



## Environment, Climate Change & Water

Our reference:  
Contact:

DOC11/17821  
Andrew Mitchell, 9995 5620

Tony Farrell  
Director City Strategy  
Lake Macquarie City Council  
Box 1906  
HRMC NSW 2310

Dear Mr Farrell

### **Guidance on Lead Contamination in Soils at North Lake Macquarie**

I refer to an email from Gabriele Calcagno dated 7 April 2011 regarding the above matter. I understand that you are seeking advice that may assist Council in relation to contemporary guidance documents on contamination, how the contamination status of a property should be recorded on the s149 planning certificate and what degree of investigation or remediation would be required from a proponent in the development assessment process. These are very broad questions to which we can only provide general advice. In preparing this response I draw your attention to emails from our Andrew Mitchell to your Gabriele Calcagno on 10 February 2011 and 5 May 2011 providing comments on Council's policies.

We have reviewed your Policy for Managing Contaminated or Potentially Contaminated Land in Lake Macquarie (the "Policy") and your DCP1 section 2.1.13. We consider that the Policy is well thought-out and offer the below advice to improve clarity and consistency with other guidance on contamination.

#### Guideline for Lead in Soils

The health-based investigation level for lead in soils for residential land use is 300 mg/kg. This figure was derived for the National Environmental Protection (Assessment of Site Contamination) Measure 1999 (the "NEPM"). The draft NEPM 2011 has confirmed this investigation level and relevant approved guidelines in NSW such as the Duty to Notify Guidelines and the Site Auditor Scheme Guidelines also use this investigation level.

An investigation level is not a remediation goal or a safety threshold. Rather it is a level above which further investigation is warranted. Site specific acceptance or remediation criteria may be derived for particular circumstances and are generally higher than the investigation levels.

The 2007 Project Approval by the Department of Planning and Infrastructure (DoPI) for the remediation of the former Pasminco smelter site at Cockle Creek requires the preparation and implementation of a Lead Abatement Strategy (LAS) to address potential lead contamination in surface soils from historical dust deposition at some 2000 residential properties within the Lead Contaminated Survey Grid (the "Lead Grid") surrounding the former smelter site. These properties were identified in the 1995 Development Consent for the smelter expansion and the related Commission of Inquiry.

The LAS was prepared by Pasminco in consultation with the Office of Environment and Heritage (OEH), NSW Health, DoPI and Council. The table of lead levels, in particular the thresholds of 1000 mg/kg of lead in grassed surface soils and 300 mg/kg of lead in bare soils was based on the nature of the contamination, potential exposure pathways, the high level of community education and awareness and the recognised fall in blood lead levels following the closure of the smelter. NSW Health asserted and it was subsequently demonstrated, that the major source of elevated blood lead in the adjacent community was due to the contemporary lead emissions from the smelter, rather than historic deposition. For this specific contamination issue, we consider that the modified remediation threshold put forward by Pasminco, when considered in the context of the LAS, is an appropriate measure to reflect possible risk from exposure to lead dust in surface soils in North Lake Macquarie.

#### Lead Slag

With respect to lead slag, we note that in the order of millions of tonnes of slag has been used by Council, utilities and residents for a variety of purposes in the broad area of Lake Macquarie for around 100 years. The LAS does not include assessment or management of lead slag except for the offer by Pasminco to accept slag, at no charge, from community members while the onsite containment cell is open. We encourage the community to avail themselves of this opportunity. Our Waste Management Section would be pleased to work with Council officers on developing a regional solution to emplacement of lead slag should Council or members of the community wish to remove these materials from their land. You may contact Mr Chris McElwain on 9995 5649 to discuss this matter further.

#### Notification Requirements

The Guidelines on the Duty to Report Contamination provide that a site owner does not need to report contamination where it has already been recognised and is being managed by other means, such as through a planning process under the *Environmental Planning and Assessment Act 1979*. In the case of the LAS, the residential properties within the Lead Grid are specifically referred to within the 2007 Project Approval and thus we consider them adequately covered.

#### Planning Framework

State Environmental Planning Policy No. 55 (SEPP 55) provides a framework for considering contamination in planning decisions, including appropriate recording and use of information. The SEPP 55 Guidelines were issued in 1998. A public consultation draft of the revised SEPP 55 Guidelines was published in November 2008. The revised guidelines have not yet been finalised by DoPI. We note that Council has developed its Policy with consideration of both the 1998 Guidelines and the 2008 draft Guidelines.

In updating or clarifying the Policy we recommend that you have regard to:

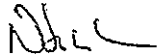
- Whether there should be a restriction on land use due to actual or potential contamination notated under s149(2), or whether there should be an advisory on contamination notated under s149(5).
- Considering the future use of the land in the context of the current use and whether the proposed use would actually *increase* the risk of harm from the contamination.
- How to maintain the consistency of any restriction in the context of complying development under the NSW Housing Code.
- Whether Council holds contamination sampling results for the specific site under consideration.
- Consistency with the LAS for properties within the Lead Grid.
- Information on lead slag that may be present throughout the City, not just in the Lead Grid.

In relation to the redevelopment of residential lands within the Lead Grid we would anticipate that lead concentrations in undisturbed soils at the site would remain largely unchanged and the concentrations in disturbed soil may be likely to decrease, due to mixing with clean soils or capping with new soils, turf or pavement. During such a development within the Lead Grid, exposure of workers and those in the immediate vicinity should be considered through the application of good contemporary OH&S practices for dust control during demolition activities. OEH would be happy to work with Council, NSW Health and WorkCover on the development of an appropriate guidance relating to the OH&S considerations.

For properties within the Lead Grid we consider that SEPP 55 is likely to be triggered for rezoning applications and development where there is a change of land use. There is also the potential for SEPP 55 to be triggered for sensitive land use (such as residential) development of a site where actual testing has shown the lead concentrations to be above the LAS threshold but abatement was not undertaken.

Should you wish to discuss this matter further please contact Andrew Mitchell on telephone 9995 5620.

Yours sincerely

 3/6/2011

**NIALL JOHNSTON**  
**Manager Contaminated Sites**  
**Environment Protection and Regulation**

cc: Felicity Greenway, Department of Planning and Infrastructure  
Dr Craig Dalton, Department of Health