



LEGISLATIVE ASSEMBLY
FOR THE AUSTRALIAN CAPITAL TERRITORY

STANDING COMMITTEE ON PUBLIC ACCOUNTS

Brendan Smyth MLA (Chair), Mary Porter MLA (Deputy-Chair),
Nicole Lawder MLA, Yvette Berry MLA

ANSWER TO QUESTION TAKEN ON NOTICE DURING PUBLIC HEARINGS into

Appropriation (Loose Fill Asbestos Insulation Eradication) Bill 2014/15

Asked by Brendan Smyth MLA on 28 November 2014: Minister for Territory and Municipal Services took on notice the following question(s):

In relation to –

The report prepared by/for Roads ACT in relation to the extension of Nudurr Drive – can the Committee be provided with a copy of the report.

SHANE RATTENBURY MLA: The answer to the Member's question is as follows:–

Please find the requested reports attached.



Approved for circulation to the Standing Committee on Public Accounts

Signature:

Date:

2/12/14

By the Minister for Territory and Municipal Services Mr Shane Rattenbury MLA

Mr Mike Nash
Douglas Partners Pty Ltd
GPO Box 472
West Ryde NSW 2114

Monday, 03 December 2012

Dear Mike,

Re: 816701 – Response to Auditor Comments Regarding Review of the Robson Phase 1 Environmental Site Assessment Report, Nudurr Drive Extension, Gungahlin, ACT

Robson Environmental Pty Ltd (Robson) is pleased to present this response to the comments provided in your memorandum dated 13 November 2012 after the Site Audit review of Robson's recently prepared Phase 1 environmental assessment report titled '*Phase 1 Environmental Site Assessment, Nudurr Drive Extension, Gungahlin ACT 2912*' (Robson reference 816701_EAR_Phase 1_20121019, dated 19 October 2012).

Section 1

Auditor Comment: 'It is stated as fact that the landfill extends beyond Block 789 into the road reserve (also in Table A, Section 2), but no attribution is given, can the evidence be provided/summarised. In addition, can Robson explain why it is, or is not likely (possible) that the landfill extends eastwards or southwards into Block 783, or is this later clarified by survey plan at Drawing 3?'

Robson Response: The extent of the former landfill activity undertaken on Block 516 is shown in the ACTPLA survey plans (Appendix G and summarised in Figure 3), which is supported by the aerial photographs (Appendix B, and discussed in Section 2.4). The following is noted with regards to these primary lines of evidence:

- Landfilling was undertaken in the northwest corner of Block 516. Block 516 was subsequently redesignated, with the majority of the block being identified as Block 789, but with the northwest portion becoming part of the Nudurr Drive Road Reserve. As shown in Figure 3, a portion of the former landfill in the northwest corner of Block 516 now forms part of the Nudurr Drive Road Reserve. As such, the landfill extends beyond Block 789 into the road reserve;
- The landfilling activities are constrained to within Block 516, and do not extend onto the adjacent blocks to the south or east. This is also supported by the other lines of site history enquiries. When Block 516 was redesignated, the

eastern and southern boundaries of the newly assigned Block 789 where such that they coincided with the eastern and southern boundaries of former Block 516, and as such it can be concluded that the former landfill does not extend eastwards or southwards into the adjacent Block 783. The extent of the landfill, and the boundaries of Block 516 and Block 789, are summarised in Figure 3.

Auditor Comment: *'On the last line page 9 – '...the full extent of Block 789, the adjacent Blocks 783 and 789, and...,' should probably read '...the full extent of Block 789, the adjacent Blocks 783 and 788, and...'. In any case please comment.'*

Robson Response: Confirmed. The portion of the sentence should read as '...the full extent of Block 789, the adjacent Blocks 783 and 789, and part of the proposed Nudurr Drive extension to the north of the landfill'.

Section 2.5

Auditor Comment: *'2nd paragraph, disagreement on distances: the search results indicate that '...two privately managed extraction bores....within one km radius...', but then goes on to say that '...search results indicates....WU is located approximately 2 km to the south-east WU907 is located approximately 1.2km to the west...'. Please clarify.'*

Robson Response: The text of the letter for search results provided by the Water Resources Unit (WRU, see Appendix C of the report) indicates that there are two (2) privately managed registered groundwater abstractions bores within a 1 km radius of Blocks 788, 789 and 783, Gungahlin. The figure provided by the WRU however shows that the search area used is not a simple circle shape with a single radius but has lobe portions based upon multiple radii, and therefore the boundary appears to actually extend to distances further than 1km from the site. It is considered that this enlarged boundary area has allowed for the capturing of the two (2) bores which Robson considers to be at distances actually greater than 1 km from the site.

Section 2.6

Auditor Comment: *'Page 19, Block 34 Section 90 is referenced but in a Figure relative to Block 789, but does not show where it is. Please clarify.'*

Robson Response: Please see Figures 3 and 4. Block 34 is located to the north of the landfill area between Blocks 33 and 35, on the southern side of Tinderry Circuit.

Section 7.1

Auditor Comment: *'Page 42, in the section on 'Content of Landfill Material' – this does not mention the loads of putrescible waste which apparently deposited because of the strike at other landfills and which could potentially generate LFG and or contain a different set of contaminants to C&D waste. Please consider this issue and identify any further implications such as LFG'.*

Robson Response: Confirmed – A sentence to the effect of the following should be included at the end of the second last paragraph on page 42 'This includes the

approximately 20 trucks of general household putrescible waste indicated to have been deposited on a day in January 1988 when the other ACT landfills were closed due to a strike'.

The potential for impacts associated with putrescible and other non-C&D wastes, including groundwater and soil vapour impacts, have been identified in Section 7.1 (particularly, third paragraph of page 43), and Section 7.6. Recommendations for the assessment of these impacts were provided in Section 8 (particularly the second dot point recommendation provided on page 51).

Section 8

Auditor Comment: 'Page 51, second major bullet point. This refers to the eastern portion of Block 783 – but presumably means eastern portion of Block 788 when referenced against Figure 7. Please clarify'.

Robson Response: Confirmed – the section of the sentence should read as '..., it is recommended that for the next stage of detailed assessment work (Phase 2 ESA) that the site boundary be defined as Block 789, the east portion of Block 788, the portion of Nurdurr Drive Road....'.

Auditor Comment: 'Does "oval area" on western side of Block 788 (please refer to page 15 i.e. the 1995 aerial photo summary) warrant inclusion in the area to be investigated as part of the revised Audit area? Note that the "oval area" on the eastern side has been included in the revised Audit area but not the western oval area'.

Robson Response: The two (2) oval areas have different appearances and the origins of the two (2) are considered be different. As shown in the 1995 aerial photograph, the west oval area is visible as bare earth likely to be related to vehicle tracks leading to the north and potentially related to the construction activities for Palmerston that were undertaken sometime between the 1985 and the 1995 photographs. In the 1995 photograph, the east oval area has a vegetated and perhaps a slightly lower elevation appearance (based upon shadows and what appear to be puddles of water on the ground surface). Further, the 2002 photograph shows that earthworks have subsequently been undertaken on the east oval area which are likely associated with the earthworks of similar appearance undertaken on the landfill area.

As we are dealing with historic activities undertaken up to 27 years ago (that is, sometime post 1985) it is difficult to be certain, however the available evidence indicates that the west oval feature is likely to be associated with non-landfill activities, and therefore does not warrant further assessment (that is, because it is considered to not be part of the extent of contamination associated with the former asbestos landfill and subsequent activities).

Auditor Comment: 'At some stage appropriate geotechnical testing of the landfill area, particularly in the road reserve, will be required to demonstrate that any existing or future capping is not susceptible to erosion, gullyng, cracking etc. and in general to demonstrate that settlement issues will not come into play which may

results in the exposure of buried wastes, water entrainment or gas emissions through the cap (if present).'

Robson Response: Noted – this Auditor comment will be passed onto the Client for further consideration.

General

Auditor Comment: *'A CSM – would be useful and could take the form an annotated cross section showing potential contaminant sources, pathways and receptors.'*

Robson Response: An indicative cross section of the conceptual site model for the system is provided in the attached Figure 8. Note that Figures 1 to 7 are in the Phase 1 ESA report.

Robson trusts that the provided responses meet the audit requirements. Should you have any additional comments or wish to discuss further then please do not hesitate to contact either Chris Gunton or the undersigned.

For and on behalf of Robson Environmental Pty Ltd

Yours sincerely,



Stuart McElroy
Associate Environmental Scientist

Attachments

Figure 8: CSM Cross-Section

THIS DRAWING IS SUBJECT TO COPYRIGHT. IT REMAINS THE PROPERTY OF ROBSON ENVIRONMENTAL PTY LTD.

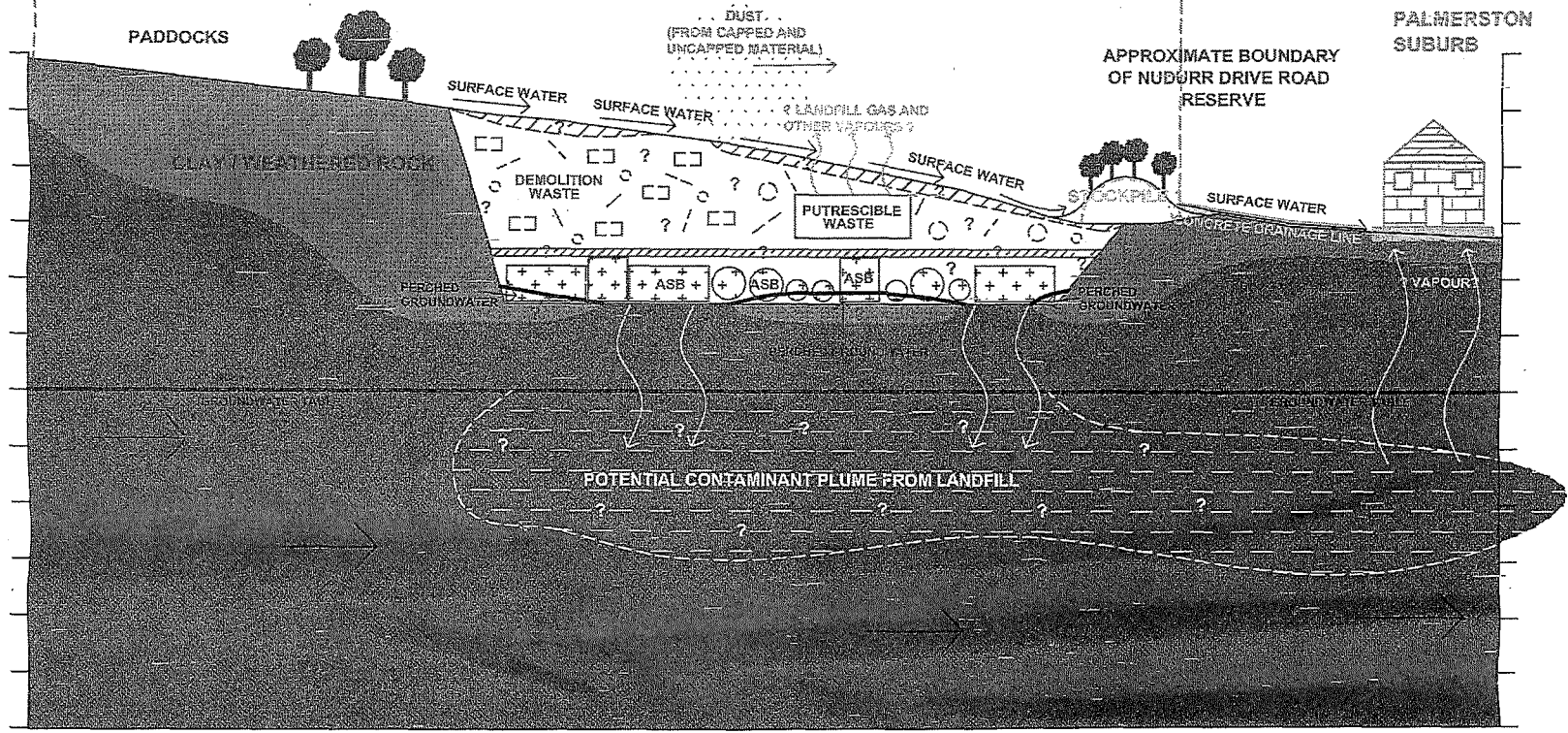
SOUTH

LOOKING WEST

NORTH

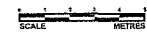
APPROXIMATE BOUNDARY OF FORMER BLOCK 516

EXTENT OF ASBESTOS DUMP (1985 - 1991)



LEGEND

- CLAY / WEATHERED ROCK
- FRACTURED BEDROCK
- CAPPING
- POTENTIAL CONTAMINANT PLUME
- ASBESTOS DUMP
- DEMOLITION WASTE, PUTRESCIBLE WASTE AND IMPORTED SOILS
- NEIGHBOURING SUBURB (PALMERSTON)
- FLORA, FAUNA AND HUMAN VISITORS (RECEPTORS)
- VAPOUR / FLUID PATHWAY
- EXPECTED DIRECTION OF GROUNDWATER FLOW



NOTE: ALL LOCATIONS AND BOUNDARIES ARE APPROXIMATE ONLY

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Client:
 -BROWN CONSULTING (ACT)
 PTY LTD

Project:
 PHASE 1 ESA

Location:
 NUDURR DRIVE EXTENSION
 GUNGAHLIN, ACT, 2912

Drawing Title:
 CONCEPTUAL SITE MODEL

Drawn AR	Signed <i>[Signature]</i>	Date 3.12.12
Checked SM	Signed <i>[Signature]</i>	Date 3.12.12
Rev A	Date 3.12.2012	Revision Details
Project - Drawing No. 816701		Figure No. Rev. 8 A

Approximate Vertical Axis:
1unit : 5m

Approximate Horizontal Axis:
26units = 360m
1unit = 13.8m

Approximate Vertical Exaggeration
= 13.8 / 5
= 2.76

THIS IS ONE INTERPRETATION ONLY
 OTHER INTERPRETATIONS ARE POSSIBLE

Memorandum

To	Stuart McElroy	Robson Environmental	stuartmcelroy@robsonenviro.com.au
cc	Gilbert Ortiz	Brown Consulting	Gilbert.Ortiz@brownconsulting.com.au
From	Mike Nash		Date 13 November 2012
Subject	Statutory Site Audit ACT 004 Contamination Assessment Nudurr Drive Extension, Gungahlin, ACT		Project No. 72812

Stuart

Thank you for the Phase 1 Environmental Site Assessment Nudurr Drive Extension Gungahlin ACT 2912, dated 19 October 2012 received on 2 November. I have reviewed the report and consider the report is quite comprehensive and accordingly have only a few minor comments, as follows:

- **Section 1**
 - It is stated as fact that the landfill extends beyond Block 789 into the road reserve (also in Table A, Section 2), but no attribution is given, can the evidence be provided/summarised. In addition, can Robson explain why it is, or is not, likely (possible) that the landfill extends eastwards or southwards into Block 783, or is this later clarified by survey plan at Drawing 3?;
 - On the last line page 9 – ‘... the full extent of Block 789, the adjacent Blocks 783 and 789, and.....,’ should probably read ‘...the full extent of Block 789, the adjacent Blocks 783 and 788, and...’. In any event please comment.
- **Section 2.5**
 - 2nd paragraph, disagreement on distances: The search results indicate that ‘...two privately managed extraction bores.....within one km radius...’, but then goes on to say that ‘...search results indicates.....WU is located approximately 2 km to the south-east WU 907 is located approximately 1.2 km to the west...’. Please clarify.
- **Section 2.6**
 - Page 19, Block 34 Section 90 is referenced but in a Figure relative to Block 789, but does not show where it is. Please clarify.
- **Section 7.1**
 - Page 42, in the section on ‘Content of Landfill Material’ – this does not mention the loads of putrescible waste which apparently deposited because of the strike at other landfills and which could potentially generate LFG and or contain a different set of contaminants to C&D waste. Please consider this issue and identify any further implications such as LFG.
- **Section 8**
 - Page 51, second major bullet point. This refers to the eastern portion of Block 783 – but presumably means eastern portion of Block 788 when referenced against Figure 7. Please clarify.

- Does "oval area" on western side of Block 788 (please refer to page 15 i.e. the 1995 aerial photo summary) warrant inclusion in the area to be investigated as part of the revised Audit area? Note that the "oval area" on the eastern side has been included in the revised Audit area but not the western oval area.
- At some stage appropriate geotechnical testing of the landfill area, particularly in the road reserve, will be required to demonstrate that any existing or future capping is not susceptible to erosion, gulying, cracking etc. and in general to demonstrate that settlement issues will not come into play which may result in the exposure of buried wastes, water entrainment or gas emissions through the cap (if present).

General

A CSM – would be useful and could take the form of an annotated cross section showing potential contaminant sources, pathways and receptors.

In addition, at some stage it may be prudent to consider arranging for security fencing of the site to prevent fly tipping, particularly in the L shaped area and/or elsewhere on the site. In this regard can Robson clarify whether the description of materials in this area (S. 7.2 page 45) represents recent or historic fly tipping of wastes?

I would suggest that these minor issues are addressed via an addendum letter to the report rather than re-issuing the entire document.

Yours faithfully

Douglas Partners Pty Ltd



J M Nash

Principal

Please note that the above information, interim advice and opinions do not pre-empt the eventual site audit findings nor do they constitute a site audit as defined under the ACT Environment Protection Act 1997 or under Part 4 of the NSW Contaminated Land Management Act 1997.



Mr Jason Watson
SLR Consulting Australia Pty Ltd
Level 1, Unit 7-8, 26-28 Napier Close
Deakin ACT 2600

RE: CONTAMINATED LAND SEARCH

Dear Mr Watson

Thank you for your search form request of 11/07/2012 enquiring about:

Block 789 - Gungahlin

Records held by the Environment Protection Authority (EPA) for the above block(s) indicate the following:

The block is recorded on the EPA's contaminated sites management database and geographic information system.

The site was formerly known as Block 516 Gungahlin. There is an historic asbestos disposal facility located at the site which is recorded on the Environment Protection Authority (EPA) Contaminated Sites Management Database and Geographic Information System as a Landfill site.

The facility was used as a repository for the asbestos collected during the ACT Asbestos removal program in the late 1980's and early 1990's. The asbestos material disposed at the site was double bagged then placed in wooden crates or shipping containers and interned under 3 to 4 metres of clean fill.

EPA records also indicate that uncontrolled filling occurred at the site following the closure of the asbestos internment site.

The ANZECC 1992, Guidelines for the Assessment and Management of Contaminated Sites and the Contaminated Sites Environment Protection Policy (EPP), November 2009 list landfills as activities associated with land contamination.

A limited contamination assessment of part of the site was commissioned by Brown Consulting on behalf of the ACT Planning and Land Authority and undertaken by Coffey Environments in 2010. The assessment was to determine whether the former asbestos disposal site impacted on the proposed Nudurr Drive extension. The assessment found that remedial works were required due to identified impacts.

Information held by the EPA on this site is commercial in confidence. Should you wish to review the above report or other records on the site I would recommend that you contact Mr Gerard Coffey of the ACT Planning and Land Authority on 6207 2471.

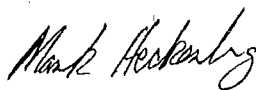
The EPA has not issued any environment protection orders under sections 91C (1), 91D (1) or 125 (4) of the *Environment Protection Act 1997* (the Act) over the site and as a result the site is not recorded on the Register of contaminated sites under section 21(A) of the Act.

The information detailed above only relates to records held by the EPA and may not represent the actual condition of the site.

At present the EPA has no information on contamination of the above block(s) other than as detailed above. However, this does not absolutely rule out the possibility of contamination and should not be interpreted as a warranty that there is no contamination.

I appreciate that this does not absolutely rule out the existence of contamination of the soils. If you or your clients wish to be completely sure you, or they, should arrange to conduct independent tests.

Yours sincerely



Mark Heckenberg
Project Officer
Environment Protection and Water Regulation

18/07/2012

