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27 August 2008

Catylis Pty Ltd
Level 15, 124 Walker Street
NORTH SYDNEY NSW 2060

Attention: Mr Bill Jenner

Dear Sir

**ADDITIONAL CONTAMINATION ASSESSMENT
AND REMEDIATION REQUIREMENTS
PROPOSED RESIDENTIAL DEVELOPMENT, CATHERINE HILL BAY**

1. INTRODUCTION

Further to the Preliminary Contamination Assessment (PCA) at the site, as described in report 39663C of November 2007 (Ref 1) we provide clarifications regarding the suitability of the site for residential development. The suitability of the site for residential development is conditional on additional assessment and appropriate remediation. The steps required to meet these conditions have been summarised so that they can form part of a statement of commitments to be undertaken in the future as part of the development.

It is understood that Areas A and B, as defined in our previous report (Ref 1) are proposed for development.

2. BACKGROUND

The results of the preliminary contamination assessment indicated the following:

Area A

The results of assessment in Area A indicated that there was minimal industrial development on the site, with primarily residential uses on the more elevated northern parts of the site. The stockpiling of coal and general placement of filling occurred on the lower southern parts of the site.

The results of preliminary sampling and analysis of the filling on the southern portions of the site indicated the absence of gross contamination. Detailed assessment of this part of the site was recommended prior to construction.

Area B

Area B contains the former Pit E, which included heavy industry. Potential contaminants identified in this area include fibro sheeting, and various fill materials. The results of preliminary sampling and analyses indicated the presence of the following contaminants which exceed residential land use criteria:

- TRH was detected in several test pits, generally towards the centre of the site where the most dense industrial parts of the former Pit E site were located;
- Elevated lead, PAH and Benzo(a)pyrene were also detected at one of these test pits;
- A thin layer of black slag was identified near the north-east corner of the existing mine building. Black slag was only observed in this location and hence may be a localised occurrence;
- The results of laboratory analysis also indicated the presence of bonded asbestos in fibro sheet fragments and asbestos fibres in soil one test pit and for one surface sample.

Additional sampling and testing was recommended across Area B to further delineate contamination 'hot spots'.

3. REMEDIATION FOR RESIDENTIAL LAND USE

The results of the PCA indicated that site remediation will be required in Area B, concentrated on the former Pit E site, with possible more localised remedial works in Area A.

Remediation, where required, would include the preparation of a remediation action plan (RAP), appropriate excavation and removal/disposal/capping of contaminated soil, followed by validation sampling and analysis to the requirements of SEPP 55 and NSW DECC. Immobilisation of the black slag material by a licensed contractor may be required prior to disposal.

Based on the known and potential contaminants in parts of the site and the ability to remediate the above listed contaminants, Douglas Partners is satisfied that the land will be suitable, after remediation, for residential purposes. The land is required to be remediated before the land is used for such a purpose and the following must be undertaken as part of any application for land subdivision to ensure that the site is suitable for residential development with respect to contamination:

- Detailed contamination assessment for Areas A and B in accordance with SEPP 55 and NSW DECC guidelines;
- Development of a Remediation Action Plan based on the results of the detailed contamination assessment and verification through the NSW DECC site auditor process undertaken;
- Appropriate remediation conducted to removed identified contaminants exceeding the DECC land use criteria;
- Deleterious materials and possible associated surface impact removed;
- Validation testing and verification;
- Validation of asbestos contamination should be conducted by a qualified asbestos consultant;

- Waste classification to DECC guidelines of any materials destined for off-site disposal at a licensed landfill.

Yours faithfully
DOUGLAS PARTNERS PTY LTD

Reviewed by:

Will Wright
Principal

Stephen Jones
Principal

REFERENCES

1. Douglas Partners, "Preliminary Contamination and Geotechnical Assessment, Proposed Residential Subdivision, Catherine Hill Bay", Report 39663C-01, Nov 07