIP and the suitability of certain parcels for current or future use, in relation to existing infrastructure and operations on site.</p> <p>The Proposed locations for the Landscaped Mounds are not part of any future development or operational plans and are compatible with existing BIP operations and storage facilities.</p>
Item	City of Botany Bay Council – 7 September 2015	Orica response
23	<p>4.2.3 – Landscaped mounds</p> <p>This section discusses new landscaped mounds along the western portion of the Proposal Area. These have not been indicated in Figure 3 as specified in the document.</p>	Figures have been updated accordingly.
24	<p>4.3 – Refinement of lot boundaries</p> <p>The following amendments should be made:</p> <p><i>"Consistent with the topography of the area it is proposed to move the northern portion of the western boundary of Lot 104 DP 1192400, 8.6 metres to the west. This is presented in Figure-6-5. "</i></p> <p><i>"The revised boundary readjustment plan, showing the proposed refinements to the lot boundaries, is</i></p>	References to Figures have been reviewed and updated.

	<i>presented in Figure 7 6.</i>	
25	<p>4.4 – Modification to the conditions of the project approval</p> <p>The following amendment should be made:</p> <p><i>"Omit the boundary readjustment plan contained in Appendix D of the Project Approval and insert a new plan, as presented in Figure 7 6"</i></p>	References to Figures have been reviewed and updated.
26	<p>5.2.3 – Traffic, Transport and Access</p> <p>In 2011, Council's submission to Modification 4 of the Orica Botany Car Park Waste Encapsulation Remediation Project, Council requested that "Orica prepare and submit for approval a Transport Management Plan addressing the use of the public road network for the transportation of HCB-contaminated soil from Southlands and Asciano property. "</p> <p>However, Council's records do not indicate any Transport Management Plan has been submitted. Accordingly, the applicant should submit a construction traffic management plan and a comprehensive Transport Management Plan including a detailed traffic impact assessment on the surrounding road network, internal road and parking management plan for Council's review and approval.</p>	<p>Further investigations into the potential HCB-contaminated soil from Southlands and Asciano properties, undertaken after the granting of Modification 4, determined that treatment was not required. Hence, the materials were not relocated to the CPWE Directly-heated Thermal Desorption Plant. Note that all investigation and remediation activities have been overseen by a NSW Accredited Contaminated Sites Auditor.</p> <p>The current Proposal does not involve movements on the public road network other than the delivery of VENM, as described in items 3 and 4, and the arrival and departure of workers on site.</p> <p>It is proposed to use truck and dog vehicles to deliver the VENM. This will require approximately 500 vehicle movements in total, over the space of approximately 1 month (subject to weather and project schedule). This equates to approximately 20 truck movements per day. Approximately 10 workers will be employed for 6 months, resulting in an additional maximum of 10 passenger vehicle movements per day. These volumes are well within the typical flows of the local area and as such the potential traffic impact on the overall traffic volumes in the local area is negligible.</p> <p>Orica respectfully considers that the preparation of a Transport Management Plan and detailed traffic assessment is not appropriate.</p>

<p>27</p>	<p>5.2.4 – Vegetation management</p> <p>DA/486/2010 for the staged subdivision of No. 16-20 Beauchamp Road, Hillsdale permitted the removal of 85 trees on the subject site to allow for the subdivision and use of the site for industrial purposes. The subject modification seeks removal of a further 48 trees.</p> <p>It is not clear in the report as to why the additional 48 trees require removal, specifically the trees on the Denison Street frontage, as shown in the plan by Cardno YN210058-SK019(A) Rev.07 appended to the Arborist report. The report discusses boundary adjustments but only the northern portion of the western boundary is indicated (Figures 5 and 6). It also mentions the spreading and compaction of soil but it is unclear how this directly impacts the additional 48 trees.</p> <p>As reported in the previous application for the subdivision, the retention of trees in the Denison Street and Corish Circuit setbacks is imperative to protect the amenity of adjacent land uses at this interface with residential properties and community land uses, including the Hensley Athletic Field located only 20 metres from the site. 42 trees (# 92-133) are located on the inner (site) edge of this important tree</p>	<p>Orica has endeavoured to minimise the environmental impact of the Proposal as far as practicable.</p> <p>The reuse requires the bulk of the material to be spread and compacted over the allocated area (Destination A), which is currently vegetated. The practice involves excavators, dozers and rollers, and cannot be completed without the identified vegetation being removed.</p> <p>Orica agrees with Council that retention of the setbacks is an important aspect in maintain local amenity. Consistent with Council’s position, over 1000 trees are proposed to be retained and protected in the landscaped setback area adjacent to Corish Circle and Denison Street.</p> <p>Figures showing the extent of the:</p> <ul style="list-style-type: none"> ▪ area where vegetation clearing has already been approved under DA/486/2010; ▪ area where further clearing is required under this Proposal (Modification 6); and ▪ the landscaped setback area adjacent to Corish Circle and Denison Street <p>have been included in Annexure B of the Proposal.</p> <p>The arboricultural impact report was prepared in accordance with <i>Australian Standard 4970-2009: Protection of Trees on Development Sites</i> and consists of two parts:</p> <ul style="list-style-type: none"> ▪ Part 1. What is there and how significant is it (that is, what is worthy of retention exclusive to the proposed works); and ▪ Part 2. What is the impact of the works (hence trees may rate in Part 1 as being worthy of retention but identified as being removed in Part 2). <p>The arboricultural impact report states that only 6 trees have high landscape significance and 46 trees have short or very short safe useful life expectancy (and a further tree is dead). It further recommends that the trees not subject to removal be protected, Orica will ensure this occurs through the implementation of an EMP.</p>

	<p>buffer zone. Whilst it is acknowledged 20 of these 42 trees are in poor condition or of low-moderate landscape significance, 22 of the 42 trees are of high significance and assessed as being suitable for retention. Given the condition and location of the 22 trees suitable for retention and the insufficient information provided in support of their removal, their removal is not supported.</p>	<p>In the context of the objectives of the Three Ports SEPP General Industrial zoning, the CPWE Remediation Project, and this Proposal, individually and as a whole, being:</p> <ul style="list-style-type: none"> ▪ the provision of services and employment for port related activities; ▪ the remediation of underutilised contaminated land; ▪ the sustainable practice of on-site beneficial reuse of previously contaminated material (now validated); and ▪ the retention of over 1000 trees in a landscaped setback area adjacent to Corish Circle and Denison Street <p>the loss of 6 significant trees is a minor impact in an otherwise overwhelmingly positive development.</p>
Item	City of Botany Bay Council – 9 September 2015	Orica response
28	<p>5.2 - Environmental Impacts</p> <p>It is noted that prior to works commencing, Orica will prepare a specific environmental management plan (EMP) addressing impacts that may arise during the proposed works, including air pollution, noise and vibration, sediment and erosion control, contaminated land management, waste management, and incident management and response. It is requested that Council be provided a copy of the EMP for comment when prepared.</p>	<p>Orica will provide Council with a copy of the EMP once prepared.</p>
29	<p>5.2.6 - Contaminated Land</p> <p>It is noted that the proposed modification involves the spreading and compaction of treated soil. It is</p>	<p>Noted.</p>

<p>understood that the treated soil is the soil excavated from the remediation of the Car Park Waste Encapsulation (CPWE) site for which approval was granted. A Site Audit Statement and Site Audit for the Car park Waste Encapsulation, Botany Industrial Park (SA309/2) dated June 2014 has been completed. According to this Site Audit, remediation of the CPWE site was carried out in accordance with the Remediation Action Plan (RAP). The excavated soils were classified in accordance with the RAP for beneficial reuse on the site. A commercial/industrial indoor exposure scenario determined that the soil is suitable for the construction of buildings.</p> <p>The RAP provided three sets of criteria: reuse criteria, treatment criteria and disposal criteria. The reuse criterion was the most stringent and the Site Audit considered that the material stockpiled on the site meets this criterion with no limitations for its reuse on the site or elsewhere on the Botany Industrial Park for commercial/industrial purposes. This material has been stored in the Surplus Soil Stockpile Area (SSSA) in the location of the proposed modification works. Accordingly, no objections are raised to the Orca Botany Car Park Waste Encapsulation Remediation Project - Project Approval 06_ 0197 (Modification 6) subject to the submission of an EMP prepared to the satisfaction of Council prior to works commencing.</p>	
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Item	Environment protection Authority – 9 September 2015	Orica response
30	The EPA has provided in-principle support to previous Orica proposals for appropriately re-using treated and validated soil from the Orica Car Park Waste Encapsulation Remediation Project (for example, in our letter to Planning dated 3/7/11).	Noted.
31	This in-principle support was contingent on Orica obtaining all necessary planning approvals and obtaining written advice from relevant Accredited Site Auditors on the suitability of the re-using the treated soil at the proposed re-use sites.	<p>Noted. Orica has obtained written advice from Accredited Site Auditors on the suitability of the re-using the validated material at the proposed re-use sites. They are as follows.</p> <ul style="list-style-type: none"> ▪ Site Audit Statement and Report, Car Park Waste Encapsulation, Botany Industrial Park (CM Jewell and Associates Pty Ltd). ▪ Site Audit Statement and Report, Eastern Portion of Botany Industrial Park (Ramboll Environ, February 2012). ▪ Stockpile Assessment, Eastern Portion of Botany Industrial Park (Ramboll Environ, 7 July 2015).
32	Part of the Modification 6 request (Mod 6 request) aims to address the issue of ensuring the relevant planning approval is in place for the soil re-use.	Noted.
33	The EPA understands from Orica that the relevant Site Auditors have confirmed the suitability of re-using the treated soil at the locations shown in Mod 6 request. However, the EPA recommends that this is confirmed before any planning approval is granted.	Noted. Refer response to item 31. These have been separately submitted to Department of Planning and Environment accordingly.

34	If a planning approval is granted and there is appropriate Site Auditor confirmation, the re-use of the treated material as proposed in the Mod 6 request is considered appropriate.	Noted.
35	Orica has correctly identified in the Mod 6 request that there are Environment Protection Licensing implications around the re-use of material at Stockpile C. The EPA considers that these implications can be appropriately resolved.	Noted.
36	The wording proposed by Orica for amending Condition 7 of the Project Approval could be simplified to clarify what is and is not permitted.	<p>Orica agrees with the EPA's recommendation and proposes the following wording.</p> <p>Omit condition 7 and insert a new condition 7 as follows:</p> <p><i>Disposal of surplus validated material from the project is only permitted:</i></p> <ul style="list-style-type: none"> ▪ <i>on land described in Schedule 1; or</i> ▪ <i>on land within the Botany Industrial Park as described in the EA, which is owned by Orica or which written consent has been given by the owner; or</i> ▪ <i>at a licenced landfilling facility that can lawfully receive the surplus validated material.</i> <p>Written consent has be received from Qenos. This has been provided to the Department separately.</p>
37	Insofar as the EPA's regulatory responsibilities are concerned, the activities proposed in Mod 6 can be appropriately managed using the current conditions of Orica's Environment Protection Licence (#2148)	Noted.