ANNEXURE 4

Contamination Assessment

prepared by

Strategic Environmental & Engineering Consulting

Z

COWMAN STODDART PTY LTD

SEEC

Stage 1: Contamination Assessment

Part Lot 20, Old Saddleback Road, Kiama NSW

Prepared by:

Mark Passfield SEEC Reference 13000047-CA-01

Date: 5th April 2013



Strategic Environmental and Engineering Consulting

PO Box 1098, Bowral NSW 2576 phone: (02) 4862 1633 • fax: (02) 4862 3088 • email: reception@seec.com.au

Document Certification

This report has been developed based on agreed requirements as understood by SEEC at the time of investigation. It applies only to a specific task on the nominated lands. Other interpretations should not be made, including changes in scale or application to other projects.

Any recommendations contained in this report are based on an honest appraisal of the opportunities and constraints that existed at the site at the time of investigation, subject to the limited scope and resources available. Within the confines of the above statements and to the best of my knowledge, this report does not contain any incomplete or misleading information.

Mark Passfield Director SEEC 5th April 2013

Copyright

The information, including the intellectual property contained in this document is confidential and proprietary to SEEC. It may be used only by the person, company or organisation to whom it is provided for the stated purpose for which it is provided. It must not be given to any other person, company or organisation without the prior written approval of a Director of SEEC. SEEC reserves all legal rights and remedies in relation to any infringement of its rights in respect of confidential information.

© SEEC, 2013

Version	Author	Reviewer	Date		
DRAFT	МР	AM	4 th April 2013		
Final	МР	Client	5 th April 2013		

Document Table

TABLE OF CONTENTS

1	S	cope of Work	.1
2	S	ite Identification and Zoning	. 2
3	S	ite History	. 2
	3.1	Sources of information	. 2
	3.2	Documented History	.2
	3.3	Aerial Photography	. 2
4	A	Adjacent Land Uses	. 6
5	S	ite Condition and Environment	. 6
	5.1	General Conditions	.6
	5.2	Visible Signs of Contamination	.9
	5.3	Topography	.9
	5.4	Fill Materials	.9
	5.5	Odours	.9
	5.6	Flood Potential	.9
6	S	oils and Geology	.9
7	C	Contamination Assessment	.9
	7.1	Risk Assessment	.9
	7.2	Stage 1 Conclusion and Recommendations1	10
8	R	References1	10

1 Scope of Work

Strategic Environmental and Engineering Consulting (SEEC) have been commissioned by Weriton Properties Pty Ltd (owner) to prepare this Stage 1 Preliminary Contamination Assessment. It is required to accompany an application to rezone Part of Lot 20 DP1151501, 43 Old Saddleback Road, Kiama (The 'Subject Site', Figure 1) to become zone R2 (to permit residential development).

The aim of this Stage 1 Preliminary Contamination Assessment is to:

- Identify any past and present potentially contaminating activities;
- Describe the site condition;
- Identify potential contamination types;
- Provide a preliminary assessment of site contamination; and
- Assess the need for further investigation(s).

This Assessment has been undertaken and documented following the requirements set out in *Guidelines for Consultants Reporting on Contaminated Sites* (NSW EPA, 2000).



Figure 1 - Site Location



2 Site Identification and Zoning

The subject site is identified as Part of Lot 20 DP1151501. It forms a thin triangular sliver of land in the far south of the whole property. It is zoned RU2 (Rural Landscape) but the remainder of Lot 20 is zoned R2 (low density residential). It is considered this a zoning anomaly and it is proposed to re-zone the sliver to R2 so that the whole of Lot 20 is zoned the same.

3 Site History

3.1 Sources of information

A summary of the site's history has been compiled below. This information has been sourced from:

- Historical aerial photography available from the NSW Government: *Land and Property Information* (A division of the Department of Finance and Services).
- Recent aerial photography available from Department of Lands' *Six Viewer*.
- Section 149 Council Certificate.
- Verbal information from the current owner.

3.2 Documented History

A Section 149 certificate was obtained for the site. From that certificate it is determined that Council is not aware of the land being significantly contaminated and the land is not subject of a Management Order under the Contaminated Land Management Act (1997).

3.3 Aerial Photography

Figures 2 to 4 are extracts from aerial photographs taken in (1949, 1963, 1974, 1984 and 1997). The photographs were supplied by the NSW Government: *Land and Property Information* (a division of the Department of Finance and Services). Figure 1 is a recent aerial photograph of the site from 'Six Viewer' (NSW Dept. Lands).





REV	DATE	DES.	DRN.	APP.	REVISION DETAILS	DRAWING STATUS	North	CLIENT			PO.Box 1098, Bowral, NSW. 2576	PROJECT TITLE
						DESIGN BY M.P.					Suites 9 & 10, Bowral Mall	PART LOT 20
						DRAWN BY S.C.A.	\neg // \\				Cnr. Boolwey & Station Streets, Bowral.	
						FINAL APPROVAL M.P.			MR GRAHAM WERRY		(t) 02 4862 1633	OLD SADDLEE
						SCALE: N.T.S.	\neg \prime \land \land			CFFC	(f) 02 4862 3088	
						(on A3 Original)					email: reception@seec.com.au	KIAMA
							\sim \sim \sim \sim \sim			JLLU		
В	08/04/13	M.P.	S.C.A.	M.P.	TITLE BLOCK INFORMATION REVISED	FOR INFORMATIO	$N \lor V$				WWW.SEEC.COM.AU	
Α	02/04/13	i M.P.	S.C.A.	M.P.	ISSUED FOR INCLUSION IN REPORT							
Plot	Date: Mondo	зу, 8 Ар	ril 2013	12:19	54 PM CAD File Name: K:\13000047 Lot 20 No 43	Saddleback Mountain Rd Kiama\Drawing	Is\13000047_P01_F	G_REV B.d	lwg			

DP1151501 BACK ROAD	DRAWING TITLE HISTORICAL AERIAL PHOTOGRAPHY							
NSW	PROJECT NO.	SUB-PR NO.	DRAWING NO.		REV	drawing		
	13000047	P01	FIGURE	2	В	This d		
						-		





R	EV DATE	DES.	DRN.	APP.	REVISION DETAILS	DRAW	/ING STATUS	North	CLIENT			PO.Box 1098, Bowral, NSW. 2576	PROJECT TITLE
						DESIGN BY	M.P.					Suites 9 & 10, Bowral Mall	PART LOT 20
						DRAWN BY	S.C.A.					Cnr. Boolwey & Station Streets, Bowral.	
						FINAL APPROVAL	M.P.			MR GRAHAM WERRY		(t) 02 4862 1633	OLD SADDLE
						SCALE:	N.T.S.		·		СГГС	(f) 02 4862 3088	
						(on A3 Original)						email: reception@seec.com.au	KIAMA
											JLLV		
	B 08/04/	13 M.P.	S.C.A.	M.P.	TITLE BLOCK INFORMATION REVISED	ifor inf	FORMATION					WWW.SEEC.COM.AU	
	A 02/04/	13 M.P.	S.C.A.	M.P.	ISSUED FOR INCLUSION IN REPORT	FOR INFORMATION							
Plo	ot Date: Monday, 8 April 2013 12:19:59 PM CAD File Name: K:\13000047 Lot 20 No 43 Saddleback Mountain Rd Kiama\Drawings\13000047_P01_FIG_REV B.dwg												

						COPYRIGHT © TI
DP1151501 BACK ROAD		storical Photogi	_ AERIAL RAPHY			ig is subject to
NSW	PROJECT NO.	SUB-PR NO.	DRAWING NO.		REV	drawing
	13000047	P01	FIGURE	3	В	This di
						-



<u>1997</u>

RE	08/04/1	3 M.P.	S.C.A. S.C.A.		REVISION DETAILS	DRAWING STATUS DESIGN BY M.P. DRAWN BY S.C.A. FINAL APPROVAL M.P. SCALE: (on A3 original) N.T.S. FOR INFORMATION		CLIENT	MR GRAHAM WERRY	SEEC	PO.Box 1098, Bowral, NSW. 2576 Suites 9 & 10, Bowral Mall Cnr. Boolwey & Station Streets, Bowral. (1) 02 4862 1633 (1) 02 4862 3088 email: reception@seec.com.au WWW.SEEC.COM.AU	PROJECT TITLE PART LOT 20 E OLD SADDLEBA KIAMA N
Plot	Date: Mond	ay, 8 Ap	oril 201.	5 12:20:	03 PM CAD File Name: K:\13000047 Lot 20 No 4	3 Saddleback Mountain Rd Kiama\Drawings\	_13000047_P01_FIC	G_REV B.d⊮	wg			

DP1151501 BACK ROAD NSW	HISTORICAL AERIAL PHOTOGRAPHY								
INOW	PROJECT NO.	SUB-PR NO.	DRAWING NO.		REV	rawing			
	13000047	P01	FIGURE	4	В	This d			

Inspection of these photographs shows:

- 1949 A cottage on the site with two outbuildings on land immediately to the south. The land use of the subject site and the immediate surrounds appears rural.
- 1963 The cottage and outbuildings remain and appear unchanged. The land use of the subject site and immediate surrounds appears unchanged.
- 1974 The cottage remains but one of the outbuildings appears to have been removed. The land use of the subject site and immediate surrounds appears unchanged.
- 1984 The cottage and the outbuilding remain. The land use of the subject site and immediate surrounds appears unchanged.
- 1997 The cottage and the outbuilding remain. A new shed is on adjoining land immediately to the northwest. The land use of the subject site and immediate surrounds appears unchanged.
- Six viewer (estimated ~2008). The cottage and outbuildings remain. The land use of the subject site and immediate surrounds appears unchanged, although urban development is encroaching from the north.

The aerial photographic history accords well with the verbal history obtained from the current owner.

4 Current Adjacent Land Uses

Residential land is found to the north but land to south and east is vacant rural land.

5 Site Condition and Environment

5.1 General Conditions

At the time of inspection (25th March 2012) the subject site was occupied by part of a cottage (Figures 5 and 7) and a small part of the footings of a previous cottage. It is thought (from the aerial photos) that the original cottage was demolished and used to build the new one sometime between 1963 and 1974. The septic tank serving the cottage and part of an unsealed driveway are also on the subject land (Figure 7). The remainder of the subject land is undeveloped.





Figure 5 – View west over cottage. Septic tank in shrubs in foreground.



Figure 6 – Looking west towards Old Saddleback Road. Driveway in foreground.





Figure 7 - Site Plan of Existing Structures



5.2 Visible Signs of Contamination

There were no obvious signs of contamination or materials that could cause contamination on the subject site.

5.3 Topography

The subject site occupies a northeast facing side slope. Site gradients are generally low, ranging from 5 to 8 percent.

5.4 Fill Materials

There were no obvious signs of fill material; although minor earthworks (e.g. to form the drive) has occurred in the past.

5.5 Odours

There were no obvious signs of foul odours.

5.6 Flood Potential

The site is unlikely to be flood affected.

6 Soils and Geology

The site is mapped on the Bombo Soil Landscape. This is a residual soil landscape formed on igneous rock (Latite).

7 Contamination Assessment

7.1 Risk Assessment

There are no indications that the subject site has had potentially contamination activities on it, although it is possible that the under floor area of the cottage could have been sprayed for termites sometime in the past.



7.2 Stage 1 Conclusion and Recommendations

The subject site has been developed with a residential cottage since before 1949. That cottage was presumably associated with rural-residential activities on the surrounding land.

The subject site now forms part of Lot 20 DP11551501 which, at the time of inspection, was being used for rural residential purposes. There are no signs of past or present potentially contaminating activities on the subject land.

We conclude the risk of contamination is very low and the issue of contamination would not preclude re-zoning. However, there is a risk that the under-floor area of the dwelling has been sprayed for termites. When the home is demolished we recommend the exposed under-floor area is tested for Organochlorine and Organophosphate pesticides at the surface and at a depth of 300 mm. If pesticides are present a remedial action plan would be required to address remediation or removal of the contaminated soil.

There is a septic tank on the land that would require decommissioning and removal before any future residential development.

8 References

- NSW Environmental Protection Authority (2000). Contaminated Sites Guidelines for Consultants Reporting on Contaminated Sites.
- NSW Dept. Urban Affairs and Planning Environment Protection Authority (1998). *Managing Land Contamination, Planning Guidelines, SEPP55-Remediation of Land.*
- SCA/DLWC (2002) Soil Landscapes of the Sydney Drinking Water Hydrological Catchments.

