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# **Macdonaldtown Triangle (Former Gasworks Site) Human Health & Ecological Risk Assessment**

- Final
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# 1 Executive Summary

## Background

This report presents the results of a human health and ecological risk assessment for the Former Gasworks Site of the property known as the Macdonaldtown Triangle, Erskineville, NSW (hereafter referred to as 'the Site'). The risk assessment has identified the potential issues that should be addressed in respect to contamination on the Site. Ground contamination that is present at the neighbouring former cleaning sheds site has been addressed in a separate risk assessment prepared by SKM (Macdonaldtown Triangle, Former Cleaning Shed Site, Human Health & Ecological Risk Assessment, August 2005).

The main tasks that have been undertaken as part of this assessment are as follows:

- An assessment of site conditions, which involved an evaluation of the main features of the site and its history;
- A review of previous investigations;
- Development of a site investigation methodology and quality assurance and quality control protocols;
- A preliminary assessment of the risks posed by ground contamination at the Site and identification of environmental investigation levels for assessing soil contamination, groundwater contamination, aesthetics, and soil-gas quality;
- A site-specific health and ecological risk assessment, which has involved hazard identification, toxicological assessment, human health exposure assessment and ecological risk characterisation; and
- Provision of conclusions and recommendations.

The Former Gasworks site along with the adjacent Former Cleaning Shed site is referred to as "The Macdonaldtown Triangle" and forms a 1.53 ha parcel of land. The Site is identified as Lot 50 in Deposited Plan 1001467 in the Local Government Area of City of Sydney Council, Parish of Petersham and County of Cumberland. The Site is generally bounded by railway and rail related activities to the north and east, the former gasworks site immediately to the south of the Site and Burren Street to the west.

## Soil Contamination

The site-specific risk assessment involved the assessment of soil contamination data provided by previous investigations together with some additional data that targeted data gaps. The study has found that the fill layer is mainly contaminated with high levels of PAHs and TPH C10-C36 distributed over much of the site. In the fill layer, hot-spots were found to be contaminated by