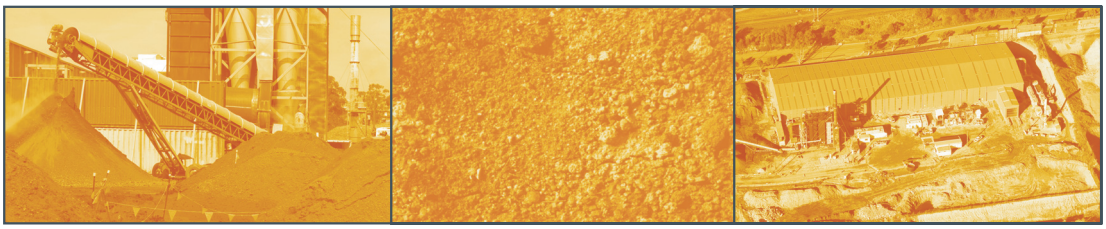

a p p e n d i x i

agency responses

NSW HEALTH

ENVIRONMEN TAL HEALTH BRANCH

H06/7492

Mr Ricardo Prieto-Curiel
Critical Infrastructure and Spec ial Projects
NSW Department of Planning
GPO Box 39
Sydney NSW 2001

Dear Mr Prie to-Curiel,

R.e : NSW Health Requirements for Orica's Remediation of Car Park Waste Encapsulation (CPWE) Site in the Bota ny Industrial Park, Botany Bay Local Government Area

NSW Health has reviewed the Environm ental Assessment Scoping Report for the Remediation of Car Park Waste Encapsulation, Botany Industrial Park. To assess the impact of the Remediation proposal on public health, NSW Health has identified the following matters which should be addressed in the Environmental Assessment for the project:

1. GENERAL

The Environmental Assessment should prov ide detailed information on the proposed excava tion and pre-treatm ent building (the shed).

1. The shed is described in the scoping docum ent as a *sealed, enclosed shed*. Does this mean it is airtight? If so, how will worker and machinery movements be undertaken?
2. If the shed is not airtight, how will gaseous contaminant s be controlled once the car park capsule is cracked?
3. What emission control systems will be p laced on the shed?
4. What will be the emergency procedures (e.g. exhaustin g) for the shed should a build up of gaseous contami nant become excessive and what will be the impacts of these actions?

Detailed info rmation should also be provided on the Direct Thermal Destruction process and the Bioremediation process, specifically addressing the range of chemicals to be treated, with detail of chemical pathways to end products, as well as existing evidence of the effectiveness of this technology to achieve these pathways.

The contaminated material should be fully characterised, including the presence and concentrations of any heavy metals.

Soil remediation goals and propos ed validation criteria should also be described.

NSW Department of Health
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PO Box 798 Gladesville NSW 1675
Building 11, Gladesville Hospital
Victoria Road, Gladesville NSW 2111
Telephone (02) 9816 0373 Fax (02) 9816 0377
Website www.health.nsw.gov.au

2. AIR

Potential health risks due to air impacts should be undertaken using the risk assessment approach as specified in the EnHealth guidelines *Environmental Health Risk Assessment - Guidelines for assessing human health risks from environmental hazards.* Upon undertaking the risk assessment, agreement on the following issues should be obtained from NSW Health before the Environmental Assessment is lodged with the Department of Planning.

- Contaminants of concern – justification for the exclusion / inclusion of specific chemicals in the risk assessment, along with a toxicological profile of these chemicals needs to be provided to NSW Health. Where chemicals may be present in low concentrations but have a similar mode of action to other chemicals present at the site it is our expectation that they are retained in the risk assessment and a cumulative toxicological effect estimated.
- Chemical parameters used in the risk assessment
- Exposure parameters / scenarios – a multi-exposure pathway risk assessment model should be employed to account for inhalational and ingestion (via dust deposition and homegrown vegetable) pathways. Acute impacts of chemical exposures should be considered for both children and adults. The contribution of chemical exposures during the remediation to lifetime exposure for chemicals with chronic or carcinogenic effects should also be considered.
- Receptors considered should include acute impacts on users of Hensley Athletic Field, in addition to acute and chronic impacts on people in nearby residences.
- Assessment modelling – Air modelling should be undertaken in accordance with Department of Environment and Conservation *Approved Methods for Modelling and Assessment of Air Pollutants in NSW.* This should include impacts from the DTD plant or bioremediation emissions and associated equipment as well as impacts from the carpark excavation. Concentrations of gas and dust emissions at identified receptors should be presented separately and additively with background levels.
- Background exposure of the community should be assessed by representative monitoring of current concentrations of criteria pollutants and chemicals of concern in the air, in addition to incorporating any known or expected sources of the chemicals of concern during the remediation process that may contribute to acute or lifetime exposure, or in the future that may contribute to lifetime exposure. This would include expected contributions to local air pollution associated with proposals such as HCB repackaging or the GWTP.
- The potential for odour impacts at Hensley Field and residential locations should also be assessed.

3. NOISE

Noise modelling should be undertaken in accordance with the NSW DEC Industrial Noise Policy and compared to the Industrial Noise Criteria. Background noise at the Hensley Field and at the most impacted residential locations should be assessed by monitoring

during a number of representative periods (weekday, weekend, evening, and nighttime for residential). Expected contributors to noise during the remediation process should also be identified and included in the modelling of noise impacts, this may include noise from the HCBD repackaging proposal or other new activities that are likely to commence in the area during the remediation.

Modelled Noise impacts from this proposal should include:

- Operational noise
- Construction noise
- Traffic noise

Special attention should be focused on residential night time noise impacts and noise impacts on users of Hensley Field.

4. TRAFFIC SAFETY

A traffic plan should be included in the Environmental Assessment that addresses the safety concerns for children entering and exiting Hensley Field. Justification for the need to route heavy vehicles onto Cornish Circuit and alternatives routes for these heavy vehicles should be presented.

5. WATER

The Environmental Assessment should provide detail of the proposed monitoring of groundwater and surface water impacts, and include effective management strategies to minimise any further water contamination.

6. ENVIRONMENTAL MANAGEMENT PLAN

The Environmental Assessment should include details of an environmental management plan that includes a monitoring proposal for air and noise emissions.

The Health Department contact for this issue is Mr. Geoffrey Richards, Senior Policy Officer (Toxicology) on 9816 0534 or grich@doh.health.nsw.gov.au .

Yours sincerely,

Dr. Michael Staff
Director
11/08/06

Our Ref: WA/3(4)/7

City of Botany Bay

10 August 2006

Manager
Critical Infrastructure and Special Projects
Department of Planning
GPO Box 39
SYDNEY NSW 2001

Dear Mr. Jeffries,

Re: Environmental Assessment for the Remediation of Car Park Waste Encapsulation Botany Industrial Park.

In regard to your letter regarding the Environmental Assessment (EA) for the Remediation of the HCB Car Park, Council provides the following response.

Council has reviewed the Environmental Assessment Scoping Report prepared on behalf of Orica by HLA-Envirosciences Pty Ltd, July 2006, for the Remediation of the HCB Car Park Waste Site and provide the following comments/deficiencies with the scoping report with specific reference to the Direct Thermal Desorption (DTD) proposal: -

1. **Air Emission Controls and Monitoring**
2. **Energy Requirements & Contingency plan for loss of power**
3. **Management of the eastern embankment of the car park site**
4. **Remediation/Management of contaminated groundwater**
5. **Disposal of non treatable waste within the encapsulation**
6. **Other Issues**

1. Air Emission Controls and Monitoring

Monitoring of emissions and reporting these to stakeholders including the community is an important part of the remediation project. Council suggests that this be achieved by the development of standard procedures and timeframes for reporting any non compliance issues to the HCB Community Participation and Review Committee. This communication protocol should be developed and communicated for comment prior to commissioning of the Plant. This is important in light of several GTP licence limit exceedances for dioxins that occurred earlier this year.

As a consequence of the difficulties encountered during commissioning of the Groundwater Treatment Plan Council suggests a minimum of fortnightly dioxin emission testing during the commissioning and initial processing phase of the plant's operation.

Due to ongoing community concern regarding cumulative air emissions from the Orica operations these levels should be monitored and reported through an agreed air monitoring communications strategy.

The area within the vicinity of Corrish Circle including the HCB Car park site has ongoing dust issue which has at times affected users of the Hensley Athletic Field open playing fields as well as nearby offices. This situation should be taken into consideration in the development of the Environmental Assessment.

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