21 March 2018

AMENDMENT C164 – BRUNSWICK MORELAND INDUSTRIAL LAND STRATEGY (MILS) REZONINGS

ASSESSMENT OF POTENTIAL FOR CONTAMINATION

Image: 1950s Brunswick at Moreland Station (State Library of Victoria)

REPORT

Submitted to:
Richard Tolliday
Senior Strategic Planner
Moreland City Council

rtolliday@moreland.vic.gov.au

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Golder Associates

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1.0 INTRODUCTION

Moreland City Council (MCC) engaged Golder Associates Pty Ltd (Golder) to provide consultancy services to support Amendment C164 – Brunswick Moreland Industrial Land Strategy (MILS) Rezonings. The works have involved the assessment for potential contamination of 16 nominated industrial areas (approx. 138 properties) within the Brunswick Activity Centre (BAC), (the study area).

2.0 PROJECT OBJECTIVE

The primary purpose of the assessment is to identify land within the defined study area, based on the potential for contamination, which should be included in or excluded from the Environmental Audit Overlay (EAO) as part of Planning Scheme Amendment C164 to rezone multiple industrial precincts within the BAC which would allow for sensitive uses.

3.0 APPROACH

The application of the EAO is one of the key considerations associated with the rezoning of industrial precincts. Council needs to carefully consider its obligations under Ministerial Direction No. 1 whilst balancing the interests of development of the City to aid the social and economic prosperity of its community.

In the absence of direct testing data, two key Indicators of Potentially Contaminated Land are:

1) Past industrial use; and

2) Evidence of Filling

The former can be identified in historical aerial photographs and maps. The latter is much harder to identify given most sites are filled. However in areas in the north of Melbourne and in the vicinity of the study area in particular, there are specific areas of quarrying and filling that can be identified from past maps and photos. These are the more important issues when identifying higher risk contaminated sites.

Sites where there has been no history of these two factors, especially those that can be shown to have a documented long history of residential use, would generally represent a “Low Risk” of contamination. These need also to be assessed in context of their surrounds should adjacent Potentially Contaminated Sites impact upon their contamination risk. Such risks posed by adjacent Potentially Contaminated Sites include migration of contamination via groundwater or vapour.

The approach to the contamination assessment has been to identify Potentially Contaminated Sites (High and Medium Risk) and Low Risk sites using a screening methodology. This has been undertaken using a hierarchy of information to find either evidence of past industrial activity or filling (Potentially Contaminated) or no industrial activity (Low Risk).

In undertaking this approach it is noted that a full Phase 1 Contamination Assessment has not been undertaken for each site but rather a review of information to find a reasonable level of evidence to support the position for each property of Potentially Contaminated (and hence requiring an EAO) or Low Risk (no EAO). As a full Phase 1 Contamination has not been completed, where there is uncertainty regarding the status of the site and there is some evidence to indicate that the site could be affected by an offsite source of contamination in particular, in discussion with MCC, a conservative position regarding the application of the EAO has been taken. Ultimately it will be MCC’s obligation as the Responsible Planning Authority to satisfy itself regarding the suitability of the contamination status of the site should the site be redeveloped for a sensitive use.

There are only two recommendations considered within the approach requested for this assessment; no application of an EAO where there is Low Risk of potential contamination and application of an EAO for the remaining sites where the risk of potential contamination either on site or from an adjacent site is not considered to be Low Risk based on the evidence identified or conservatively assumed due to uncertainty. Given this, as a consistent framework was used to assess all sites across the industrial precincts reviewed, some sites that are already used for a sensitive (residential) use, are recommended for application of an

EAO. Management of the implications of such an outcome is beyond the scope of this assessment but require further consideration by MCC.

The adopted process generally is aligned with the methodology established by the Department of Planning and Community Development (DPCD) with Moreland City Council as part of the DPCD Brunswick Industrial Land Rezoning Project (MILUS Pilot Project) in 2010 (refer Section 4.2.2). It is understood that Council decisions regarding the boundaries of an EAO based on this methodology were considered at the time as being the correct interpretation and application of the guidelines outlined in Ministerial Direction No.1 and the General Practice Note on Potentially Contaminated Land (Department of Sustainability and Environment, June 2005).

4.0 SCOPE OF WORK

4.1 MILS Areas Assessed

The study area comprises a total of 16 MILS areas within the Brunswick Activity Centre with a total of 138 properties to be assessed. A summary of the number of properties in each MILS is provided in Table 1.

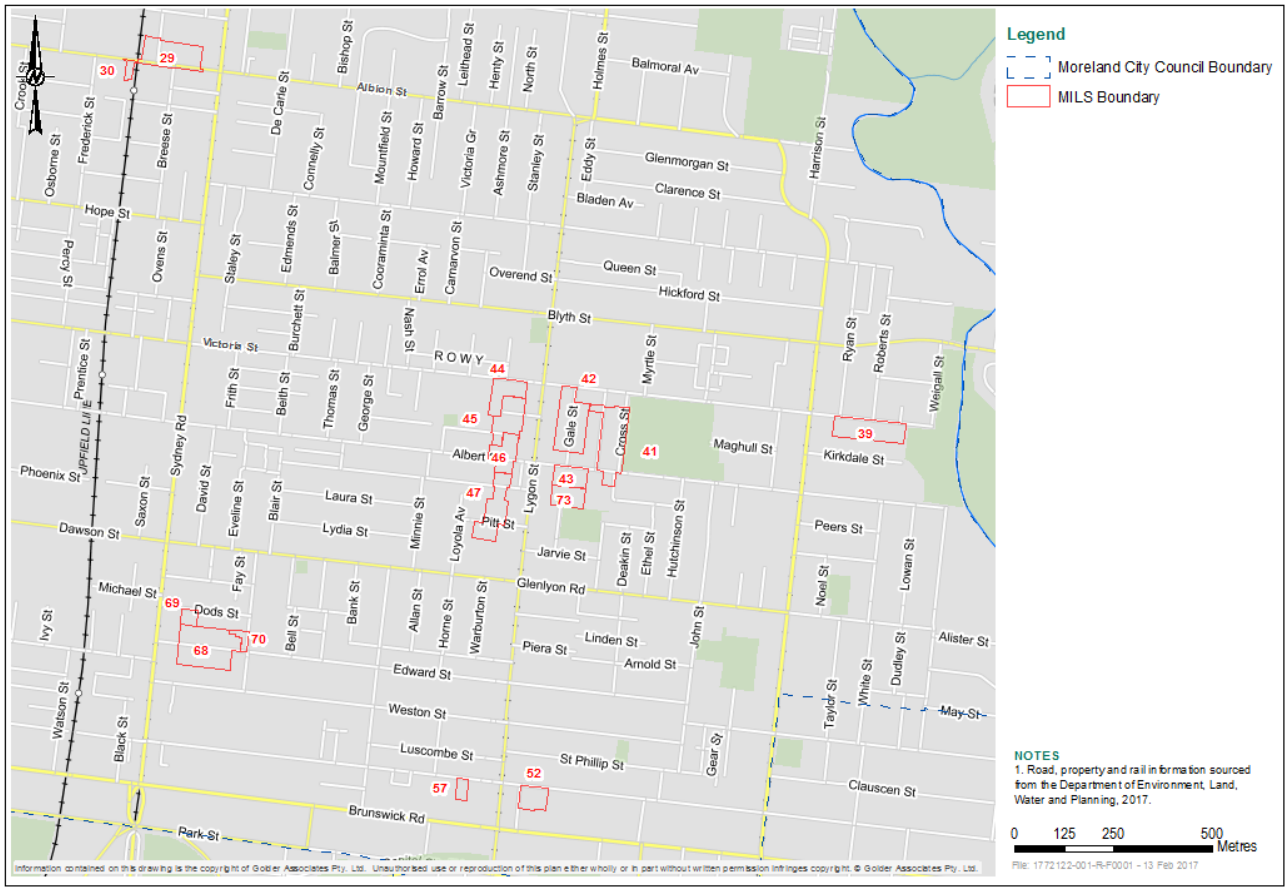
Table 1: Summary of MILS areas

MILS Area Number	MILS Precinct Name and general MILS area location (see map for exact property locations)	Number of properties (incl. residential properties)
29	Name: Tinning Location: 191-219 Albion St, Brunswick - north side of Albion St east of Train line	14
30	Name: Tinning Location: 220 Albion St, Brunswick	1
68	Name: Edward Street Location: Edward Street	14
69	Name: Edward Street Location: Dods St	0*
70	Name: Edward Street Location: Charles St	2
39	Name: Kirkdale Street Location: Victoria St, east of Nicholson St and north of Waste Recycler	14
41	Name: Victoria St/Albert St Location: Between Cross St and Sedgman St	9
42	Name: Victoria St/Albert St Location: Gale St	26
43	Name: Victoria St/Albert St Location: Southern side of Albert St	4
73	Name: Victoria St/Albert St Location: Leinster Grove	1**
44	Name: Victoria St/Glenlyon Road Location: Victoria St (includes 160-164 Victoria St, which is partly in the Residential Zone).	8
45	Name: Victoria St/Glenlyon Road Location: Ann St	13***
46	Name: Victoria St/Glenlyon Road Location: Albert St	6
47	Name: Victoria St/Glenlyon Road Location: Pitt St	13

MILS Area Number	MILS Precinct Name and general MILS area location (see map for exact property locations)	Number of properties (incl. residential properties)
52	Name: Lygon St South Location: Barkly St, east of Lygon St	9
57	Name: Lygon St South Location: Barkly St, west of Lygon	4
	Total Number of properties (approx.)	138

** for the purposes of this assessment 13-15 Edward Street has been included in MILS 68*
*** 20 Leinster Grove is also known as 240-250 Lygon Street*
****for the purposes of this assessment 154-158 Victoria Street has been included in MILS 44*

An overview of the MILS locations is provided in Inset 1.



Inset 1: MILS location overview

4.2 Methodology

4.2.1 Data Sources

To assess the potential for contamination on each property, Golder undertook a screening contamination assessment using the data sources outlined in Table 2.

Table 2: Data Sources used for EAO screening assessment

Source	Type of Information Assessed
Historic Planning Schemes	Historic Planning schemes from 1954, 1968 and 1984 were reviewed for each property to assess the potential historic land use for each property.
Current Aerial Photographs	Current aerial photographs (aerial date 23 December 2016) were sourced from Nearmap Pty Ltd. The current aerial photographs were used in conjunction with visual observations of the property from a site walkover to assess the current land use of each property. Current aerial photographs for each MILS are present as Figure 1.
Historical Aerial Photographs	Historic aerial photographs were retrieved from DELWP for 1931, 1945, 1956, 1968 and 1984. Due to the high resolution of the aerial photograph, 1984 was selected for a detailed review of each property to assess the presence of residential or commercial/industrial buildings at each site. Further historic aerials were reviewed where uncertainty remained after screening of all data sets. The 1984 aerial photograph for each MILS is presented as Figure 2.
MMBW historic maps	MMBW Maps of Brunswick were sourced from the State Library of Victoria and dated from 1904 to 1906 for each MILS. The maps were used to assess the presence of buildings and former quarries on each property. The MMBW maps for each MILS is presented as Figure 3.
Sands & McDougall business directories	Historic property information was sourced from the 1942, 1965 and 1974 Sands and MacDougall street directories. It is noted that there is inherent uncertainty with this information as over time property numbers have changed and the direction of property number has also varied.
Internet searches	Internet searches, such as Google Maps and real estate listings, were conducted to assess the current or recent use of each property.
Council records	Where uncertainty remained after screening of all data sets, council rates records were queried for select properties.
'*Brunswick Major Activity Centre – Environmental Audit Overlay Assessment, 15 December 2011*' by SKM	Thirty five properties within the current study were assessed for contamination risk by SKM in 2011. This conclusions in the report were used to corroborate the information and conclusions in the current project.
EPA Priority Sites	A review of priority sites was undertaken within the vicinity of each MILS. These are sites which EPA has been regulating by Notice due to their known pollution. EPA data in the vicinity of each MILS is presented as Figure 4.
EPA Audits (Section 53X statements/certificates and Section 53V audits[1])	EPA Audits provide useful background data regarding the contamination status of surrounding sites. A review of EPA Audit was undertaken within the vicinity of each MILS. EPA data in the vicinity of each MILS is presented as Figure 4.
EPA Groundwater Quality Restricted Use Zones	A GQRUZ is an area of restricted groundwater use usually declared by EPA following completion of a s53X Audit of a site. The GQRUZ indicates an area of groundwater contamination from the audited site which is polluted and hence restricts the ability of owners within the GQRUZ to install a groundwater well. Review of EPA GQRUZs was undertaken within the vicinity of each MILS. EPA data in the vicinity of each MILS is presented as Figure 4.

1 – Golder notes that only recent s53V audits are publicly available.

In addition to the above desktop screening, all 138 properties were assessed visually from the street front to evaluate:

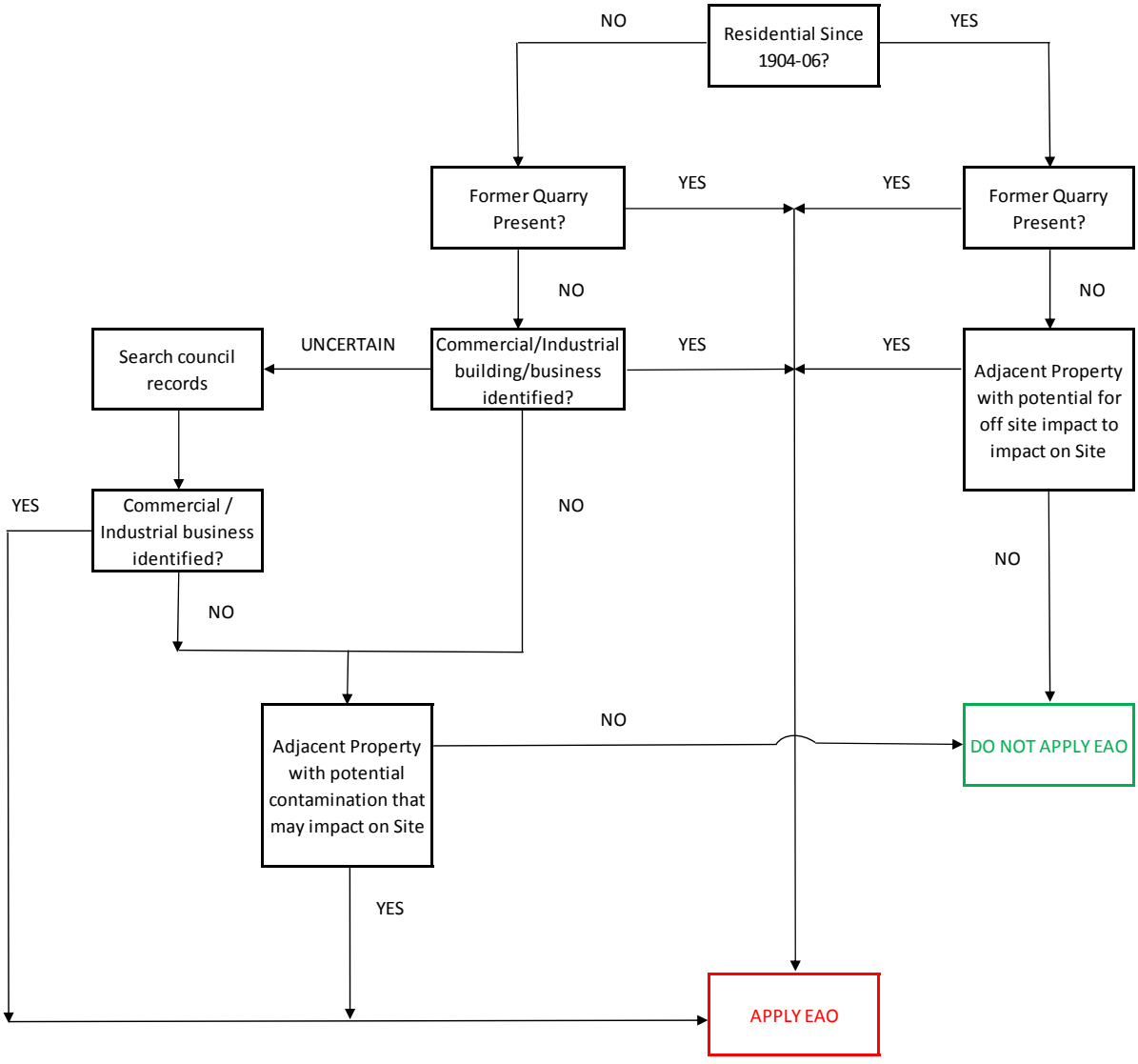
a) Evidence of polluting activities currently or in the past;

b) Evidence of underground storage tanks;

c) Evidence of significant filling

4.2.2 Assessment of Contamination Risk

Based on the results of the desktop assessment and visual inspection each property was categorised for the potential application of an EAO using the decision process shown in Inset 2.



Inset 2: Property categorisation

The outcome of the categorisation process was either a recommendation to apply or not apply an EAO. The process incorporated the methodology outlined by DPCD for the MILUS Pilot Project (2010). That methodology can be summarised generally as follows:

- Step 1 – Visual Inspection

- Step 2 – Research Historic Land Use
- Step 3 – Based on Step 2, confirm those properties that have had a continuous residential or otherwise non-pollution land uses since first developed
- Step 4 – Consider the potential for sub-soil / groundwater contaminants from adjoining properties and the risk of the contamination impacting upon the property.

Hence, it is considered that the methodology adopted by Golder for this assessment is aligned with the DPCD methodology.

5.0 RESULTS OF ASSESSMENT

A summary property sheet for each nominated property is provided in Appendix A and a tabular summary of the outcomes of the assessment is provided in Appendix B. A summary of the outcome by MILS is presented in Table 3 and presented in Figure 5.

Table 3: Summary of Property Categorisation by MILS

MILS Area Number	Total Number of properties	EAO recommended	No EAO recommended
29	14	9	5
30	1	1	0
39	14	11	3
41	9	9	0
42	26	18	8
43	4	4	0
44	7	4	4
45	14	6	7
46	6	4	2
47	13	9	4
52	9	3	6
57	4	4	0
68	14	14	0
70	2	2	0
73	1	1	0
TOTALS	138	99	39

Based on the property assessment, the following results are noted:

- No nominated properties or immediately adjacent properties were found to be on the EPA Priority Sites Register
- No nominated properties were found to have had a Section 53V or Section 53X Environmental Audit completed.

- Of the 35 properties reviewed by SKM in 2011, 23 were assessed by Golder to have the same outcome as the SKM recommendation of no EAO. However, Golder has recommended that 12 properties have an EAO applied which differs from the SKM conclusion. These properties and their reasons for the different recommendation are summarised in Table 4 below.
- There were also a number of existing residential or apparently residential properties where application of the assessment framework has resulted in the recommendation of application of an EAO. These are also outlined in Table 4 along with further information regarding the reasoning used. As outlined in Section 3.0, some of these assessments are subjective based on the high level review undertaken with the final recommendation being conservative where uncertainty remained especially in relation to the potential for contamination from adjacent offsite contamination sources.

Table 4: Properties where EAO Recommendation Differs from SKM (2011) or Existing or Apparent Use is Residential but an EAO Recommended

MILS Area Number	Property Address	Reason for EAO Recommendation
29	201 Albion Street Brunswick 3056	Property has been residential since 1905/6, however between two industrial sites being a car mechanic (197-199 Albion St) and potential historic metal merchants 203 Albion St with potential for groundwater contamination impacting site.
29	6 Ilhan Lane Brunswick 3056	Currently Vacant, however historically appears to have had a commercial/industrial structure present
39	26 Victoria Street Brunswick East 3057	Property has been residential since 1905/6, however it is downgradient of an adjacent industrial property (30 Victoria St) which has been a car mechanic and has the potential for groundwater contamination
39	28 Victoria Street Brunswick East 3057	Property has been residential since 1905/6, however it is downgradient of an adjacent industrial property (30 Victoria St) which has been a car mechanic and has the potential for groundwater contamination
42	9 Gale Street Brunswick East 3057	Property has been residential since 1905/6, however adjacent commercial/industrial land uses have the potential for groundwater contamination.
43	100 Albert Street Brunswick East 3057	Currently residential, with an apparent residential historic use, however adjacent properties (92-96 Albert Street) have potential for groundwater contamination and a GQRUZ is in place.
43	98 Albert Street Brunswick East 3057	Currently residential, with an apparent residential historic use, however adjacent properties (92-96 Albert Street) have potential for groundwater contamination and a GQRUZ is in place.
44	148 Victoria Street Brunswick 3056	Property has been residential since 1905/6, however adjacent to car mechanic (150-152 Victoria St) which is possibly upgradient with potential for groundwater contamination.
45	6 Ann Street Brunswick 3056	Currently residential, with an apparent residential historic use, however adjacent to car mechanic (150-152 Victoria St) which is possibly upgradient with potential for groundwater contamination.
45	8 Ann Street Brunswick 3056	Currently residential, with an apparent residential historic use, however adjacent to car mechanic (150-152 Victoria St) which is possibly upgradient with potential for groundwater contamination.
45	11 Ann Street Brunswick 3056	Current building is of a commercial/industrial nature
47	6 Pitt Street Brunswick 3056	Currently vacant, however historically the property was a quarry
47	7 Pitt Street Brunswick 3056	Currently residential, with an apparent residential historic use, however adjacent property (5 Pitt St) may contain underground tanks with potential for groundwater contamination

MILS Area Number	Property Address	Reason for EAO Recommendation
47	8 Pitt Street Brunswick 3056	Currently vacant, however historically the property was a quarry
47	10 Pitt Street Brunswick 3056	Currently residential, with an apparent residential historic use, however quarry was present in the south east, dry cleaning related business to the south at 145 Glenlyon Road
47	12 Pitt Street Brunswick 3056	Appears residential, however rates cards indicate a previous ground floor factory.
52	126 Barkly Street Brunswick East 3057	Property has been residential since 1905/6, however adjacent and likely downgradient of former car mechanic (128 Barkly Street) with potential for groundwater contamination.
57	134 Barkly Street Brunswick 3056	Currently residential, with an apparent residential historic use, however adjacent uses on are former car mechanic (132 Barkly Street) to the east and former electroplating (140 Barkly Street) and manufacturing (138 Barkly St) to the west leading to potential for groundwater contamination.
57	136 Barkly Street Brunswick 3056	Currently residential, with an apparent residential historic use, however adjacent uses on are former car mechanic (132 Barkly Street) to the east and former electroplating (140 Barkly Street) and manufacturing (138 Barkly St) to the west leading to potential for groundwater contamination.
68	55 Edward Street Brunswick 3056	Currently commercial with an apparent residential historic use, however adjacent to manufacturing landuses at 47 and 59-61 Edward Street that have the potential for groundwater contamination.
68	57 Edward Street Brunswick 3056	Currently commercial with an apparent residential historic use, however adjacent to manufacturing landuses at 47 and 59-61 Edward Street that have the potential for groundwater contamination.

Notes:

1. Properties Shaded have an EAO application recommendation which differs from the SKM (2011) conclusion.

6.0 IMPORTANT INFORMATION

Your attention is drawn to the document titled - “Important Information Relating to this Report”, which is included in Appendix C of this report. The statements presented in that document are intended to inform a reader of the report about its proper use. There are important limitations as to who can use the report and how it can be used. It is important that a reader of the report understands and has realistic expectations about those matters. The Important Information document does not alter the obligations Golder Associates has under the contract between it and its client.

Report Signature Page

GOLDER ASSOCIATES PTY LTD

Scott Ambridge
Senior Environmental Engineer

Ian Kluckow
Principal

SHA/IMK/sha

A.B.N. 64 006 107 857

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