

Parsons Brinckerhoff Australia Pty Limited

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Dear Emma

Sydney Water North Bondi property, 21-23 Niblick Street, North Bondi, NSW

On behalf of Sydney Water Corporation (Sydney Water), Parsons Brinckerhoff Australia Pty Ltd (Parsons Brinckerhoff) tested soil and groundwater at the park located at 21-23 Niblick Street, North Bondi, NSW.

Sydney Water currently owns the park and plans to sell it. The purpose of the environmental testing was to provide a more detailed understanding of potential soil and groundwater contamination at the park to assess whether any contamination clean-up was required prior to its sale.

Results showed that a soil sample collected at a depth of 0.2-0.3 metres below ground level at the centre of a small area in the north portion of the park had an elevated concentration of lead. The concentration of lead in this small area exceeded industry guidelines for soils in open spaces such as parklands.

The industry guidelines adopted for the site for open spaces and residential land are based primarily on the ingestion of soil – i.e., by eating the soil or breathing its dust. It is unlikely that skin contact with the lead impacted soil could lead to any health problem.

The exposure factors on which the industry health guidelines for lead in open space are based on the following factors:

- Duration of exposure: A child has been exposed for 6 years.
- The rate of ingestion of soil per day: A child will ingest 50 mg of soil per day at the site.
- The frequency of exposure: The frequency of exposure is 365 days per year.
- Time spent outdoors on site each day: Children will spend 2 hours on site each day.

It should be understood that the lead industry guideline is deliberately set using very conservative exposure factors and using a child which is considered the most sensitive receptor. However, it is reasonable to assume that a person would not have spent all or even most of his or her time exclusively in the small impacted area of the park. Also, the guideline assumes that an individual meets all the exposure factors – that is, for a risk to eventuate, a child would have to play every day of the year in the small impacted area of

the park for 2 hours or more per day, and would have to eat an average of 50 mg of soil per day for at least 6 years. It is very unlikely that any individual would meet all these exposure requirements. In addition the site has grass cover which reduces exposure. Exposure to a person using the park is therefore greatly minimised.

For those reasons it is considered highly unlikely that the small area of the park with the lead impact would have caused an unacceptable health risk to those using the park.

It was recommended that the small area of lead-impacted soils be remediated. Excavation of impacted soil and disposal to an appropriately licensed off-site waste facility was chosen as the preferred remediation approach.

During the assessment of the park one piece of bonded asbestos cement and three small asbestos fibre bundles were identified in soil samples submitted for laboratory analysis. The quantities reported were well below the industry health guidelines and met the guidelines for open space and residential housing with gardens.

Yours sincerely



Adrian Heggie

Principal Scientist & Risk Assessor
Contaminated Land Management
Parsons Brinckerhoff Australia