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23 November 2007

Mr Nick Jackman
 Senior Development Manager
 Rose
 51 Riley Street
 WOOLLOOMOO NSW 2011

Dear Mr Jackman,

Re: State Significance Rezoning Application for Catherine Hill Bay, NSW (the "Site")

I refer to my letter of 17 November 2005 and to your subsequent request for my independent contaminated land management technical opinion in relation to the above Site, and specifically:

- Whether, consistent with Clause 6 (1) (b) of SEPP 55, the Planning Authority may be able to be satisfied that "the land will be suitable, after remediation, for all the purpose for which the land in the rezoning concerned is permitted to be used".

Please note that I am obliged to clearly state that the information provided below should not be construed as an "audit" under the provisions of the Contaminated Land Management Act, 1997 (as amended).

In preparing this opinion I have considered the following key documents:

- HLA Envirosciences Pty Ltd (2004) Catherine Hill Bay report N5014201_RPT01, prepared for LakeCoal Pty Ltd, dated 10th August 2004.
- HLA Envirosciences Pty Ltd (2004) Moonie Colliery report N5014201_RPT03, prepared for LakeCoal Pty Ltd, dated 25th October 2004.
- Asquith and DeWitt (2007) State Significance Site Study, Catherine Hill Bay and Gwandalan, prepared for Coastal Hamlets Pty Ltd and Lakeside Living Pty Ltd, dated July 2007.
- NSW Department of Planning (1998) State Planning Policy No. 55 – Remediation of Land, NSW Government.
- NSW Department of Environment and Conservation (2006) Contaminated Sites Series: Guidelines for the NSW Site Auditor Scheme (second Edition), dated April 2006, NSW Government.

N4086101_Ltrrpt_23nov07

By way of background, the HLA investigations were specifically developed to address Mine Site Lease conditions and were not for detailed site characterisation and redevelopment planning purposes. In my opinion, this HLA work was entirely appropriate for the mine lease and closure planning purposes.

Notwithstanding the different objective of the HLA investigations in relation to the Catherine Hill Bay Sites, and using all of the available information, it is possible to conclude that the potential for significant contamination to exist at the site is low and remediation is possible.

The HLA October 2004 report for the Moonee Colliery was prepared specifically for mine closure purposes and the furthermore, the report specifically concludes (Section 9):

"The need for remediation is determined largely by the proposed future land use and the form that land rehabilitation might take."

A review of Asquith and DeWitt (2007) identified the following preferred landuse scenarios:

- Conservation purposes;
- Recreational / open space purposes; and
- Various low to medium density residential uses.

These proposed landuses are shown diagrammatically in Figure 10 of Asquith and DeWitt (2007). From a land contamination and remediation perspective, these proposed landuses would be considered to be generally consistent with the following generic landuses:

- Conservation / recreational / open space uses = "HIL-E", relating to parks, recreational open space, playing fields including secondary schools; and
- Various low to medium density residential uses = "HIL-A", relating to residential areas with gardens and accessible soils (home grown produce contributing less than 10% fruit and vegetable intake, no poultry).

Based on these proposed landuses and the contamination identified in the HLA investigations, certain remediation would be required to make the land suitable for the proposed purposes.

Furthermore, despite the two HLA Reports' purpose being specifically for mine closure planning, they can be used as a reasonable indicator of the nature and extent of potential contamination at the subject Site and therefore whether remediation may be required. The identified contamination was isolated, consisting of asbestos containing materials (ACM), mineral fibre, lead paint, and some heavy metal and hydrocarbon hotspot contamination. To be expected, coal wash materials were also identified in specific areas of the Site. Based on the available information, remediation of contamination of the nature and extent identified is practical. Such remediation would be relatively straight forward, to make the Site suitable for the more sensitive landuse purposes identified above.

Additionally, while the extent of the remediation would depend upon the nature of the future landuse, it is possible to conclude from the available data, that the scale of remediation, even for the most sensitive landuse, is likely to be low and as such, under normal conditions would constitute "Category 2 Works" under SEPP 55, depending upon the provisions of other relevant environmental planning instruments. Supplementary investigations would be appropriate to confirm this conclusion.

Due to the nature and extent of impacted materials identified at the Site, a remedial action plan (RAP) would be appropriate to address these identified impacts.

Due to the nature of the Site and its remediation, and consistent with SEPP 55, it may be appropriate to **appoint an independent government accredited Site Auditor** to review the proposed works and, at the completion of remediation, provide a site audit statement (SAS) and site audit report (SAR), confirming the suitability of the Site for its intended purposes.

I would be pleased to provide further information in support of this review and associated conclusions and recommendations, at your request. Please contact me on 02 4911 4900 or 0413 833 811.

Yours sincerely,

HLA-Envirosciences Pty Limited (HLA ENSR)



Ross McFarland
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Contaminated Site Services