



during works, activities should immediately cease and advice be sought from a suitably qualified Environmental Consultant.

While remediation of the Cleaning Sheds area, aside from the filling proposed during redevelopment, is not considered necessary, management will be required to ameliorate potential risks during redevelopment, and on an ongoing basis. GHD recommend that an Environmental Management Plan (EMP) is prepared and implemented for the proposed redevelopment works. The EMP should identify potential environmental impacts associated with the works and document measures to be taken to manage these.

In addition, a long-term Site Management Plan (SMP) for the Cleaning Sheds area, post-development, should be prepared in due course. The SMP should address issues associated with the retention of potentially contaminated fill material under the proposed imported soils, and include controls to prevent future exposure to the fill.

If soil material needs to be excavated and removed from the site during construction, materials should be classified, in accordance with the NSW EPA (1999) Guidelines for the *Assessment, Classification and Management of Liquid and Non-liquid Wastes*. It should be noted that the waste classification contained in this report was specifically for the ashy fill material at the site (delineation area) that was understood to potentially require remediation during redevelopment. Topsoil and general clay fill material that is located at the site, and materials in the wider Macdonaldtown Triangle have not been classified.



## 11. Limitation of this Report

This report has been prepared for use by RailCorp, who has commissioned the works. The advice herein relates only to this project and all results conclusions and recommendations made should be reviewed by a competent and experienced person with experience in environmental investigations, before being used for any other purpose. GHD accepts no liability for use or interpretation by any person or body other than the client who commissioned the works. This report should not be reproduced, or amended in any way without prior approval by the client or GHD, and should not be relied upon by any other party, who should make their own independent inquiries.

The extent of sampling of soils and subsequent analysis has been necessarily limited. The soil samples were collected from test pits and therefore may not identify contamination that occurs in unexpected locations or from unexpected sources.

The extent of sampling of soils and subsequent analysis and has been necessarily limited, and has been targeted towards areas where contamination is considered to be most likely. This approach maximises the probability of identifying contaminants; however, it may not identify contamination that occurs in unexpected locations or from unexpected sources.

Further, soil, rock and aquifer conditions are often variable, resulting in non-homogenous contaminant distributions across a site. Contaminant concentrations have been identified at chosen sample locations; however, conditions between sample locations can only be inferred on the basis of the estimated geological and hydrogeological conditions and the nature and extent of identified contamination. Boundaries between zones of variable contamination are often indistinct, and have been interpreted based on available information and the application of professional judgement. The accuracy with which the sub-surface conditions have been characterised depends on the frequency and methods of sampling and the uniformity of sub-surface conditions and is therefore limited by the scope of works undertaken.

This report does not provide a complete assessment of the environmental status of the site, and it is limited to the scope defined herein. Should information become available regarding conditions at the site including previously unknown sources of contamination, GHD reserves the right to review the report in the context of the additional information.



## **Summary Tables of Analytical and Field Results**

Table A     Summary of Analytical Results

Table B     Summary of TCLP Waste Classification Data

Table C     Summary of Analytical Results - Relative Percentage Difference Calculations

**Table A - SOIL**  
**Summary Analytical Results**  
**MacDonaldtown Triangle**



Sample ID	Depth (m)	Date Sampled	Arsenic (total) mg/kg	Cadmium mg/kg	Chromium mg/kg	Copper mg/kg	Lead mg/kg	Mercury (inorganic) mg/kg	Nickel mg/kg	Zinc mg/kg
	PQL <sup>(1)</sup>									
	HL(F) <sup>(2)</sup>									
TP1	0.1-0.3	17/08/05	500	100	0.5	1.0	1.0	0.10	1.0	1.0
TP1	0.5-0.6	17/08/05	9	<1	5.3	130	230	0.17	18	170
TP2	0.0-0.2	17/08/05	9	<1	5.3	81	100	<0.1	16	350
TP2	0.4-0.5	17/08/05	-	-	-	-	-	-	-	-
TP2	0.8-1.0	17/08/05	-	-	-	-	-	-	-	-
TP3	0.2-0.3	17/08/05	<4	<1	1.6	62	66	<0.1	15	120
TP3	0.4-0.6	17/08/05	<4	<1	6.2	43	120	<0.1	22	410
TP3	0.8-0.9	17/08/05	-	-	-	-	-	-	-	-
TP4	0.1-0.2	17/08/05	-	-	-	-	-	-	-	-
TP4	0.3-0.4	17/08/05	-	-	-	-	-	-	-	-
TP4 - Pipe	-	17/08/05	-	-	-	-	-	-	-	-
TP5	0.4-0.5	17/08/05	-	-	-	-	-	-	-	-
TP6	0.7-0.8	17/08/05	-	-	-	-	-	-	-	-
TP6	1.3-1.5	17/08/05	-	-	-	-	-	-	-	-
TP7	0.1-0.2	17/08/05	-	-	-	-	-	-	-	-
TP7	0.4-0.6	17/08/05	-	-	-	-	-	-	-	-
TP7 Asb-1	-	17/08/05	-	-	-	-	-	-	-	-
TP8	0.4-0.6	17/08/05	-	-	-	-	-	-	-	-
TP9	0.7-0.9	17/08/05	-	-	-	-	-	-	-	-
TP10	0.1-0.3	17/08/05	-	-	-	-	-	-	-	-
TP10	1.6-1.8	17/08/05	-	-	-	-	-	-	-	-
TP11	0.5-0.6	17/08/05	-	-	-	-	-	-	-	-
DUP 1	-	17/08/05	20	<1	7.5	160	260	0.19	16	270
DUP 2	-	17/08/05	-	-	-	-	-	-	-	-
DUP 3	-	17/08/05	-	-	-	-	-	-	-	-

<sup>(1)</sup> Practical Quantitation Limit

<sup>(2)</sup> Sensitive Land Use Threshold Concentration, *Guidelines for Assessing Service Station Sites* (NSW EPA, 1994)

<sup>(3)</sup> Health Investigation Level 'F' - Commercial and Industrial : *National Environment Protection Measure (NEPC, 19*

<sup>(4)</sup> NSW DEC document that no asbestos fibres are to be detected in soil.

-	Sample not analysed
ND	Not detected (concentration below practical quantitation limit of testing laboratory)
N/A	Not Available (no threshold available)
24000	Exceeds HL (F) Investigation Level