

22 February 2002

Site ID: 16934

File Number: 900622

Enquiries to: Contaminated Land Unit

Telephone: (07) 3227 6870

ATT: Contaminated Land Pollution Prevention, Health & Safety Brisbane City Council GPO Box 1434 BRISBANE QLD 4001

CERTIFICATE OF APPROVAL OF A SITE MANAGEMENT PLAN

This document provides written notification that, in accordance with the *Environmental Protection Act* 1994 (EP Act), a site management plan has been approved for the parcel of land described below, which is recorded on the Environmental Management Register (EMR). A copy of the suitability statement and the site management plan is attached.

Lot: 19 Plan: RP880216 BRISBANE CITY COUNCIL

"DOCKSIDE" KANGAROO POINT BRISBANE 4000

Section 417 of the EP Act states -

A local government must not, under an approval or other authority under the *Integrated Planning Act 1997* or any other Act, allow the use or development of, or an activity to be carried out on, land in a way that contravenes a site management plan for the land.

For further information regarding this notice please contact the Contaminated Land Unit, EPA on telephone (07) 322 58487.



Delegate of Administering Authority Environmental Protection Act 1994 288 Edward Street • Brisbane, Queensland • GPO Box 2771 • QLD 4001 • AUSTRALIA Telephone (07) 3225 1827 • Facsimile (07) 3247 3278 • www.env.qld.gov.au/environment/business/contaminated

SUITABILITY STATEMENT

DATE PRINTED: 22/02/2002

OWNER

STENCRAFT PTY LTD

C/-Sch4Pi4s6
PROPERTY AND LEASING MANAGER

14TH FLOOR, 410 QUEEN STREET

BRISBANE

QLD 4000

DATE OF ISSUE: 22/02/2002

PROPERTY DESCRIPTION

LOT: 19 PLAN: RP880216
"DOCKSIDE" KANGAROO POINT

BRISBANE 4000

BRISBANE CITY COUNCIL

EMR Site ID: 16934 FILE REFERENCE: 900622

STUDIES UNDERTAKEN BY APPLICANT OR REQUESTED BY DIRECTOR

Stage 1 Site Contamination Assessment Proposed Lagoon Apartments, Corner Cairns Street and Deakin Street, Kangaroo Point (Volume 1 and 2) prepared by Earthtech Consultants (Qld) Pty Ltd, dated October-November 2001 (Job No. ME2057).

Information provided by Earthtech Consultants (Qld) Pty Ltd in correspondence dated 12 November 2001, 19th December 2001 and 29th January 2002.

STATEMENT OF SUITABILITY

On the basis of the information supplied to this Department, the subject site is suitable for the following use(s) providing the site is used and managed as per the Site Management Plan attached as Annexure 1. The final land use must be for high density residential with minimal opportunities for soil access; including high-rise apartments and flats. The balance of Lot 7 on SL807308 is not suitable for any use until further investigation work enables the administering authority to issue a suitability statement for this land.

Other specific uses may be suitable for the site, please contact this Department for further advice. The suitability statement provides information on appropriate land uses at the date of effect. Subsequent uses of the site for notifiable activities or for situations where a hazardous contaminant is released into the soil may result in the need to review suitable uses or amend the attached site management plan.

ENVIRONMENTAL MANAGEMENT REGISTER

LOT: 19 PLAN: RP880216 is recorded on the Environmental Management Register with a Site Management Plan. A copy of the Site Management Plan is attached as Annexure 1.



Delegate of Administering Authority Environmental Protection Act 1994



288 Edward Street • Brisbane, Queensland • GPO Box 2771 • QLD 4001 • AUSTRALIA Telephone (07) 3225 1827 • Facsimile (07) 3247 3278 • www.env.qld.gov.au/environment/business/contaminated

ANNEXURE 1 - SITE MANAGEMENT PLAN

LOT: 19

PLAN: RP880216 FILE REF: 900622 PRINTED: 22/02/2002

DATE OF EFFECT: 22/02/2002

1.0 INTRODUCTION

This Site Management Plan (SMP) only applies to the hatched area shown on Drawing No. SMP 'A' for Lot 7 on SL807308 and Lot 19 on RP880216. The balance of Lot 7 on SL807308 has not been subject to a contaminated land investigation. No activity or use is permitted on the balance of Lot 7 SL807308 without the prior approval of the administering authority (EPA). Further investigation work is required to obtain this approval.

The owner of the land, as defined in the *Environmental Protection Act 1994*, is to ensure that this SMP and any variations approved or required by the administering authority are complied with. The obligations and conditions set out in this SMP bind the owner, from time to time, of the land.

2.0 SUMMARY OF CONTAMINATION

The site lies within an area formerly occupied by operations associated with the Kangaroo Point 'Dry-Dock'. Site investigations carried out in November - December 2001 identified that ground conditions over the site comprise shallow depths of fill (average 0.6m deep) overlying weathered rock (tuff). Analysis indicated isolated occurrences of heavy metals (Cu, Pb, Zn and Sn) and TPH at levels exceeding the Environmental Investigation Levels (EIL's). However these concentrations were less than Health Based Investigation Levels for standard residential use (HBIL A). Two locations encountered levels of Lead and PAH exceeding the HBIL A levels (refer to Drawing No. SMP 5).

3.0 OBJECTIVES OF THE PLAN

The objective of the plan is to manage the contamination remaining on the site during the construction phase and post development to protect human health and the environment.

The objective will be achieved by:

- Establishment and maintenance of barriers between users of the site and the contamination (eg. site capping);
- Application of controls on site excavations works;
- The application of maintenance and monitoring programs; and
- Restrict the use on balance of Lot 7 SL807308 until further investigation work enables the administering authority to issue a suitability statement for this land.

4.0 ACHIEVEMENT AND MANAGEMENT OF OBJECTIVES

To ensure the plans objectives are achieved and maintained, the owner of the site is required to comply with the following conditions unless otherwise specified.

4.1 Landuse. The site (see hatched area on Drawing No. SMP 'A') must be used for high density residential with minimal opportunities for soil access; including high-rise apartments and flats. The

balance of Lot 7 on SL807308 is not suitable for any use until further investigation work enables the administering authority to issue a suitability statement for this land.

- 4.2 Development Design. The development design is to ensure that environmental harm is prevented and public health maintained by planning, minimising and strictly controlling excavation into the areas of contamination (see Drawing Nos. SMP 'A' and SMP5).
- 4.3 Supervision of Works. All excavation works (including scraping for the profiling of soils) must be supervised by a member of a prescribed organisation with relevant qualifications and experience in accordance with Section 381 of the Environmental Protection Act 1994. The person shall be responsible for the development of suitable working plans; for stopping excavation works in the event of identified contaminants being exposed; for visual monitoring of the removal and replacement of soils over the site; and inspection and confirmation of the adequacy of the capping layers.
- 4.4 Site Capping. A capping layer consisting of concrete slab, bitumen/asphalt paving over 150mm compacted roadbase, a minimum of 0.5m thick compacted medium plasticity clay soil with a permeability of at least 1x10-9 m/s or a synthetic liner such as HDPE or a geosynthetic clay liner (GCL) shall be installed over the areas around TP1 and TP5 (see Drawing No. SMP5) prior to the commencement of excavation works on the site. The synthetic liner may be required in areas (such as slopes) where the placement and compaction of a clay liner is not possible.

The integrity of the capping must be maintained in good condition at all times to ensure that water does not infiltrate through the contaminated zone and prevent/minimise erosion of clay capping layers (where installed).

Approval from the Administering Authority must be obtained before the capping layer is penetrated for any reason.

- 4.5 Landscaped Areas. Areas to be capped (see Drawing No. SMP 5) and require landscaping are to be covered with at least 0.3m clean (imported) top soil (AS4419) on top of a minimum of 0.3m of compacted clay (or equivalent capping material). To minimise erosion of all other areas that are not covered by buildings or sealed with an impervious cover such as pavers, concrete or bitumen/asphalt, these must be overlain by a minimum 0.2m of topsoil with either garden beds or healthy grass cover, to a lawn turf standard.
- 4.6 Contaminated Soil Disposal. Contaminated soil must not be excavated and removed from the site without adequate sampling and without prior approval of the Administering Authority under Section 424 of the Environmental Protection Act 1994 (or equivalent).
- 4.7 Advice to building designers, site workers and lessees. The owner must provide all persons involved in building, design and planning, and all contractors conducting building and/or excavation works with a copy of the approved Site Management Plan (SMP) prior to commencement of works onsite. The owner must provide a copy of the SMP to any lessee who intends to undertake site excavations.
- 4.8 Workplace Health and Safety. A Workplace Health and Safety Plan (WH&S Plan) which deals with contamination and conforms to the requirements of the Workplace Health and Safety Act 1995 and subordinate legislation (or its equivalent) is to be developed for all site excavation works. The WH&S plan must specifically address measures to minimise dermal, ingestion and inhalation exposures to site contaminants of Lead and PAH. This WH&S plan shall be developed prior to the commencement of any construction works on-site.
- 4.9 General Environmental Protection. Site works relating to the excavation, removal and/or disposal of soil from the site must be conducted in a manner which ensures that the environment is protected.

Environmental harm is to be prevented by:

- Ensuring that noxious or offensive odours are not released with water sprays and/or covered with plastic.
- Ensuring that contaminant spillages are cleaned up as quickly as practicable and are not hosed, swept or otherwise released to any stormwater system, roadside gutter or waters.
- Ensuring that all trucks exiting the site and carrying contaminated soil have watertight bodies and all loads are covered with appropriate covers.
- Ensuring that all trucks exiting the site have clean tyres, with the use of wheel wash-down bays.

- Suppressing dust emissions by use of a fine water spray whenever dust is generated.

- Establishing sediment traps throughout and around the site to capture sediment transported by stormwater or water used for dust control or wheel washdown purposes.
- Ensuring that rill and gully erosion and mobilisation and deposition of sediments offsite is prevented.

All contamination safety and excavation processes are to be documented and records kept which demonstrate SMP compliance.

4.10 Unexpected or gross contamination. It is a requirement of this SMP that excavation works are to immediately cease and the EPA notified and advised of appropriate remedial action in the event that monitoring reveals offensive or noxious odour at the work site and/or evidence of gross contamination not previously detected.

In the event that grossly contaminated soils in addition to those detected during site investigations are identified during the course of construction, work in that area is to cease and the contamination is to be delineated by a member of a prescribed organisation and contained on site at a standard satisfactory to the EPA.

5.0 MAINTENANCE AND MONITORING REQUIREMENTS

Site Inspections

- 5.1 The following monitoring and reporting is to be undertaken by a suitably qualified person in accordance with Section 381 of the *Environmental Protection Act 1994* during excavations works.
- Notification to the Administering Authority within 24 hours of any problems associated with fulfilling the requirements of the SMP;
- Visual monitoring of the removal and replacement of soils over the site;

- Inspection and confirmation of the adequacy of the capping layers;

- Sampling and testing (including validation testing) of excavated soils where off-site disposal permits are required or where unexpected contamination is detected or suspected;

- Submission of a report, prepared in accordance with the 'Draft Guidelines for the Assessment and Management of Contaminated Land in Queensland, May 1998', to the Administering Authority within 28 days from the completion of the final capping barriers across the site, documenting details of:
- The site barriers (capping) as constructed, including the surveyed thicknesses of the capping layers.
- Results of sampling undertaken
- Records of soil excavations and disposals (with associated material types and quantities); and
- SMP compliance.
- 5.2 An annual inspection of the development site area is to be undertaken by the owner to ensure that the capping layer and surface covers remain in good condition and that settlement of fill has not affected the integrity of the capping layer or building structures.

Records are to be kept of the inspections including review of soil excavations, soil disposal, safety records and site management plan compliance is to be undertaken. All records shall be kept by the owner and are to be made available to an authorised officer under the *Environmental Protection Act 1994* upon request.

The EPA may undertake regular site inspections to monitor the site in relation to the above conditions.

The SMP has been developed to manage residual site contamination at the effective date. Subsequent uses of the site may result in the need to review the plan.

The SMP makes reference to plan attachments (SMP A and SMP 5) that are available from the EPA if required.



288 Edward Street • Brisbane, Queensland • GPO Box 2771 • QLD 4001 • AUSTRALIA
Telephone (07) 3225 1827 • Facsimile (07) 3247 3278 • www.env.qld.gov.au/environment/business/contaminated

22 February 2002

Site ID: 149

File Number: 900622

Enquiries to: Contaminated Land Unit

Telephone: (07) 3227 6870

ATT: Contaminated Land Pollution Prevention, Health & Safety Brisbane City Council GPO Box 1434

BRISBANE OLD 4001

CERTIFICATE OF APPROVAL OF A SITE MANAGEMENT PLAN

This document provides written notification that, in accordance with the *Environmental Protection Act* 1994 (EP Act), a site management plan has been approved for the parcel of land described below, which is recorded on the Environmental Management Register (EMR). A copy of the suitability statement and the site management plan is attached.

Lot: 7 Plan: SL807308

BRISBANE CITY COUNCIL

26 CAIRNS STREET KANGAROO POINT 4169

Section 417 of the EP Act states -

A local government must not, under an approval or other authority under the *Integrated Planning Act 1997* or any other Act, allow the use or development of, or an activity to be carried out on, land in a way that contravenes a site management plan for the land.

For further information regarding this notice please contact the Contaminated Land Unit, EPA on telephone (07) 322 58487.

Delegate of Administering Authority Environmental Protection Act 1994 288 Edward Street • Brisbane, Queensland • GPO Box 2771 • QLD 4001 •AUSTRALIA Telephone (07) 3225 1827 • Facsimile (07) 3247 3278 • www.env.qld.gov.au/environment/business/contaminated

SUITABILITY STATEMENT

DATE PRINTED: 22/02/2002

OWNER

STENCRAFT PTY LTD

C/-Sch4Pt4s6 - PROPERTY AND LEASING MANAGER

14TH FLOOR, 410 QUEEN STREET

BRISBANE

OLD 4000

DATE OF ISSUE: 22/02/2002

PROPERTY DESCRIPTION

LOT:7

PLAN: SL807308

26 CAIRNS STREET

KANGAROO POINT

4169

BRISBANE CITY COUNCIL

EMR Site ID: 149

FILE REFERENCE: 900622

STUDIES UNDERTAKEN BY APPLICANT OR REQUESTED BY DIRECTOR

Stage 1 Site Contamination Assessment Proposed Lagoon Apartments, Corner Cairns Street and Deakin Street, Kangaroo Point (Volume 1 and 2) prepared by Earthtech Consultants (Qld) Pty Ltd dated October-November 2001 (Job No. ME2057).

Information provided by Earthtech Consultants (Qld) Pty Ltd in correspondence dated 12 November 2001, 19th December 2001 and 29th January 2002.

STATEMENT OF SUITABILITY

On the basis of the information supplied to this Department, the subject site is suitable for the following use(s) providing the site is used and managed as per the Site Management Plan attached as Annexure 1.

The final land use must be for high density residential with minimal opportunities for soil access; including high-rise apartments and flats. The balance of Lot 7 on SL807308 is not suitable for any use until further investigation work enables the administering authority to issue a suitability statement for this land.

Other specific uses may be suitable for the site, please contact this Department for further advice. The suitability statement provides information on appropriate land uses at the date of effect. Subsequent uses of the site for notifiable activities or for situations where a hazardous contaminant is released into the soil may result in the need to review suitable uses or amend the attached site management plan.

ENVIRONMENTAL MANAGEMENT REGISTER

LOT: 7 PLAN: SL807308 is recorded on the Environmental Management Register with a Site Management Plan. A copy of the Site Management Plan is attached as Annexure 1.

Delegate of Administering Authority Environmental Protection Act 1994 288 Edward Street • Brisbane, Queensland • GPO Box 2771 • QLD 4001 • AUSTRALIA Telephone (07) 3225 1827 • Facsimile (07) 3247 3278 • www.env.qld.gov.au/environment/business/contaminated

ANNEXURE 1 - SITE MANAGEMENT PLAN

LOT: 7

PLAN: SL807308

FILE REF: 900622 PRINTED: 22/02/2002

DATE OF EFFECT: 22/02/2002

1.0 INTRODUCTION

This Site Management Plan (SMP) only applies to the hatched area shown on Drawing No. SMP 'A' for Lot 7 on SL807308 and Lot 19 on RP880216. The balance of Lot 7 on SL807308 has not been subject to a contaminated land investigation. No activity or use is permitted on the balance of Lot 7 SL807308 without the prior approval of the administering authority (EPA). Further investigation work is required to obtain this approval.

The owner of the land, as defined in the Environmental Protection Act 1994, is to ensure that this SMP and any variations approved or required by the administering authority are complied with. The obligations and conditions set out in this SMP bind the owner, from time to time, of the land.

2.0 SUMMARY OF CONTAMINATION

The site lies within an area formerly occupied by operations associated with the Kangaroo Point 'Dry-Dock'. Site investigations carried out in November - December 2001 identified that ground conditions over the site comprise shallow depths of fill (average 0.6m deep) overlying weathered rock (tuff). Analysis indicated isolated occurrences of heavy metals (Cu, Pb, Zn and Sn) and TPH at levels exceeding the Environmental Investigation Levels (EIL's). However these concentrations were less than Health Based Investigation Levels for standard residential use (HBIL A). Two locations encountered levels of Lead and PAH exceeding the HBIL A levels (refer to Drawing No. SMP 5).

3.0 **OBJECTIVES OF THE PLAN**

The objective of the plan is to manage the contamination remaining on the site during the construction phase and post development to protect human health and the environment.

The objective will be achieved by:

- Establishment and maintenance of barriers between users of the site and the contamination (eg. site capping);
- Application of controls on site excavations works;
- The application of maintenance and monitoring programs; and
- Restrict the use on balance of Lot 7 SL807308 until further investigation work enables the administering authority to issue a suitability statement for this land.

4.0 ACHIEVEMENT AND MANAGEMENT OF OBJECTIVES

To ensure the plans objectives are achieved and maintained, the owner of the site is required to comply with the following conditions unless otherwise specified.

Landuse. The site (see hatched area on Drawing No. SMP 'A') must be used for high density 4.1 residential with minimal opportunities for soil access; including high-rise apartments and flats. The balance of Lot 7 on SL807308 is not suitable for any use until further investigation work enables the administering authority to issue a suitability statement for this land.

- 4.2 Development Design. The development design is to ensure that environmental harm is prevented and public health maintained by planning, minimising and strictly controlling excavation into the areas of contamination (see Drawing Nos. SMP 'A' and SMP5).
- 4.3 Supervision of Works. All excavation works (including scraping for the profiling of soils) must be supervised by a member of a prescribed organisation with relevant qualifications and experience in accordance with Section 381 of the Environmental Protection Act 1994. The person shall be responsible for the development of suitable working plans; for stopping excavation works in the event of identified contaminants being exposed; for visual monitoring of the removal and replacement of soils over the site; and inspection and confirmation of the adequacy of the capping layers.
- 4.4 Site Capping. A capping layer consisting of concrete slab, bitumen/asphalt paving over 150mm compacted roadbase, a minimum of 0.5m thick compacted medium plasticity clay soil with a permeability of at least 1x10-9 m/s or a synthetic liner such as HDPE or a geosynthetic clay liner (GCL) shall be installed over the areas around TP1 and TP5 (see Drawing No. SMP5) prior to the commencement of excavation works on the site. The synthetic liner may be required in areas (such as slopes) where the placement and compaction of a clay liner is not possible.

The integrity of the capping must be maintained in good condition at all times to ensure that water does not infiltrate through the contaminated zone and prevent/minimise erosion of clay capping layers (where installed).

Approval from the Administering Authority must be obtained before the capping layer is penetrated for any reason.

- 4.5 Landscaped Areas. Areas to be capped (see Drawing No. SMP 5) and require landscaping are to be covered with at least 0.3m clean (imported) top soil (AS4419) on top of a minimum of 0.3m of compacted clay (or equivalent capping material). To minimise erosion of all other areas that are not covered by buildings or sealed with an impervious cover such as pavers, concrete or bitumen/asphalt, these must be overlain by a minimum 0.2m of topsoil with either garden beds or healthy grass cover, to a lawn turf standard.
- 4.6 Contaminated Soil Disposal. Contaminated soil must not be excavated and removed from the site without adequate sampling and without prior approval of the Administering Authority under Section 424 of the Environmental Protection Act 1994 (or equivalent).
- 4.7 Advice to building designers, site workers and lessees. The owner must provide all persons involved in building, design and planning, and all contractors conducting building and/or excavation works with a copy of the approved Site Management Plan (SMP) prior to commencement of works onsite. The owner must provide a copy of the SMP to any lessee who intends to undertake site excavations.
- 4.8 Workplace Health and Safety. A Workplace Health and Safety Plan (WH&S Plan) which deals with contamination and conforms to the requirements of the Workplace Health and Safety Act 1995 and subordinate legislation (or its equivalent) is to be developed for all site excavation works. The WH&S plan must specifically address measures to minimise dermal, ingestion and inhalation exposures to site contaminants of Lead and PAH. This WH&S plan shall be developed prior to the commencement of any construction works on-site.
- 4.9 General Environmental Protection. Site works relating to the excavation, removal and/or disposal of soil from the site must be conducted in a manner which ensures that the environment is protected.

Environmental harm is to be prevented by:

- Ensuring that noxious or offensive odours are not released with water sprays and/or covered with plastic.
- Ensuring that contaminant spillages are cleaned up as quickly as practicable and are not hosed, swept or otherwise released to any stormwater system, roadside gutter or waters.
- Ensuring that all trucks exiting the site and carrying contaminated soil have watertight bodies and all loads are covered with appropriate covers.
- Ensuring that all trucks exiting the site have clean tyres, with the use of wheel wash-down bays.
- Suppressing dust emissions by use of a fine water spray whenever dust is generated.
- Establishing sediment traps throughout and around the site to capture sediment transported by stormwater or water used for dust control or wheel washdown purposes.
- Ensuring that rill and gully erosion and mobilisation and deposition of sediments offsite is prevented.

All contamination safety and excavation processes are to be documented and records kept which demonstrate SMP compliance.

4.10 Unexpected or gross contamination. It is a requirement of this SMP that excavation works are to immediately cease and the EPA notified and advised of appropriate remedial action in the event that monitoring reveals offensive or noxious odour at the work site and/or evidence of gross contamination not previously detected.

In the event that grossly contaminated soils in addition to those detected during site investigations are identified during the course of construction, work in that area is to cease and the contamination is to be delineated by a member of a prescribed organisation and contained on site at a standard satisfactory to the EPA.

5.0 MAINTENANCE AND MONITORING REQUIREMENTS

Site Inspections

- 5.1 The following monitoring and reporting is to be undertaken by a suitably qualified person in accordance with Section 381 of the *Environmental Protection Act 1994* during excavations works.
- Notification to the Administering Authority within 24 hours of any problems associated with fulfilling the requirements of the SMP;
- Visual monitoring of the removal and replacement of soils over the site;
- Inspection and confirmation of the adequacy of the capping layers;
- Sampling and testing (including validation testing) of excavated soils where off-site disposal permits are required or where unexpected contamination is detected or suspected;
- Submission of a report, prepared in accordance with the 'Draft Guidelines for the Assessment and Management of Contaminated Land in Queensland, May 1998', to the Administering Authority within 28 days from the completion of the final capping barriers across the site, documenting details of:
- The site barriers (capping) as constructed, including the surveyed thicknesses of the capping layers.
- Results of sampling undertaken
- Records of soil excavations and disposals (with associated material types and quantities); and
- SMP compliance.
- 5.2 An annual inspection of the development site area is to be undertaken by the owner to ensure that the capping layer and surface covers remain in good condition and that settlement of fill has not affected the integrity of the capping layer or building structures.

Records are to be kept of the inspections including review of soil excavations, soil disposal, safety records and site management plan compliance is to be undertaken. All records shall be kept by the owner and are to be made available to an authorised officer under the *Environmental Protection Act 1994* upon request.

The EPA may undertake regular site inspections to monitor the site in relation to the above conditions.

The SMP has been developed to manage residual site contamination at the effective date. Subsequent uses of the site may result in the need to review the plan.

The SMP makes reference to plan attachments (SMP A and SMP 5) that are available from the EPA if required.



Queensland Department of Environment and Heritage

160 Ann Street • Brisbane Queensland • PO Box 155 • BRISBANE ALBERT STREET QLD 4002 Telephone (07) 227 7111 • Facsimile (07) 227 6534

Contaminated Land Unit (07) 227 7369/227 7370

Telephone Reference: 900622

Your reference

Our reference

The Town Clerk Brisbane City Council

GPO Box 1434

BRISBANE QLD 4001

24 May 1994

NOTIFICATION UNDER THE CONTAMINATED LAND ACT 1991

In accordance with the requirements of Section 23 of the Contaminated Land Act 1991 please note that the parcel of land described in the Schedule below has been classified as a PROBABLE site and its particulars recorded in the Contaminated Sites Register.

SCHEDULE

LOT

7 ON PLAN SL807308

LOCATION

26 CAIRNS STREET

KANGAROO POINT

4169

OWNER

DEPARTMENT OF LANDS REGIONAL DIRECTOR

LAND ADMINSTRATION BUILDING

130-148 GEORGE STREET

BRISBANE

4000

PRESCRIBED PURPOSE: METAL SPRAYERS

Yours sincerely

Sch4 Pt4 (6)

David N. Miles
Director, Waste Management Branch
Division of Environment

	BRISHANE CITY			
PAPER FOR R	EGISTRATIC	N OR ATTAC	CHMENT	
Tick	applicable box	/cs thus:		4
MEMORANDUM: Central Reco	ords			
Register				
Attach to an	y relevant P/P's	s		
Forward file	to:			
	Code AOC	the same of the sa	5 MLC	
2. Officer (Floor		
3. Officer (Code	Floor _		
File				
Sa	A.dal	O S DINO	fficer Code:	700.
Signature	Was .	_10/3/190	illicer Code:	MUCC

CHECK LIST - Contaminated Land System	- A
Owner: Steneraft Pty Uta	
Address: 26 Cairns St	
Kangaroo Point P.C. 4169	
Lot No: 7	
RP No: 50807308	
CLS: 582 Remediation: Investigation: CLL: Contacts: Land Use:	
BiMap: Hazardous: DEH:	
DEH: Interested Pty: Contaminants:	
Results Categories:	
Update Details:	
Checking Officer:	1015194

Contaminated Site Summary Report 4 264/47/1-PLI30/26

Site Deta"

Site Ref. Number: 000582 Rotherham/deakin/darrah/goodwin/cairns

Address:

Rotherham/deakin/dar

Kangaroo Point

4169

Phone:

Owner:

Lot: 7

Plan: SL807308

Zone:

UPRN:

Lease#:

Expires: / /

Site Status

Class:

Status: Date: / /

Comments:

General Details

Manual File#:

Data Accuracy: Aerial Photo?

Comments:

Kangaroo Point (pro)

Remediation

Status:

Date: / /

Consultant:

Comments:

Investigation

Result:

Date:

Comments:

Land Use

Eff. Date

Exp. Date

Land Use

Comments

01/07/93

910-VACANT URBAN LAND

DEH

Sequence #

Notify Date Resp. Date Notification Code Comments



Queensland Department of Environment and Heritage

160 Ann Street • Brisbane Queensland • PO Box 155 • North Quay Qld 4002 • Telephone (07) 227 7111 • Facsimile (07) 227 6534

Enquiries to

Telephone

Contaminated Land Unit (07) 227 7369/227 7370

Your reference

Reference: 900622

Our reference

08 MAR 1993

The Town Clerk Brisbane City Council GPO Box 1434 BRISBANE OLD 4001

NOTIFICATION UNDER THE CONTAMINATED LAND ACT 1991

In accordance with the requirements of Section 23 of the Contaminated Land Act 1991 please note that the parcel of land described in the Schedule below has been classified as a PROBABLE site and its particulars recorded in the Contaminated Sites Register.

SCHEDULE

LOT 7 ON PLAN SL807308
LOCATION ROTHERDAM/DEAKIN/DARRAH/GOODWIN/CAI
RNS STS
KANGAROO POINT
4169

OWNER DEPARTMENT OF LANDS
REGIONAL DIRECTOR
LAND ADMINSTRATION BUILDING
130-148 GEORGE STREET
BRISBANE
4000

Sch4 Pt4 (6)

David N. Miles Director Waste Management 910

recorded

Contact name:

Mr Peter Stevens

Jephone:

225 4710

Fax (direct):

225 5230

Your ref.:

Our ref.:

PJS:SJ

12 May 1994

Mr D N Miles Director, Waste Management Branch Department of Environment and Heritage PO Box 155 NORTH QUAY 4002

Notification Under the Contaminated Land Act 1991

Dear Sir

I refer to your notification for L7 SL807308 for premises situated at Rotherdam/Deakin/Darrah/Goodwin/Cairns Sts, Kangaroo Point.

Perusal of Councils records reveals that the Real Property Description has been recorded incorrectly. The property description should be L7 SL807308, 26 Cairns St, Kangaroo Point.

It would be appreciated if you would amend your records accordingly.

Yours faithfully



Peter Stevens

SENIOR PROJECT OFFICER CONTAMINATED LAND DEPARTMENT OF RECREATION AND HEALTH

Brisbane City Council
69 Ann Street
Brisbane
Queensland
GPO Box 1434
Brisbane
Australia 4001
Facsimile 229 1168



Queensland Department of Environment and Heritage

160 Ann Street • Brisbane Queensland • PO Box 155 • North Quay Qld 4002 • Telephone (07) 227 7111 • Facsimile (07) 227 6534

Enquiries to

Telephone

Contaminated Land Unit (07) 227 7369/227 7370

Your reference

Reference: 900622

Our reference

08 MAR 1993

The Town Clerk
Brisbane City Council
GPO Box 1434
BRISBANE QLD 4001

NOTIFICATION UNDER THE CONTAMINATED LAND ACT 1991

In accordance with the requirements of Section 23 of the Contaminated Land Act 1991 please note that the parcel of land described in the Schedule below has been classified as a PROBABLE site and its particulars recorded in the Contaminated Sites Register.

26 EAIRNS

SCHEDULE

LOT 7 ON PLAN SL807308
LOCATION ROTHERDAM/DEAKIN/DARRAH/GOODWIN/CAI
RNS STS
KANGAROO POINT

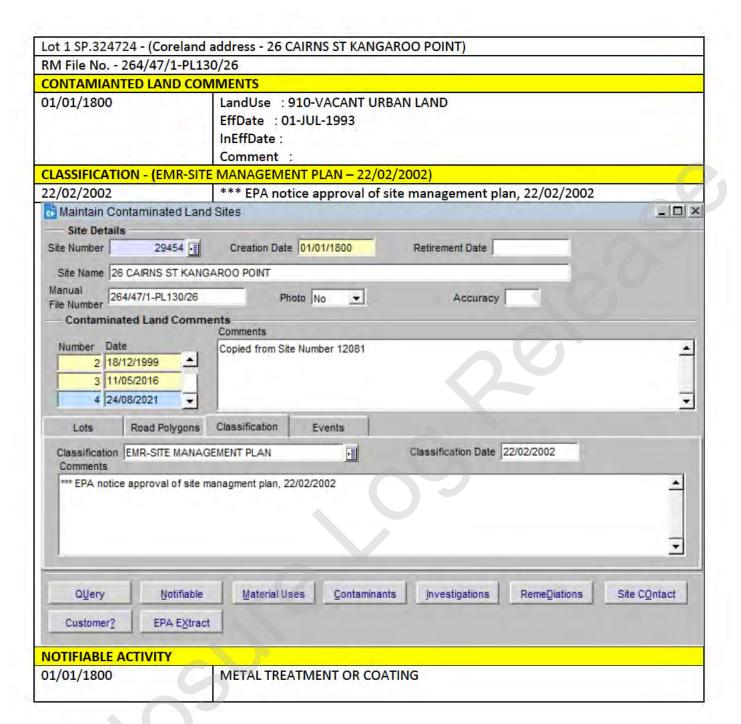
4169

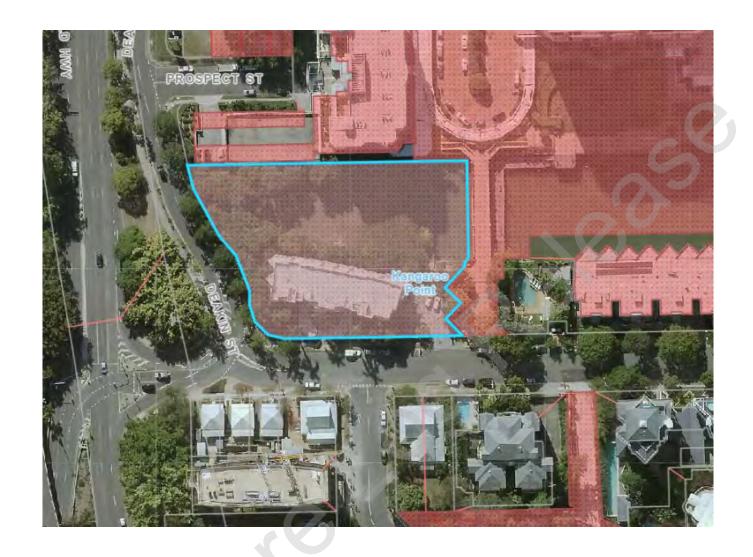
OWNER DEPARTMENT OF LANDS
REGIONAL DIRECTOR
LAND ADMINSTRATION BUILDING
130-148 GEORGE STREET
BRISBANE
4000

Yours sincerely

David N. Miles Director Waste Management 910

recorded





Lance A. Warrell Consultant Soil Scientist AS/NZS ISO 9001:2000 Self Assessed

ABN: 64 727 077 653

BLEND TEST RESULTS

Test Certificate No.: 6221(cs)

Client: CANDY SOIL

Project: LAGOON APARTMENTS, CAIRNS STR. DOCKSIDE

Sample Identification: TRADE BLEND

No. of Samples: 1

Job Number: 02-003 Date Sampled: 15-11-01 Date Received: 16-11-01 Lab. No.: 3535

SOIL TEST REULTS for Organic soils

		Procedure/Test Requirement	
and the same of th	Test Result	A G A419-1998	
Property		Appendix B - Clause 5.2 > 0.6 kg/L	
Bulk density (kg/L)	0.85	AS 1289.4.1.1 - Clause 5.3 > 15% < 25%	
Organic Matter	16	AS 1207 min	
% OM- mass)	12	Appendix C - Clause 5.5 > 5 mm/min	
Wettability (mm/min)	6.7	Appendix D Clause 5.6 (D5.2)	
pH (1:1.5 vol/vol)	U.	рН 5.5-7.5	
pH (1:5 wt/voi)	7.4 (NR)	Appendix D - Clause 5.7 < 2.5 dS/m	
EC (dS/m)	0.90	Appendix D - Clause 5.8 < 200 mgN-NH-L	
Ammonium (mg/L)	35	A - andir D - Clause 5.9	
	15	3 mg/l, for very sensitive piants	
Phosphorus (mg/L)		Langendix E - Clause 5.10	
A STATE OF THE STA	One (NR)	1 to Cocculation	
Dispersibility		4 = Minimal flocculation (1 or 2 required)	
(9/)	80	Appendix F Clause 5.11 > 50% Appendix G - Clause 5.12 greater than ZERO	
Toxicity index (%)	0.70	Appendix H - Clause 5.13 acceptable range	
Nitrogen drawdown Index		Appendix H - Cinuse Six aver-	
Permeability (cm/hr)	38	2 to 100 cm/hr Appendix I - Clause 3.14	
Soil texture (< 2mm)	Coarse sandy loam (NR)	Clause 5.15 less than 8% < 20 mm but > 10 mm	
	NIL	2 % or less > 20 mm	
Large particles	TARA	4 /8 43 494/	
		SES AS 4419-1998 for Organic Soils	

Comments: Analysis in J.F. Report 3535/2901 - PASSES AS 4419-1998 for Organic Soils pH (1:1.5) is well within required pH range 5.5 to 7.5; as is the pH (1:5) A small quantity of soluble Nitrogen required 3 to 4 gN/m³ of media per week Phosphorus P is low would suit all plants EXCEPT very P sensitive species. Checked by: L.A. Warrell Test Procedures: AS 4419-1998

Signator

Date: 16/ 09 / 02

27 Halimah Street, CHAPEL HILL QLD 4069 Ph: (07) 3378 8370 Fax: (07) 3878 5204 E-mail: iwarrelin ozemail.com.au



(S) Secam Street, Mansfield Qld ATHTECH PO Box 2034, Mansfield DC Qld 4122

"SULTAN" (QLD) Pty78 RPEUE SET ACN 01626 SE1

ABN 83 C

Phone: (07) 3343 3166 (07) 3849 4705 Fax

E-mail: consultants@earthtech.com.au

Website: www.earthtech.com.au

6th September, 2002

Job Nº ME 2057/1

Hutchinsons Builders PO Box 3075 DARRA Old 4076

FAX: 3870 3155

ATTENTION:

RE: Contaminated Site Supervision - Lagoon Apartments, KANGAROO POINT

INTRODUCTION

At the request of Sch4 Pt4 (6) of Hutchinsons Builders, Earthtech has undertaken supervision of earthworks in areas of contaminated soil, for the Lagoon Apartments development at Cairns Street, Kangaroo Point.

This report details on-site supervision and earthworks activities undertaken to comply with the requirements set down in the Site Management Plan (SMP) (as issued by the EPA - File Ref: 900622 Dated: 22/02/02).

SCOPE

The site (situated on parts of Lot 7 on SL807308 & Lot 19 on RP880216) has been the subject of a Site Contamibation Assessment undertaken by Earthtech in November 2001, and subsequently found to contain two discrete areas of contaminated fill. A SMP detailing required earthworks procedures to be implemented at the site, was prepared and issued by the Environmental Protection Agency (EPA).

Earthtech was commissioned to fulfill the roll of Contaminated Site Specialist (CSS), to undertake site inspections and supervise earthworks operations (in areas subject to contamination), at the site.



200

ME2057/1-SMP Supervision Report



SUPERVISION CRITERIA

Table 1 - Supervision Criteria from the SMP

Objective 'Identification of Undetected Contamination' Task - 1 Item 4.3 'Supervision of Works' - by visual monitoring excavation of all on-site spoil	Performance Indicator(s) Item 4.10 'Offensive or Noxious Odours or Visual Identification of Previously Undetected Gross Contamination'
Objective 'supervision of construction of capping layers' Task • 2 Item 4.4 'Site Capping' - capping to be installed in the areas of TP1 & TP5 prior to commencement of any earthworks at the site	Performance Indicator(s) Item 4.4 'A capping layer consists of one of the following': - concrete slab - bitumen seal & 150mm of compacted gravel - 0.5m (min) clay layer (K < 1x10 ⁻⁹ m/sec) - synthetic liner of HDPE or GCL construction
Objective 'approval of site landscaping' Task - 3 Item 4.5 'Landscaped Areas' - All landscaping must be inspected upon completion	Performance Indicator(s) Item 4.5 Areas of the site are to be covered with: - 0.3m (min) of topsoil over day capped areas - 0.2m (min) of topsoil in all other areas Landscaped areas must be turfed / garden beds.
Objective 'No contaminated soil to be removed off-site' Task - 4 Item 4.6 'Contaminated Soil Disposal' - Soil from designated contaminated areas not to be taken off-site	Performance indicator(s) item 4.6 'Contaminated soil must not be excavated and removed from the site, without adequate sampling and without prior approval of the EPA

EARTHWORKS ACTIVITIES

The area of the site subject to the SMP issued by the EPA is shown hatched on Drawing 'SMPA', which is appended to the SMP. The tasks outlined in Table 1 refer to clauses from the SMP, which required active on-site supervision by Earthtech, who were commissioned as the Contaminated Site Specialists (CSS).

Bulk earthworks commenced at the site on Monday 18th March 2002 and continued through to Thursday 20th March, 2002. At which time all excavation and disturbance of soil on-site (with the exception of some minor disturbances associated with installation of services outside of the delineated areas of contamination), had been completed.

Construction activities continued through the period March 20th to August 30th, 2002.

SUMMARY OF SUPERVISION

Earthworks

The following observations were made on-site during supervision of earthworks activities:

Excavations outside of the areas or delineated contamination did not reveal any further signs of contamination (ie. gross contaminants or 'ash' fill).

ME2057/ -SMP Supervision Report



- Green matter (ie. stripped grass, trees & mulch), boulders and demolition debris
 was removed off-site to landfill during the first two days of operations, this
 material contained little or no soil.
- No contaminated soils were taken off-site.
- Dust caused by excavations early on the first day was suppressed by the use of water spray from a fire hose, which was then kept on-site and applied regularly during the remaining earthworks operations.

Capping

The following observations were made on-site during supervision of construction activities at the site:

- The delineated areas of contamination have been capped with 75mm of continuous concrete.
- A 0.5m thick layer of 'clean' spoil was temporarily placed over the concrete capping slabs, to help prevent any damage to the capping that may have been incurred during construction. This was later increased in depth to 1.0 to 3.0m, after completion of bulk earthworks.
- The edge of the delineated area of contamination surrounding Test Pit 1, remained exposed in a fill batter, this was temporarily covered with heavy duty plastic sheeting, staked and held in place by 'gaffer' tape while construction of building foundations and ground floor pavements was undertaken.
- Upon completion of construction the exposed embankment was sealed with an application of shot-crete applied in a 100mm thick layer. Inspection of the site following the application showed the shot-crete layer to be continuous for the length of the filled embankment.

Landscaping

Significant landscaping is planned for areas of the site on which contamination is contained. Review of the approved landscaping schedule for the Lagoon Apartments site did not indicate any conflicts with the requirements set down in the SMP, provided the following are undertaken:

The area of the site around TP5 has been capped with concrete and covered by fill to a depth ranging from 1.0m (fronting the street) to 3.0m at the building line. This area was initially designated to be planted with mature trees, the roots of which may have penetrated/cracked the concrete cap. However this has been amended and only 'ground cover' and small shrubs have been planted in the zone extending back 2.0m from the fence line, and medium sized trees (Palms etc..) with a root extension of no more than 1.2m in the zone from 2.0m back to the building line, (see amended Drawing No SMP5, attached). This is considered acceptable from the environmental management perspective and does not conflict with the requirements of the SMP.



The area of the site around TP1 has also been capped with concrete, and the exposed face of the fill batter behind this area has been covered with a continuous layer of sprayed concrete (shot-crete). This area was also designated to be covered with mixed vegetation, the roots of which may have penetrated/cracked the concrete cap and/or the shot-crete. This has been amended and vegetation is limited to plants contained in a 'tree planting area' on top of the existing concrete cap, which has been covered by the compacted clay cap (0.3m minimum depth) and an additional 1.0m of 'clean' imported soil, giving a total minimum soil depth of 1.3m. This 'tree planting area' abuts the existing concrete wall, further reducing any risk of contaminant migration. The shot-creted embankment face beyond the 'tree planting area' has partly been covered with a 0.4m deep layer of imported soil, and planted with grasses, ground cover and small-shrubs. This is also considered acceptable.

SITE STATUS

On-site supervision of earthworks and construction activities undertaken at the site are considered adequate to comply with the requirements set down in the SMP (as issued by the EPA).

The scope of landscaping outlined above is not considered to pose any additional threat or risk to public health or the environment and meets in essence the requirements of the SMP.

REPORTING & MONITORING

This report should be submitted to the Contaminated Land Unit of the EPA within 28 days of completion of capping barriers at the Lagoon Apartments site (ie. by 28th September, 2002).

In accordance with the SMP, an annual inspection of the development site area should be undertaken by the owner to ensure that the capping layer and surface covers remain in good condition and that settlement of fill has not affected the integrity of the capping layer or building structures (i.e. that the soil cover over the concrete capping remains in place and the shot-creted surface remains free of signs of distress).

Records are to be kept of these inspections. All records (including a copy of this report) should be kept by the owner and are to be made available to authorised officers (of the EPA) under the Environmental Protection Act 1994 on request.

ME2057/1-SMP Supervision Report



The EPA may undertake regular site inspections to monitor the site in relation to the above conditions.

For EARTHTECH

Engineer

raviewed hy

Principal Engineer

Enc. Site Register(s)

Drawings SMP A & SMP 5





PARTHERCH CONSULTANTS (QLD) Pry Ltd RPBUQ 2018 ACN 010 826 561 1/51 Sena Josef, Mansfield Qld
P.O. Box 2014 Mansfield DE Qld 4122
Phone: (07) 3343-3466 Fax: (07) 3849-1705
E-mail: consultants@earthtech.com.au
Website: www.en Hitech.com.au



SITE LOCATION: Cairns St, Kangareo Point

DATE: Mon 18/3/02

TIME ON-SITE: 7.30 am

CLIENT: Hutchinsons Builders

SITE SUPERVISOR: Sch4 Pt4

CONTAMINATED SITE SPECIALIST: Sch4 Pt4

Requirem	ents for Remediation	Undertakings
Objective 'Identification of Undetected Contamination' Task - 1 Item 4.3 'Supervision of Works' - by visually monitoring excavation of all spoil from the site	Performance Indicator(s) Item 4.10 'Otiensive or Nexious Odeurs or Visual Identification of Previously Undetected Gross Contamination'	Task 1 - Details Of Operations stripping of vegetation & shallow tensoil complete 11 often monitor demolition of pavament, kerbing, rails etc. 9 bucks of 'green waste' off-site to Modgee Transfer Shi 11 truck of rubble off-site to Deen Bros Dump request 'dust suppression' of certhworks operations - 3.30pm
Objective 'supervision of construction of capping layers'	Performance Indicator(s)	Task 2 - Details Of Operations no activities
Task - 2 Item 4.4 'Site Capping' - capping to be installed in the areas of TP1 & TP5 prior to commencement of any site earthworks at the site	item 4.4 'A capping layer consists of one of the following': concrete slab biluminous seal & 150mm Inyer of compactert gravel 0.5m (min) medium plasticity clay layer (K < 1×10.9 m/sec) synthetic liner of HDPE or GCL construction	discussed potential source of day capping with sila foreman (Jeff Miller) - from Regatta Hotel sile. Trowning
Objective 'approval of site landscaping'	Performance Indicator(s)	Task 3 - Details Of Operations
Task - 3 Item 4.5 'Landscaped Areas' - All tandscaping must be inspected upon completion	Item 4.5 'areas of the site are to be covered with: 0.3m (min) of topsoil over any clay capped areas 0.2m (min) of topsoil in all other areas Landscaped areas to be tuded with grass cover or garden beds.	• no Activities
Objective 'No contaminated soil to removed off-site'	Performance Indicator(s)	Task 4 - Details Of Operations
Task - 4 Item 4.6 'Contaminated Soit Disposal' - Soil from designated contaminated areas is not to be taken off-site	Item 4.6 'Contaminated soil must not be excavated and removed from the site, without adequate sampling and without prior approval of the EPA'	• no Activities



CONSULTANTS (QLD) Pty Ltd RPEUQ 2078

DNSULTANTS P.O. Box 2034 Instield DC Qld 4122 Phone: [07] 3343 3166 Fax: (07)-3849 4705

E-mail: consultants@earthtech.com.au ACN 010 826 561 Website: www.earthtech.com.au



SITE LOCATION: Cairns St, Kangaroo Point

DATE: Tue 19/3/02

TIME ON-SITE: 7.15 am

CLIENT: Hutchinsons Builders

SITE SUPERVISOR:

CONTAMINATED SITE SPECIALIST:

Se	h4	Pt4	(6)

Requirements for Remodiation ,		Undertakings	
Objective 'Identification of Undetected Contamination'	Performance Indicator(s)	Task 1 - Details Of Operations remaining 3 truck loads of 'green waste' off-site to Nedge Transfer Stn. by 11.00am 'dust suppression' using hose in place by 7.30am accevated 'clean' fill placed on the existing batter at the northern side of site	
Task - 1 Item 4.3 'Supervision of Works' - by visually monitoring excavation of all spoil from the site	Item 4.10 'Offensive or Mexicus Odours er Visual Identification of Previously Undetected Gross Contamination'		
Objective	Performance Indicator(s)	Task 2 - Details Of Operations	
'supervision of construction of capping layers' Task - 2 Item 4.4 'Site Capping' - capping to be installed in the areas of TP1 & TP5 prior to commencement of any site earthworks at the site	Item 4.4 "A capping layer consists of one of the following": - concrete slab - bituminous seal & 150mm layer of compacted gravel - 0.5m (min) medium plasticity clay layer (K < 1x10 ⁻⁹ m/sec) - synthetic liner of HDPE or GCL construction	 site foreman elects to use concrete capping instead of clay (no readily available source) 15 m³ of concrete pored in two capping stats at TP5 & TP1, as per defineated areas on site plan - 1.30cm a small area at TP5 remains to be capped 	
Objective 'approval of site landscaping'	Performance Indicator(s)	Task 3 - Details Of Operations	
Task - 3 Item 4.5 'Landscaped Areas' - All landscaping must be inspected upon completion	Item 4.5 'areas of the site are to be covered with: 0.3m (min) of topsoil over any clay capped areas 0.2m (min) of topsoil in all other areas Landscaped areas to be turied with grass cover or garden beds.	no Activities	
Objective 'No contaminated soil to removed off-site'	Performance Indicator(s)	Task 4 - Details Of Operations	
Task - 4 Item 4.6 'Contaminated Soll Disposal' - Soil from designated contaminated areas is not to be taken off-site	Item 4.6 'Contaminated soll must not be excavated and removed from the site, without adequate sampling and without prior approval of the EPA'		

EARTHIECH CONSULTANTS (QLD) Pty Ltd **RPEUQ 2078** ACM 010 826 561

1/51 Secan Mansfield Old P.O. Box 2034 Mansfield DC Qld 4122 Phone: [07] 3343 3166 Fax: [07] 3849 4705

E-mail: consultants@earthtech.com.au Website: www.earthlech.coman



SITE LOCATION: Caims St, Kangaroo Point

CLIENT: Hutchinsons Builders

DATE: Wed 20/3/02

SITE SUPERVISOR

TIME ON-SITE: 7.30 am

	nents for Remediation	Undertakings
Objective 'Identification of Undetected Confamination'	Performance Indicator(s)	Task 1 - Details Of Operations no more material to go off-sile
Task - 1 Item 4.3 'Supervision of Works' - by visually monitoring excavation of all spoil from the site	Item 4.10 'Oftensive or Noxious Odours or Visual Identification of Previously Undetected Gross Contamination'	*dust suppression' using hose in place by 7.30am general earthworks on-going - "clean" fill only excavation of footings, spoil placed behind retaining wall
Objective 'supervision of construction of capping layers'	Performance Indicator(s)	Task 2 - Details Of Operations
Task - 2 Item 4.4 'Site Capping' - capping to be installed in the areas of TP\$ & TP5 prior to commencement of any site earthworks at the site	Item 4.4 'A capping layer consists of one of the following': - concrete slab - biluminous seal & 150mm layer of compacted gravel - 0.5m (min) medium plasticity clay layer (K < 1x10 ⁻⁰ m/sec) - synthetic tiner of HDPE or GCL construction	 1m³ concrete poured to cap small area remaining at 10% exposed edge/face of batter on northern side of site covered with plastic sheeting (temporary measure until shot-crotting at completion of building phase) all exposed concrete capping covered with 0.5m of spoil to prevent chance of damage by construction traific
Objective 'approval of site landscaping'	Performance Indicator(s)	Task 3 - Details Of Operations
Yask-3 Item 4.5 'Landscaped Areas' - All landscaping must be inspected upon completion	Item 4.5 'aleas of the site are to be covered with: - 0.3m (min) of topsoil over any clay capped areas - 0.2m (min) of topsoil in all other areas Landscaped areas to be furfed with grass cover or garden beds.	 no Activities discussed landscaping with site foreman (Jeff Miller), as contaminated areas are concrete capped, topsoil depth can be limited to 0.2m, all topsoiling & turling to be inspected on completion (estimated to be July 2002).
Objective 'No contaminated soil to removed off-site'	Performance Indicator(s)	Task 4 - Details Of Operations
Soil from designated contaminated areas is not to be taken off-site	Item 4.6 'Contaminated soil must not be excavated and removed from the site, without adequate sampling and without prior approval of the EPA.'	* no Activities



FARTHTECH CONSULTANTS (QLD) Pty Ltd RPEUG 2078

ACN 010 826 561

1/51 Securect, Mansfield Qld P.O. Box 20 m Mansfield DC Qld 4122 Phone: (07) 3343-3366 Fax: (07) 3849-4705

E-mail: consultants@earthtech.com.un Website: www.earthtech.com.au



SITE LOCATION: Cairns St, Kangaroo Point

DATE: Thur 21/3/02

TIME ON-SITE: 1.30 pm

CLIENT: Hutchinsons Builders

SITE SUPERVISOR: Sch4 Pt4 (6)

CONTAMINATED SITE SPECIALIST Sch4 Pt4 (6

Requirements for Remediation ,		Undertakings	
Objective 'Identification of Undetected Confamination'	Performance indicator(s)	Task 1 - Details Of Operations no more material to go off-site	
Task - 1 Item 4.3 'Supervision of Works' - by visually monitoring excavation of all spoil from the site	Item 4.10 'Oftensive or Nexious Odours or Visual Identification of Previously Undelected Gross Contamination'	no more general earthworks on-site excavation of footings completed, spoil placed behind retaining wall (as before)	
Objective	Performance Indicator(s)	Task 2 - Defails Of Operations	
'supervision of construction of capping layers'		 Inspection of concrete capping soil cover - all status have 0.5m 	
Task - 2 Item 4.4 'Site Capping' - capping to be installed in the areas of TP1 & TP5 prior to commencement of any site earthworks at the site	Item 4.4 'A capping layer consists of one of the following': - concrete stab - bituminous seat & 160mm layer of compacted gravet - 0.5m (min) medium plasticity day fayer (K < 1x10 ⁻⁹ m/sec) - synthetic liner of HDPE or GCL construction	of soil cover as requested	
Objective 'approval of site tandscaping'	Performance Indicator(s)	Task 3 - Details Of Operations - no Activities	
Task - 3 Item 4.5 'Landscaped Areas' - All landscaping must be inspected upon completion	Item 4.5 'areas of the site are to be covered with: 0.3m (min) of topsoil over any clay capped areas 0.2m (min) of topsoil in all other areas Landscaped areas to be turfed with grass cover or garden beds.		
Objective	Performance Indicator(s)	Task 4 - Details Of Operations	
'No contaminated soil to removed off-site'			
Task - 4 Item 4.6 'Contaminated Soil Disposal' - Soil from designated contaminated areas is not to be taken off-site	Item 4.6 'Contaminated soil must not be excavated and removed from the site, without adequate sampling and without prior approval of the EPA'	• no Activities	



EARTHTECH CONSULTANTS (QLD) Ply 1.1d RPEUQ 2008 ACN 010 826 561

1/51 Seca teet, Mansfield Qld P.O. Bux 2034 Mansfield DE Qld 4122 Phone: (07) 3343 3166 Fax: (07) 3849 4705 E-mail: consultants@earthtech.com.au Website: www.earthtech.com.au



SITE LOCATION: Caims St, Kangaroo Point

DATE: Fri 30/8/02

TIME ON-SITE: 8.30 am

CLIENT: Hutchinsons Builders

SITE SUPERVISOR

CONTAMINATED SITE SPECIALIST:

Requirements for Remediation		Undertakings	
Objective 'Identification of Undetected Contamination'	Performance Indicator(s)	Task 1 - Details Of Operations no further earthworks undertaken on-site	
Task - 1 Item 4.3 'Supervision of Works' - by visually monitoring excavation of all spoil from the site	Item 4.10 'Offensive or Noxious Odours or Visual Identification of Previously Undetected Gross Contamination'		
Objective 'supervision of construction of capping layers'	Performance Indicator(s)	Task 2 - Details Of Operations concrete capping remains covered by more than 0.5m of soil	
Task - 2 Item 4.4 'Site Capping' - capping to be installed in the areas of TP1 & TP5 prior to commencement of any site earthworks at the site	Hem 4.4 'A capping layer consists of one of the following': - concrete slab - bituminous seal & 150mm layer of compacted gravel - 0.5m (min) medium plasticity day layer (K < 1x10 ⁻⁹ m/sec) - synthetic liner of HDPE or GCt, construction	cover or building foundations. Concrete shot-crete blinding layer (100m thick) is in place and continuous for the length of fill batter.	
Objective 'approval of sile landscaping'	Performance Indicator(s)	Task 3 - Details Of Operations Landscaping was undervay,	
Task - 3 Item 4.5 'Landscaped Areas' - All landscaping must be inspected upon completion	Item 4.5 'areas of the site are to be covered with: - 0.3m (min) of topsoil over any clay capped areas - 0.2m (min) of topsoil in all other areas Landscaped areas to be turfed with grass cover or garden beds.	all capped/covered contaminated areas to be planted with shallow rooting vegetation (as outlined in Landscaping Plan).	
Objective Performance Indicator(s) 'No contaminated soil to removed off-site'		Task 4 - Details Of Operations	
Task - 4 Item 4.6 'Contaminated Soit Disposal' - Soil from designated contaminated areas is not to be taken off-site	Item 4.6 'Contaminated soil must not be excavated and removed from the site, without adequate sampling and without prior approval of the EPA'		



Property Details



Parcel **Property Type**

Lot Plan L.7/SL.807308 **UPRN** 000/0026- ^01735

L.7 SL.807308 PAR STH BRISBANE Description

Creation Date 08-NOV-1990

Retirement Date

4,357 Area

69 EAST BRISBANE Ward

Subdivision Number 7973

Subdivision Number (retiring) **Title Reference Number** Lot Type Description

Tenure Type Description LANDS LEASE

Easement V Balance M16 **Orthophoto Map** 105 **Four Chain Map**

Redundant Property Description

L.7 SL.807308 PAR STH BRISBANE Comments

Reserve Number **Reserve Creation Date**

CMS Number Entitlement Contribution

UBD MAP REFERENCES

Map Col Row 160 C12

PLAN DETAILS

Creation Date 08-NOV-1990 Plan SL807308

08-NOV-1990 **Retirement Date Registration Date** Common Property Subdivision

Area

LINKED PROPERTIES

Description Lot Plan Ineffective Type UPRN Date

Holding 001/0026-4 ^01735 L.19 RP.880216 & TL.06/216116 - L.7 SL.807308 PAR STH BRISBANE

(LEASE ON L.7 ONLY)

FRONTAGES			
Description	Address	Width	
Uprn (Official Location)	26 CAIRNS ST KANGAROO POINT QLD 4169	38.5	
Postal	26 CAIRNS ST KANGAROO POINT QLD 4169	38.5	
Valuation	26 CAIRNS ST KANGAROO POINT QLD 4169	38.5	
Narrow Frontage	26 CAIRNS ST KANGAROO POINT QLD 4169	38.5	
Wide Frontage	DEAKIN ST KANGAROO POINT QLD 4169	65.8	
A STATE OF THE PARTY OF THE PAR			

LEASES

Condition Area Lease Start Date **Expiry Date Reference** Number

TL06/216116 30-JUL-2001

460/32/24(2025)

new lease issued from 30/07/2001 for 3 years construction of mixed density residential buildings & ancillary works (supersedes old lease sl.06/52766)

Lessee: STENCRAFT PTY LTD

Lessor: Department Of Natural Resources

TRANSFERS

No transfers were found.

CITY PLAN FLAGS

HIGH DENSITY RESIDENTIAL AREA HR CP-HR

> Summary - The High Density Residential Area Is Designed To Accommodate High Density, High Rise Multi-Unit Dwellings Of Up To 10 Storeys In Height. It Will Be Situated In Inner City Areas With Very Good Access To Public

Transport, Facilities, And The City Centre. For Details See Chapter 3, Section 5.

CP-HPA **HERITAGE PLACE - ADJOINING**

> Summary - Adjoining Heritage Places Are Sites That Are Immediately Adjacent To Heritage Places. Development On These Sites Is Subject To The Heritage

Place Code. For Details See Chapter 5.

CP-KPP KANGAROO POINT PENSINSULA LOCAL PLAN

Local Plans Provide Detailed Guidance For Development On Sites Within A

Local Plan Boundary. For Details See Chapter 4.

TOWN PLAN FLAGS / ZONINGS (1987)

CHARAC BLDG AREA 10

1987 Town Plan - Property In A Residential Zone, Inside The Heritage

And Character Building Area

Superseded By Brisbane City Plan 2000

KANGAROO PT PEN DP 6R

1987 Town Plan - Kangaroo Point Peninsula Development Plan

Superseded By Brisbane City Plan 2000

6T KANGAROO PT DP - P 2

Kangaroo Point Peninsula Development Plan - Precinct 2

75 CITY FRAME AREA

> 1987 Town Plan - City Frame Area Superseded By Brisbane City Plan 2000

KPP2 Kangaroo Point Peninsula Development Plan Precinct 2

OTHER PROPERTY FLAGS

CNTM Contaminated Land Flag

This Is A Notifiable Activity Site. Current Or Previous Activities On The Site May

Cause The Land Contamination.

Contact Fan Chen On 340 34710 For Further Information.

Our Business - A Better Brisbane

@ Brisbane City Council

Application: Properties on the Web bccpdsly. display_property_detai Module:

Package Body Revision: 1.58 © 1999-2001, Brisbane City Council Page generated: Aug 13, 2002 3:52

ENVIRONMENTAL MANAGEMENT REGISTER (EMR) CONTAMINATED LAND REGISTER (CLR)

Transaction ID:

323000

08 August 2001

This response relates to a search request received for the site:

Lot: 7

Plan: SL807308

EMR RESULT

The above site IS included on the Environmental Management Register.

Lot: 7

Plan: SL807308

Address: 26 CAIRNS STREET

KANGAROO POINT

4169

The site has been subject to the following Notifiable Activity pursuant to section 374 of the Environmental Protection Act 1994.

METAL TREATMENT OR COATING - treating or coating metal including, for example, anodising, galvanising, pickling, electroplating, heat treatment using cyanide compounds and spray painting using more than 5 L of paint per week (other than spray painting within a fully enclosed booth).

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

If you have any queries in relation to this search please phone (07) 3227 7370 or (07) 3225 1827.

Tess Dobinson

Acting Registrar, Contaminated Land Unit



OCT

Architecture Interiors Heritage Urban Design Master Planning

Cameron Chisholm & Nicol (QLD) Pty Ltd ABN 35 009 239 150

Level 2, 212 Margaret Street Brisbane, Queensland, 4000 GPO Box 2737, Brisbane, Queensland 4001 Telephone (07) 3221 7422 Facsimile, (07) 3221 5473

Facsimile (07) 3221 5473
Email brisbane@ccnarchitects.com.au

10th October 2001 Ref: HCP:mlg\Q0014\3300\c011010a

Development Assessment Team East Development & Regulatory Services Customer & Community Services Brisbane City Council 69 Ann Street Brisbane Qld 4000

Attention: Mr Julian Bunting

Dear Sir

Re: DA 779520 at 30 Cairns Street, Kangaroo Point

We refer to our discussions regarding the possible contamination of the site and advise that the site is registered on the Contaminated Land Register, which we attach for your information copies of the search response which relates to the original lot subdivision.

We acknowledge that testing will be required as part of the construction program to determine if any contamination existings on the construction area.



CAMERON CHISHOLM & NICOL (QLD) PTY LTD

encl

Perth Sydney

Brisbane

Gold Coast

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR) CONTAMINATED LAND REGISTER (CLR)

Transaction ID:

323001

08 August 2001

This response relates to a search request received for the site:

Lot: 19

Plan: RP880216

EMR RESULT

The above site IS included on the Environmental Management Register.

The site you have searched has been subdivided from the following site, which is included on the EMR Subdivided new parcels will remain on the EMR unless it can be shown that they are not located near the contaminating activity.

Lot: 2

Plan: SL807310

Address: "DOCKSIDE"KANGAROO POINT

BRISBANE

4000

The site has been subject to the following Notifiable Activity pursuant to section 374 of the Environmental Protection Act 1994.

METAL TREATMENT OR COATING - treating or coating metal including, for example, anodising, galvanising, pickling, electroplating, heat treatment using cyanide compounds and spray painting using more than 5 L of paint per week (other than spray painting within a fully enclosed booth).

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

If you have any queries in relation to this search please phone (07) 3227 7370 or (07) 3225 1827.

Tess Dobinson

Acting Registrar, Contaminated Land Unit



EARTHTECH CONSULTANTS (QLD) Pty Ltd RPEUQ 2078 ACN 010 826 561

EARTHTECH | 1/51 Secam Street, Mansfield Old DNSULTANTS | PO Box 2034, Mansfield DC Old 4122

Phone: (07) 3343 3166 Fax: (07) 3849 4705

E-mail: consultants@earthtech.com.au

Website: www.earthtech.com.au

6th September, 2002

Job Nº ME 2057/1

Hutchinsons Builders PO Box 3075 DARRA Qld 4076

FAX: 3870 3155

Sch4 Pt4 (6)

RE: Contaminated Site Supervision - Lagoon Apartments, KANGAROO POINT

INTRODUCTION

At the request of Sch4 Pt4 (6) of Hutchinsons Builders, Earthtech has undertaken supervision of earthworks in areas of contaminated soil, for the Lagoon Apartments development at Cairns Street, Kangaroo Point.

This report details on-site supervision and earthworks activities undertaken to comply with the requirements set down in the Site Management Plan (SMP) (as issued by the EPA - File Ref: 900622 Dated: 22/02/02).

SCOPE

The site (situated on parts of Lot 7 on SL807308 & Lot 19 on RP880216) has been the subject of a Site Contamibation Assessment undertaken by Earthtech in November 2001, and subsequently found to contain two discrete areas of contaminated fill. A SMP detailing required earthworks procedures to be implemented at the site, was prepared and issued by the Environmental Protection Agency (EPA).

Earthtech was commissioned to fulfill the roll of Contaminated Site Specialist (CSS), to undertake site inspections and supervise earthworks operations (in areas subject to contamination), at the site.



ME2057/1-SMP Supervision Report



SUPERVISION CRITERIA

Table 1 - Supervision Criteria from the SMP

Objective	Performance Indicator(s) Item 4.10 'Offensive or Noxious Odours or Visual Identification of Previously Undetected Gross Contamination'	
'Identification of Undetected Contamination'		
Task - 1 Item 4.3 'Supervision of Works' - by visual monitoring excavation of all on-site spoil		
Objective 'supervision of construction of capping layers'	Performance Indicator(s) Item 4.4 'A capping layer consists of one of the following': - concrète slab - bitumen seal & 150mm of compacted gravel - 0.5m (min) clay layer (K < 1x10 ⁻⁹ m/sec) - synthetic liner of HDPE or GCL construction	
Task - 2 Item 4.4 'Site Capping' - capping to be installed in the areas of TP1 & TP5 prior to commencement of any earthworks at the site		
Objective	Performance Indicator(s) Item 4.5	
'approval of site landscaping'	'Areas of the site are to be covered with:	
Task - 3 Item 4.5 'Landscaped Areas' - All landscaping must be inspected upon completion	0.3m (min) of topsoil over clay capped areas 0.2m (min) of topsoil in all other areas Landscaped areas must be turfed / garden beds.	
Objective	Performance Indicator(s) Item 4.6	
'No contaminated soil to be removed off-site'	'Contaminated soil must not be excavated and removed from the site, without adequate sampling and without prior approval of the EPA'	
Task - 4 Item 4.6 'Contaminated Soil		
Disposal'		
 Soil from designated contaminated areas <u>not</u> to be taken off-site 		

EARTHWORKS ACTIVITIES

The area of the site subject to the SMP issued by the EPA is shown hatched on Drawing 'SMPA', which is appended to the SMP. The tasks outlined in Table 1 refer to clauses from the SMP, which required active on-site supervision by Earthtech, who were commissioned as the Contaminated Site Specialists (CSS).

Bulk earthworks commenced at the site on Monday 18th March 2002 and continued through to Thursday 20th March, 2002. At which time all excavation and disturbance of soil on-site (with the exception of some minor disturbances associated with installation of services outside of the delineated areas of contamination), had been completed.

Construction activities continued through the period March 20th to August 30th, 2002.

SUMMARY OF SUPERVISION

Earthworks

The following observations were made on-site during supervision of earthworks activities:

 Excavations outside of the areas of delineated contamination did not reveal any further signs of contamination (ie. gross contaminants or 'ash' fill).



- 'Green matter' (ie. stripped grass, trees & mulch), boulders and demolition debris
 was removed off-site to landfill during the first two days of operations, this
 material contained little or no soil.
- No contaminated soils were taken off-site.
- Dust caused by excavations early on the first day was suppressed by the use of water spray from a fire hose, which was then kept on-site and applied regularly during the remaining earthworks operations.

Capping

The following observations were made on-site during supervision of construction activities at the site:

- The delineated areas of contamination have been capped with 75mm of continuous concrete.
- A 0.5m thick layer of 'clean' spoil was temporarily placed over the concrete capping slabs, to help prevent any damage to the capping that may have been incurred during construction. This was later increased in depth to 1.0 to 3.0m, after completion of bulk earthworks.
- The edge of the delineated area of contamination surrounding Test Pit 1, remained exposed in a fill batter, this was temporarily covered with heavy duty plastic sheeting, staked and held in place by 'gaffer' tape while construction of building foundations and ground floor pavements was undertaken.
- Upon completion of construction the exposed embankment was sealed with an application of shot-crete applied in a 100mm thick layer. Inspection of the site following the application showed the shot-crete layer to be continuous for the length of the filled embankment.

Landscaping

Significant landscaping is planned for areas of the site on which contamination is contained. Review of the approved landscaping schedule for the Lagoon Apartments site did not indicate any conflicts with the requirements set down in the SMP, provided the following are undertaken:

The area of the site around TP5 has been capped with concrete and covered by fill to a depth ranging from 1.0m (fronting the street) to 3.0m at the building line. This area was initially designated to be planted with mature trees, the roots of which may have penetrated/cracked the concrete cap. However this has been amended and only 'ground cover' and small shrubs have been planted in the zone extending back 2.0m from the fence line, and medium sized trees (Palms etc..) with a root extension of no more than 1.2m in the zone from 2.0m back to the building line, (see amended Drawing No SMP5, attached). This is considered acceptable from the environmental management perspective and does not conflict with the requirements of the SMP.



The area of the site around TP1 has also been capped with concrete, and the exposed face of the fill batter behind this area has been covered with a continuous layer of sprayed concrete (shot-crete). This area was also designated to be covered with mixed vegetation, the roots of which may have penetrated/cracked the concrete cap and/or the shot-crete. This has been amended and vegetation is limited to plants contained in a 'tree planting area' on top of the existing concrete cap, which has been covered by the compacted clay cap (0.3m minimum depth) and an additional 1.0m of 'clean' imported soil, giving a total minimum soil depth of 1.3m. This 'tree planting area' abuts the existing concrete wall, further reducing any risk of contaminant migration. The shot-creted embankment face beyond the 'tree planting area' has partly been covered with a 0.4m deep layer of imported soil, and planted with grasses, ground cover and small shrubs. This is also considered acceptable.

SITE STATUS

On-site supervision of earthworks and construction activities undertaken at the site are considered adequate to comply with the requirements set down in the SMP (as issued by the EPA).

The scope of landscaping outlined above is not considered to pose any additional threat or risk to public health or the environment and meets in essence the requirements of the SMP.

REPORTING & MONITORING

This report should be submitted to the Contaminated Land Unit of the EPA within 28 days of completion of capping barriers at the Lagoon Apartments site (ie, by 28th September, 2002).

In accordance with the SMP, an annual inspection of the development site area should be undertaken by the owner to ensure that the capping layer and surface covers remain in good condition and that settlement of fill has not affected the integrity of the capping layer or building structures (ie. that the soil cover over the concrete capping remains in place and the shot-creted surface remains free of signs of distress).

Records are to be kept of these inspections. All records (including a copy of this report) should be kept by the owner and are to be made available to authorised officers (of the EPA) under the Environmental Protection Act 1994 on request.

SEP. 09'2002 14:52 61738494705



The EPA may undertake regular site inspections to monitor the site in relation to the above conditions.

For EARTHTECH Sch4 Pt4 (6)

Engineer

reviewed by Sch4 Pt4 (6)

Principal Engineer

Enc. Site Register(s)

Drawings SMP A & SMP 5





EARTHTECH CONSULTANTS (QLD) Pty Ltd RPEUQ 2078 ACN 010 826 561 1/51 Secam Street, Mansfield Qld P.O. Box 2034 Mansfield DC Qld 4122 Phone: (07) 3343 3166 Fax: (07) 3849 4705

E-mail: consultants@earthtech.com.au Website: www.carthtech.com.au



SITE LOCATION: Cairns St, Kangaroo Point

DATE: Mon 18/3/02

TIME ON-SITE: 7.30 am

CLIENT: Hutchinsons Builders

SITE SUPERVISOR Sch4

CONTAMINATED SITE SPECIALIST Sch4

Requireme	ents for Remediation	Undertakings	
Objective 'Identification of Undetected Contamination' Task - 1 Item 4.3 'Supervision of Works' - by visually monitoring excavation of all spoil from the site Performance Indicator(s) Item 4.10 'Offensive or Noxious Odours or Visual Identification'		Task 1 - Details Of Operations stripping of vegetation & shallow topsoil complete 11.00am monitor demolition of pavement, kerbing, raits etc 9 trucks of 'green waste' off-site to Nudgee Transfer Stn 11 truck of rubble off-site to Deen Bros Dump request 'dust suppression' of earthworks operations - 3.30pm	
Objective 'supervision of construction of capping layers'	Performance Indicator(s)	Task 2 - Details Of Operations no activities	
Task - 2 Item 4.4 'Site Capping' - capping to be installed in the areas of TP1 & TP5 prior to commencement of any site earthworks at the site Item 4.4 'A capping layer consists of one of the following concrete slab bituminous seal & 150mm layer of compacted gravel 0.5m (min) medium plasticity clay layer (K < 1x10'9 n synthetic liner of HDPE or GC1 construction		discussed potential source of clay capping with site foreman (Jeff Miller) - from Regatta Hotel site, Toowong	
Objective Performance Indicator(s) 'approval of site landscaping'		Task 3 - Details Of Operations	
Task - 3 Item 4.5 'Landscaped Areas' - All landscaping must be inspected upon completion	Item 4.5 'areas of the site are to be covered with: - 0.3m (min) of topsoil over any clay capped areas - 0.2m (min) of topsoil in all other areas Landscaped areas to be turfed with grass cover or garden beds.	no Activities	
Objective 'No contaminated soil to removed off-site'	Performance Indicator(s)	Task 4 - Details Of Operations	
Task - 4 Item 4.6 'Contaminated Soil Disposal' - Soil from designated contaminated areas is not to be taken off-site	Item 4.6 'Contaminated soil must not be excavated and removed from the site, without adequate sampling and without prior approval of the EPA'	no Activities	

EARTHTECH



CONSULTANTS (QLD) Pty Ltd RPEUQ 2078 ACN 010 826 561 Website: www.earthtech.com.au

EARTHTECH | 1/51 Secam Street, Mansfield Qld P.O. Box 2034 Mansfield DC Qld 4122 Phone: (07) 3343 3166 Fax: (07) 3849 4705 E-mail: consultants@earthtech.com.au



SITE LOCATION: Cairns St, Kangaroo Point

DATE: Tue 19/3/02

TIME ON-SITE: 7.15 am

CLIENT: Hutchinsons Builders

SITE SUPERVISOR

CONTAMINATED SITE SPECIALIST

_		
\sim		

Requireme	Undertakings		
Objective 'Identification of Undetected Contamination'	Performance Indicator(s)	Task 1 - Details Of Operations remaining 3 truck loads of 'green waste' off-site to Nudg	
Task - 1 Item 4.3 'Supervision of Works' - by visually monitoring excavation of all spoil from the site	Item 4.10 'Offensive or Noxious Odours or Visual Identification of Previously Undetected Gross Contamination'	Transfer Stn. by 11.00am 'dust suppression' using hose in place by 7.30am excavated 'clean' fill placed on the existing batter at the northern side of site	
Objective	Performance Indicator(s)	Task 2 - Details Of Operations	
'supervision of construction of capping layers'		site foreman elects to use concrete capping instead of clay (no	
Task - 2 Item 4.4 'Site Capping' - capping to be installed in the areas of TP1 & TP5 prior to commencement of any site earthworks at the site	Item 4.4 'A capping layer consists of one of the following': - concrete slab - bituminous seal & 150mm layer of compacted gravel - 0.5m (min) medium plasticity clay layer (K < 1x10 ⁻⁹ m/sec) - synthetic liner of HDPE or GCL construction	 readily available source) 15 m³ of concrete pored in two capping slabs at TP5 & TP1, per delineated areas on site plan - 1.30pm a small area at TP5 remains to be capped 	
Objective 'approval of site landscaping'	Performance Indicator(s)	Task 3 - Details Of Operations	
Task - 3 Item 4.5 'Landscaped Areas' - All landscaping must be inspected upon completion	Item 4.5 'areas of the site are to be covered with: - 0.3m (min) of topsoil over any clay capped areas - 0.2m (min) of topsoil in all other areas Landscaped areas to be turfed with grass cover or garden beds.	no Activities	
Objective 'No contaminated soil to removed off-site'	Performance Indicator(s)	Task 4 - Details Of Operations	
Task - 4 Item 4.6 'Contaminated Soil Disposal' - Soil from designated contaminated areas is not to be taken off-site	Item 4.6 'Contaminated soil must not be excavated and removed from the site, without adequate sampling and without prior approval of the EPA'		



EARTHTECH CONSULTANTS (QLD) Pty Ltd RPEUQ 2078

ACN 010 826 561

1/51 Secam Street, Mansfield Qld
P.O. Box 2034 Mansfield DC Qld 4122
Phone: [07] 3343 3166 Fax: [07] 3849 4705
E-mail: consultants@earthtech.com.au
Website: www.earthtech.com.au



SITE LOCATION: Cairns St, Kangaroo Point

DATE: Wed 20/3/02

TIME ON-SITE: 7.30 am

CLIENT: Hutchinsons Builders

SITE SUPERVISOR Sch4 Pt4 (6)

CONTAMINATED SITE SPECIALIST:

Requireme	nts for Remediation	Undertakings	
Objective 'Identification of Undetected Contamination' Task - 1 Item 4.3 'Supervision of Works' - by visually monitoring excavation of all spoil from the site	Performance Indicator(s) Item 4.10 'Offensive or Noxious Odours or Visual Identification of Previously Undetected Gross Contamination'	Task 1 - Details Of Operations no more material to go off-site 'dust suppression' using hose in place by 7.30am general earthworks on-going - 'clean' fill only excavation of footings, spoil placed behind retaining wall	
Objective 'supervision of construction of capping layers' Task - 2 Item 4.4 'Site Capping' - capping to be installed in the areas of TP1 & TP5 prior to commencement of any site earthworks at the site Performance Indicator(s) Item 4.4 'A capping layer consists of one of the following': - concrete slab - bituminous seal & 150mm layer of compacted gravel - 0.5m (min) medium plasticity clay layer (K < 1x10'9 m/sec) - synthetic liner of HDPE or GCL construction		Task 2 - Details Of Operations 1m³ concrete poured to cap small area remaining at TP5 exposed edge/face of batter on northem side of site covered with plastic sheeting (temporary measure until shot-creting completion of building phase) all exposed concrete capping covered with 0.5m of spoil prevent chance of damage by construction traffic	
Objective 'approval of site landscaping'	Performance Indicator(s)	Task 3 - Details Of Operations no Activities	
Task - 3 Item 4.5 'Landscaped Areas' - All landscaping must be inspected upon completion	Item 4.5 'areas of the site are to be covered with: - 0.3m (min) of topsoil over any clay capped areas - 0.2m (min) of topsoil in all other areas Landscaped areas to be turfed with grass cover or garden beds.	 discussed landscaping with site foreman (Jeff Miller) contaminated areas are concrete capped, topsoil depth ca limited to 0.2m, all topsoiling & turfing to be inspected completion (estimated to be July 2002). 	
Objective 'No contaminated soil to removed off-site'	Performance Indicator(s)	Task 4 - Details Of Operations	
Task - 4 Item 4.6 'Contaminated Soil Disposal' - Soil from designated contaminated areas is not to be taken off-site	Item 4.6 'Contaminated soil must not be excavated and removed from the site, without adequate sampling and without prior approval of the EPA'		



EARTHTECH CONSULTANTS (QLD) Pty Ltd RPEUQ 2078 ACN 010 826 561

1/51 Secam Street, Mansfield Qld
P.O. Box 2034 Mansfield DC Qld 4122
Phone: (07) 3343 3166 Fax: (07) 3849 4705
E-mail: consultants@earthtech.com.au

AGEA
Tis fary-belon to
Commission 1 sphery

SITE LOCATION: Cairns St, Kangaroo Point

DATE: Thur 21/3/02

TIME ON-SITE: 1.30 pm

Website: www.earthtech.com.au

CLIENT: Hutchinsons Builders

SITE SUPERVISOR

CONTAMINATED SITE SPECIALIST:

Requireme	nts for Remediation	Undertakings	
Objective 'Identification of Undetected Contamination' Task - 1 Item 4.3 'Supervision of Works' - by visually monitoring excavation of all spoil from the site	Performance Indicator(s) Item 4.10 'Offensive or Noxious Odours or Visual Identification of Previously Undetected Gross Contamination'	Task 1 - Details Of Operations no more material to go off-site no more general earthworks on-site excavation of footings completed, spoil placed behind retainin wall (as before)	
Objective 'supervision of construction of capping layers'	Performance Indicator(s)	Task 2 - Details Of Operations inspection of concrete capping soil cover - all slabs have 0.5m	
Task - 2 Item 4.4 'Site Capping' - capping to be installed in the areas of TP1 & TP5 prior to commencement of any site earthworks at the site	Item 4.4 'A capping layer consists of one of the following': - concrete slab - bituminous seal & 150mm layer of compacted gravel - 0.5m (min) medium plasticity clay layer (K < 1x10 ⁻⁹ m/sec) - synthetic liner of HDPE or GCL construction	of soil cover as requested	
Objective 'approval of site landscaping'	Performance Indicator(s)	Task 3 - Details Of Operations no Activities	
Task - 3 Item 4.5 'Landscaped Areas' - All landscaping must be inspected upon completion	Item 4.5 'areas of the site are to be covered with: - 0.3m (min) of topsoil over any clay capped areas - 0.2m (min) of topsoil in all other areas Landscaped areas to be turfed with grass cover or garden beds.		
Objective 'No contaminated soil to removed off-site'	Performance Indicator(s)	Task 4 - Details Of Operations	
Task - 4 Item 4.6 'Contaminated Soil Disposal' - Soil from designated contaminated areas is not to be taken off-site	Item 4.6 'Contaminated soil must not be excavated and removed from the site, without adequate sampling and without prior approval of the EPA'		

EARTHTECH CONSULTANTS (QLD) Pty Ltd RPEUQ 2078 ACN 010 B26 561 1/51 Secam Street, Mansfield Qld P.O. Box 2034 Mansfield DC Qld 4122 Phone: (07) 3343 3166 Fax: (07) 3849 4705

E-mail: consultants@earthtech.com.au Website: www.earthtech.com.au



SITE LOCATION: Cairns St, Kangaroo Point

DATE: Fri 30/8/02

TIME ON-SITE: 8.30 am

CLIENT: Hutchinsons Builders

SITE SUPERVISOR

CONTAMINATED SITE SPECIALIST

Sch4 Pt4 (6

Requireme	Undertakings	
Objective 'Identification of Undetected Contamination'	Performance Indicator(s)	Task 1 - Details Of Operations no further earthworks undertaken on-site
Task - 1 Item 4.3 'Supervision of Works' - by visually monitoring excavation of all spoil from the site	by visually monitoring excavation of all Item 4.3 'Supervision of Works' Item 4.10 'Offensive or Noxious Odours or Visual Identification of Previously Undetected Gross Contamination'	
Objective 'supervision of construction of capping layers'	Performance Indicator(s)	Task 2 - Details Of Operations concrete capping remains covered by more than 0.5m of soil
Task - 2 Item 4.4 'Site Capping' - capping to be installed in the areas of TP1 & TP5 prior to commencement of any site earthworks at the site	Item 4.4 'A capping layer consists of one of the following': - concrete slab - bituminous seal & 150mm layer of compacted gravel - 0.5m (min) medium plasticity day layer (K < 1x10 ⁻⁹ m/sec) - synthetic liner of HDPE or GCL construction	cover or building foundations. Concrete shot-crete blinding layer (100m thick) is in place and continuous for the length of fill batter.
Objective 'approval of site landscaping'	Performance Indicator(s)	Task 3 - Details Of Operations Landscaping was underway,
Task - 3 Item 4.5 'Landscaped Areas' - All landscaping must be inspected upon completion	Item 4.5 'areas of the site are to be covered with: - 0.3m (min) of topsoil over any clay capped areas - 0.2m (min) of topsoil in all other areas Landscaped areas to be turfed with grass cover or garden beds.	 all capped/covered contaminated areas to be planted with shallow rooting vegetation (as outlined in Landscaping Plan).
Objective 'No contaminated soil to removed off-site'	Performance Indicator(s)	Task 4 - Details Of Operations
Task - 4 Item 4.6 'Contaminated Soil Disposal' Soil from designated contaminated areas is not to be taken off-sile	Item 4.6 'Contaminated soil must not be excavated and removed from the site, without adequate sampling and without prior approval of the EPA'	no Activilies



GREGORY HICKS PLISO SI LANDSCAPE ARCHITECTS

23 SUNNYBRAE STREET SUNNYBANK Q 4109

07 3344 3907 FAX 07 3344 3791 ACH Na

02/4855

Das 050/1101-7939/1918

FACSIMILE

optusnet.com.au DATE: 30.04.02. FAX NO: 3403531/ BRISBANE CITY COUNCIL. NYERGES RE: "CAGOON XPARTMENTS" DOCKSINO NO OF PAGES INCLUDING THIS PAGE:

COCINCIL REF NO DRS/45E/HO1-793919.

ATTACHED XRE SKETCHES OF PROPOSED CANOSIAPE TREATMENTS OVER CRITICAL FREAS OF MINIMAN SOIL FILL LOVER, (AREA TPI) ELSELHERE FREA (TPS) ON ATTACHMENTA; THERE IS SUFFICIENT FILL ASOIL FOR TREE / PALM ESTABLISHMENT & KLIEPTABLE GROWTH. I RECEIPE COUNCILS RESPONSE TO THE PROPOSAL IN CONJUNCTION WITH THE EPA'S KETING CONSUCTANT, EARTHTELY, BEFORE DOLUMENTATION CAN LOMMENCE AS THE PROJECT IS BEING FAST TRAYER UNDER CONSTEUDION, PROMPT RESPONSE WOULD OF A PPRECIATED. ISSUED FOR: APPROVAL ACTION CERTIFICATION

GREGORY HICKS LANDSCAPE ARCHITECTS

LANDSCAPE DESIGNERS . . SITE PLANNERS . . PROJECT MANAGERS

REG HROG

APPROX EXIST GU. APPROX FILISHED EXYOSE yourse SURPACE. ₹8.7 400 IMPORTEDSOIL TREE puniting GOVER ONER CONC CAPPING TREAT. GRADE 1:3 16TIMAL. MINDEPTH OF IMPORTED SOLL -UNF WALL (IM HIGH) .0 M. MIN WIDH 1.8M EXIST LONCKETE CAP 1 GRADE UP WITH CAPPING LATER DRIG SURFACE wier Spraged concrete complete layer MAGOON SECTION A.A 1: 100 (BEFORE REDUCTION) DUNGH APRE 22/2002 PROVINCE 0960 VALLE TO ENGINEERS ESTAILS GREGORY HICKS LANDSCAPE ARCHITECTS bulg . 678- UP 08 'B' READ WITH 648-LP 07 B', 18 LP 09 A FAX 07 3344 3791 648-410A

en 20 Apprex Top of

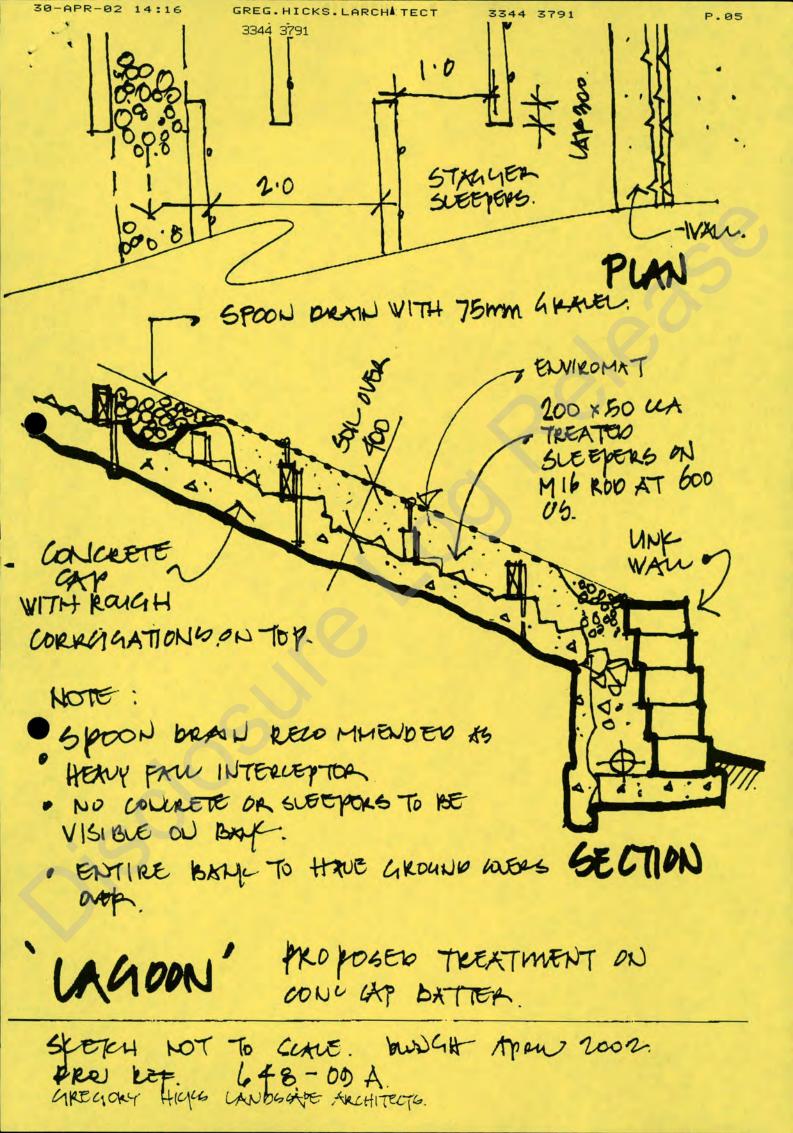
UNK WALL (IM HIGH)

to here the (RIBT APPROX)

ENTHER SET BACK 900 FROM FACE OX ON TOP OF 5X16T WALL.

EXIST MASONILY WARU- 701 WALL 10.6

MUDDIN EXISTING TREES PROPOSED PLANTING OVER CONTAMINATED UND bun 4th Apren 2002 PROJET 698 MAY NO 948-16-10 Y. STATE 1:100 5 EXISTING GRASSED MEET GROUNDLOVERS PROPOSED AND SMALL TREES . SHRUBG ON EMPONEMENT (AS EXISTING BY BUILDER) LAMOON APXRTMENTS GREGORY HICKS ANDSCAPE ARCHITECTS READ BRAVING WITH 648 UP-07 B, 648 UP-09 X TEL 07 3344 3907 FAX 07 3344 3791

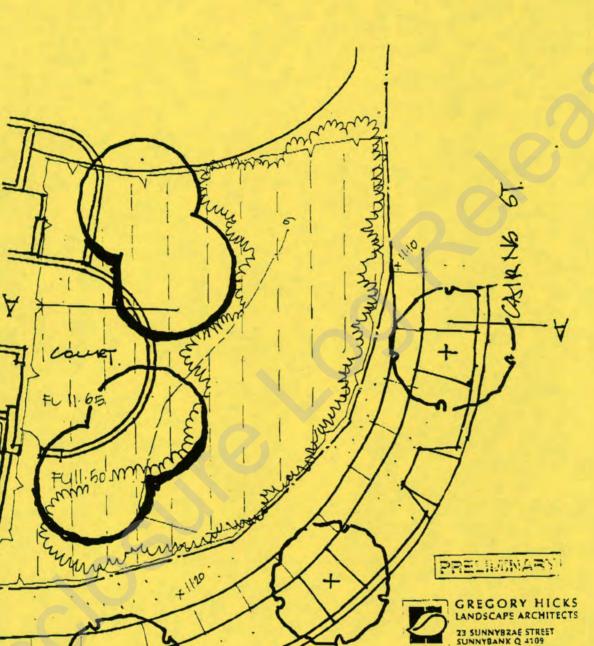


exulur untains MNISHED LOVEL CONCRETE & CULT GAY

PREE PLANTING ALERG KEFOR SETTIONS FOR SOIL COVER

concrete cy

GRAGUES & GHRLIDGE GET SECTIONS



PROJECT. LAGOON APARTMENTS

> 1.100 APRIL 7002 SCALE

23 SUNNYBRAE STREET SUNNYBANK Q 4109 TEL 07 3344 3907 FAX 07 3344 3791

DRAWING

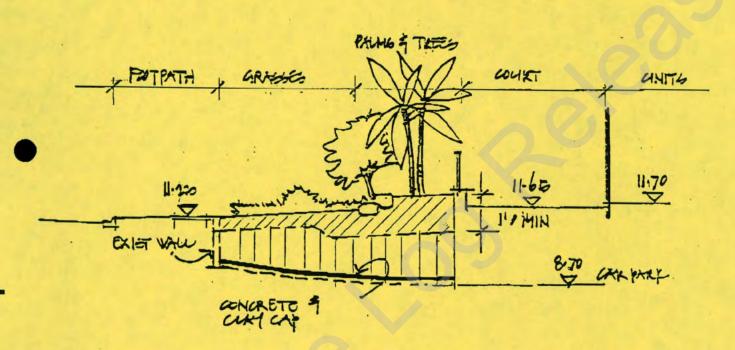
PROPOSED LANDSCAPE TREATMENT OVER CONTAMINATED LAND.

REF NO. DRAWN.



3344 3791

IMPORTED ORCHIC SCIL



GECTIAN X.A 1:100



GREGORY HICKS
LANDSCAPE ARCHITECTS

23 SUNNYBRAE STREET SUNNYBANK Q 4109

TEL 07 3344 3907 FAX 07 3344 3791

PROJECT:

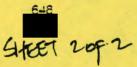
LAGOON APARTMENTS

SCALE:

1:100 APRIL 2002 PRELIMINARY

PLAN OF SECTION A -SHOWING TREATMENT OVER CONTAMINATED LAND.

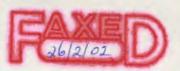
REF NO.



Southern Regional Office (Brisbane) GPO Box 2771 BRISBANE QLD 4001 Phone: (07) 3225 1827 Fax: (07) 3247 3278 www.env.qld.gov.au ABN:87221158786



Notice of concurrence agency response Sections 3.3.16 and 3.3.18 Integrated Planning Act 1997



This notice is issued by the administering authority pursuant to sections 3.3.16 and 3.3.18 of the Integrated Planning Act 1997, to advise you of a decision or action.

Enquiries to:

Anne McCartin

Telephone:

3225 8425 E-mail: Anne.McCartin@env.qld.gov.au

Your reference: DRS/USE-793919

Our reference: 149 Part 1 File No.:900622

CC: Stencraft Pty Ltd

: Stencraft Pty Ltd 27 FFB 2002 C/- Cameron Chisholm & Nicol Architects

GPO Box 1124

BRISBANE OLD 4001

ATTACHA

Brisbane City Council **GPO Box 1434** BRISBANE QLD 4001

Attention: Mr Julian Bunting

Re: Application (No. DRS/USE-793919) for development approval for assessable development to be carried out at 26-30 Cairns Street, Kangaroo Point (Lot 19 on RP880216 and Lot 7 on SL807308).

Pursuant to the following items of Schedule 2 of the Integrated Planning Regulation 1998, the Environmental Protection Agency is a concurrence agency for the development application:

Item 3 of Schedule 2 of the Integrated Planning Regulation 1998 (for Environmentally Relevant Activities)

V Item 4 of Schedule 2 of the Integrated Planning Regulation 1998 (for contaminated land)

The Environmental Protection Agency (EPA), acting as a concurrence agency under the Integrated Planning Act 1997, provides its response to the application detailed above as attached.

It would be appreciated if Council could provide a signed hard copy of the final development approval issued by Council (which includes the Agency's concurrence conditions).

The EPA has not provided a notification to native title parties for this application. The State's Native Title Work Procedures indicate that responsibility for assessment of native title issues for an IDAS application rest with the Assessment Manager. It is recommended that you undertake an assessment using your own guidelines to determine if a native title notification is required for this application.

Should you require any further information please do not hesitate to contact the above officer on the telephone number or e-mail address provided .

Signed Date

Greg O'Brien

Chief Scientific Advisor (Environmental Operations)

Delegate of Administering Authority, Environmental Protection Act 1994.

Concurrence agency response Sections 3.3.16 and 3.5.18 Integrated Planning Act 1997

Applicant: Stencraft Pty Ltd

C/-Cameron Chisholm & Nicol Architects

Council Application Number: DRS/USE-793919

EPA Application Number: 149 Part 1

Date application received by EPA: 20/11/2001

Relevant Laws and Policies: Environmental Protection Act 1994

Jurisdiction: Chapter 7, Part 8 Environmental Protection Act 1994

Development Description:

Material Change of Use

W	h	0	ro	
vv		_		•

- the existing use of the land is, or if the land is vacant land with no existing use the most recent use of the land was, for a notifiable activity under the *Environmental Protection Act* 1994.
- the proposed use of the land is for child care, educational, recreational, residential or similar purposes and the existing use of the land is, or if the land is vacant land with no existing use the most recent use of the land was, for an industrial activity.
- the land is on the Environmental Management Register or Contaminated Land Register under the *Environmental Protection Act 1994*.
- the land is wholly or partly within an area for which an Area Management Advice for industrial activity or natural mineralisation has been issued and the proposed use of the land is for child care, educational, recreational, residential or similar purposes.
- the land is wholly or partly in an area for which an Area Management Advice for unexploded ordnance has been issued.

at the following place(s):

26-30 Cairns Street, Kangaroo Point (Lot 19 on RP880216 and Lot 7 on SL807308)

the application must be refused

Response to Development Application

The Environmental Protection Agency, acting as a concurrence agency under the *Integrated Planning Act 1997*, provides its response to the application detailed above.

The co	oncurrence agency response is that
\square	conditions must attach to any development approval
	any approval must be for part only of the development
	any approval must be a preliminary approval only
	there are no concurrence agency requirements;

Conditions of the development approval

The following concurrence agency condition(s) is/are to be attached to any development approval issued for this application:

a) At all times while the use continues and the subject land is on the Environmental Management Register (EMR) the applicant must comply with the approved Site Management Plans (SMP) for Lot 19 on RP880216 and Lot 7 on SL807308 issued under the Environmental Protection Act 1994 by the Environmental Protection Agency (Contaminated Land Unit).

Reasons for inclusion of development conditions or refusal

In accordance with section 3.3.18 of the *Integrated Planning Act 1997* and section 27B of the Acts Interpretation Act 1954, a concurrence response must include reasons for a refusal or for the inclusion of development conditions.

The Environmental Protection Agency is recognised as a concurrence agency under the *Integrated Planning Regulation 1998* for the protection of the environment by the management of contaminated land. The Environmental Protection Agency concurrence agency conditions for this proposed development that are contained within this response are required to mitigate any potential risk to human health or the environment from possible hazardous contaminants present on the site.

Additional comments or advice about the application

A copy of the current SMP, with an effective date of 22 February 2002, is attached. The SMP has specific requirements which apply to excavation during site construction works and for the removal of soil from the site.

Additional information for applicants

This concurrence response pursuant to Chapter 7, Part 8 of the *Environmental Protection Act* 1994 applies only to contaminated land issues and does not remove the need to obtain any further approval for this development which may be required by this or other legislation, State and/or Commonwealth. Applicants are advised to check with all relevant statutory authorities for such approvals as may be required.

~ End Of Concurrence Agency Response ~

288 Edward Street • Brisbane, Queensland • GPO Box 2771 • QLD 4001 • AUSTRALIA Telephone (07) 3225 1827 • Facsimile (07) 3247 3278 • www.env.qld.gov.au/environment/business/contaminated

SUITABILITY STATEMENT

DATE PRINTED: 22/02/2002

OWNER

STENCRAFT PTY LTD

C/- Sch4 Pt4 (6) - PROPERTY AND LEASING MANAGER

14TH FLOOR, 410 QUEEN STREET

BRISBANE

QLD 4000

DATE OF ISSUE: 22/02/2002

PROPERTY DESCRIPTION

OT: 7

PLAN: SL807308

6 CAIRNS STREET

KANGAROO POINT

4169

BRISBANE CITY COUNCIL

EMR Site ID: 149

FILE REFERENCE: 900622

STUDIES UNDERTAKEN BY APPLICANT OR REQUESTED BY DIRECTOR

Stage 1 Site Contamination Assessment Proposed Lagoon Apartments, Corner Cairns Street and Deakin Street, Kangaroo Point (Volume 1 and 2) prepared by Earthtech Consultants (Qld) Pty Ltd dated October-November 2001 (Job No. ME2057).

Information provided by Earthtech Consultants (Qld) Pty Ltd in correspondence dated 12 November 2001, 19th December 2001 and 29th January 2002.

STATEMENT OF SUITABILITY

On the basis of the information supplied to this Department, the subject site is suitable for the following use(s) providing the site is used and managed as per the Site Management Plan attached as Annexure 1.

The final land use must be for high density residential with minimal opportunities for soil access; including high-rise apartments and flats. The balance of Lot 7 on SL807308 is not suitable for any use until further investigation work enables the administering authority to issue a suitability statement for this land.

Other specific uses may be suitable for the site, please contact this Department for further advice. The suitability statement provides information on appropriate land uses at the date of effect. Subsequent uses of the site for notifiable activities or for situations where a hazardous contaminant is released into the soil may result in the need to review suitable uses or amend the attached site management plan.



, ENVIRONMENTAL MANAGEMENT REGISTER

LOT: 7 PLAN: SL807308 is recorded on the Environmental Management Register with a Site Management Plan. A copy of the Site Management Plan is attached as Annexure 1.

Sch4 Pt4 (6)

Delegate of Administering Authority Environmental Protection Act 1994 288 Edward Street • Brisbane, Queensland • GPO Box 2771 • QLD 4001 • AUSTRALIA Telephone (07) 3225 1827 • Facsimile (07) 3247 3278 • www.env.qld.gov.au/environment/business/contaminated

SUITABILITY STATEMENT

DATE PRINTED: 22/02/2002

OWNER

STENCRAFT PTY LTD

C/-Sch4 Pt4 (6)
- PROPERTY AND LEASING MANAGER

14TH FLOOR, 410 QUEEN STREET

BRISBANE

OLD 4000

COPI

DATE OF ISSUE: 22/02/2002

PROPERTY DESCRIPTION

OT: 19 PLAN: RP880216 DOCKSIDE" KANGAROO POINT BRISBANE 4000

BRISBANE CITY COUNCIL

EMR Site ID: 16934 FILE REFERENCE: 900622

STUDIES UNDERTAKEN BY APPLICANT OR REQUESTED BY DIRECTOR

Stage 1 Site Contamination Assessment Proposed Lagoon Apartments, Corner Cairns Street and Deakin Street, Kangaroo Point (Volume 1 and 2) prepared by Earthtech Consultants (Qld) Pty Ltd, dated October-November 2001 (Job No. ME2057).

Information provided by Earthtech Consultants (Qld) Pty Ltd in correspondence dated 12 November 2001, 19th December 2001 and 29th January 2002.

STATEMENT OF SUITABILITY

On the basis of the information supplied to this Department, the subject site is suitable for the following use(s) providing the site is used and managed as per the Site Management Plan attached as Annexure 1. The final land use must be for high density residential with minimal opportunities for soil access; including high-rise apartments and flats. The balance of Lot 7 on SL807308 is not suitable for any use until further investigation work enables the administering authority to issue a suitability statement for this land.

Other specific uses may be suitable for the site, please contact this Department for further advice. The suitability statement provides information on appropriate land uses at the date of effect. Subsequent uses of the site for notifiable activities or for situations where a hazardous contaminant is released into the soil may result in the need to review suitable uses or amend the attached site management plan.

· ENVIRONMENTAL MANAGEMENT REGISTER

LOT: 19 PLAN: RP880216 is recorded on the Environmental Management Register with a Site Management Plan. A copy of the Site Management Plan is attached as Annexure 1.

Sch4 Pt4 (6)

Delegate of Administering Authority Environmental Protection Act 1994



Please note that this Site Management Plan also applies to Lot 7 on SL 807308.

288 Edward Street • Brisbane, Queensland • GPO Box 2771 • QLD 4001 • AUSTRALIA
Telephone (07) 3225 1827 • Facsimile (07) 3247 3278 • www.env.qld.gov.au/environment/business/contaminated

ANNEXURE 1 - SITE MANAGEMENT PLAN

LOT: 19

PLAN: RP880216 FILE REF: 900622 PRINTED: 22/02/2002

DATE OF EFFECT: 22/02/2002



1.0 INTRODUCTION

This Site Management Plan (SMP) only applies to the hatched area shown on Drawing No. SMP 'A' for Lot 7 on SL807308 and Lot 19 on RP880216. The balance of Lot 7 on SL807308 has not been subject to a contaminated land investigation. No activity or use is permitted on the balance of Lot 7 SL807308 without the prior approval of the administering authority (EPA). Further investigation work is required to obtain this approval.

The owner of the land, as defined in the *Environmental Protection Act 1994*, is to ensure that this SMP and any variations approved or required by the administering authority are complied with. The obligations and conditions set out in this SMP bind the owner, from time to time, of the land.

2.0 SUMMARY OF CONTAMINATION

The site lies within an area formerly occupied by operations associated with the Kangaroo Point 'Dry-Dock'. Site investigations carried out in November - December 2001 identified that ground conditions over the site comprise shallow depths of fill (average 0.6m deep) overlying weathered rock (tuff). Analysis indicated isolated occurrences of heavy metals (Cu, Pb, Zn and Sn) and TPH at levels exceeding the Environmental Investigation Levels (EIL's). However these concentrations were less than Health Based Investigation Levels for standard residential use (HBIL A). Two locations encountered levels of Lead and PAH exceeding the HBIL A levels (refer to Drawing No. SMP 5).

3.0 OBJECTIVES OF THE PLAN

The objective of the plan is to manage the contamination remaining on the site during the construction ase and post development to protect human health and the environment.

The objective will be achieved by:

- Establishment and maintenance of barriers between users of the site and the contamination (eg. site capping);
- Application of controls on site excavations works;
- The application of maintenance and monitoring programs; and
- Restrict the use on balance of Lot 7 SL807308 until further investigation work enables the administering authority to issue a suitability statement for this land.

4.0 ACHIEVEMENT AND MANAGEMENT OF OBJECTIVES

To ensure the plans objectives are achieved and maintained, the owner of the site is required to comply with the following conditions unless otherwise specified.

4.1 Landuse. The site (see hatched area on Drawing No. SMP 'A') must be used for high density residential with minimal opportunities for soil access; including high-rise apartments and flats. The

- balance of Lot 7 on SL807308 is not suitable for any use until further investigation work enables the administering authority to issue a suitability statement for this land.
 - 4.2 Development Design. The development design is to ensure that environmental harm is prevented and public health maintained by planning, minimising and strictly controlling excavation into the areas of contamination (see Drawing Nos. SMP 'A' and SMP5).
 - 4.3 Supervision of Works. All excavation works (including scraping for the profiling of soils) must be supervised by a member of a prescribed organisation with relevant qualifications and experience in accordance with Section 381 of the Environmental Protection Act 1994. The person shall be responsible for the development of suitable working plans; for stopping excavation works in the event of identified contaminants being exposed; for visual monitoring of the removal and replacement of soils over the site; and inspection and confirmation of the adequacy of the capping layers.
- 4.4 Site Capping. A capping layer consisting of concrete slab, bitumen/asphalt paving over 150mm compacted roadbase, a minimum of 0.5m thick compacted medium plasticity clay soil with a permeability of at least 1x10-9 m/s or a synthetic liner such as HDPE or a geosynthetic clay liner (GCL) shall be installed over the areas around TP1 and TP5 (see Drawing No. SMP5) prior to the commencement of cavation works on the site. The synthetic liner may be required in areas (such as slopes) where the placement and compaction of a clay liner is not possible.

The integrity of the capping must be maintained in good condition at all times to ensure that water does not infiltrate through the contaminated zone and prevent/minimise erosion of clay capping layers (where installed).

Approval from the Administering Authority must be obtained before the capping layer is penetrated for any reason.

- 4.5 Landscaped Areas. Areas to be capped (see Drawing No. SMP 5) and require landscaping are to be covered with at least 0.3m clean (imported) top soil (AS4419) on top of a minimum of 0.3m of compacted clay (or equivalent capping material). To minimise erosion of all other areas that are not covered by buildings or sealed with an impervious cover such as pavers, concrete or bitumen/asphalt, these must be overlain by a minimum 0.2m of topsoil with either garden beds or healthy grass cover, to a lawn turf standard.
- Contaminated Soil Disposal. Contaminated soil must not be excavated and removed from the site without adequate sampling and without prior approval of the Administering Authority under Section 424 of the Environmental Protection Act 1994 (or equivalent).
- 4.7 Advice to building designers, site workers and lessees. The owner must provide all persons involved in building, design and planning, and all contractors conducting building and/or excavation works with a copy of the approved Site Management Plan (SMP) prior to commencement of works onsite. The owner must provide a copy of the SMP to any lessee who intends to undertake site excavations.
- 4.8 Workplace Health and Safety. A Workplace Health and Safety Plan (WH&S Plan) which deals with contamination and conforms to the requirements of the Workplace Health and Safety Act 1995 and subordinate legislation (or its equivalent) is to be developed for all site excavation works. The WH&S plan must specifically address measures to minimise dermal, ingestion and inhalation exposures to site contaminants of Lead and PAH. This WH&S plan shall be developed prior to the commencement of any construction works on-site.
- 4.9 General Environmental Protection. Site works relating to the excavation, removal and/or disposal of soil from the site must be conducted in a manner which ensures that the environment is protected.

' Environmental harm is to be prevented by:

- Ensuring that noxious or offensive odours are not released with water sprays and/or covered with plastic.
- Ensuring that contaminant spillages are cleaned up as quickly as practicable and are not hosed, swept or otherwise released to any stormwater system, roadside gutter or waters.
- Ensuring that all trucks exiting the site and carrying contaminated soil have watertight bodies and all loads are covered with appropriate covers.
- Ensuring that all trucks exiting the site have clean tyres, with the use of wheel wash-down bays.

- Suppressing dust emissions by use of a fine water spray whenever dust is generated.

- Establishing sediment traps throughout and around the site to capture sediment transported by stormwater or water used for dust control or wheel washdown purposes.
- Ensuring that rill and gully erosion and mobilisation and deposition of sediments offsite is prevented.

All contamination safety and excavation processes are to be documented and records kept which demonstrate SMP compliance.

Unexpected or gross contamination. It is a requirement of this SMP that excavation works are to immediately cease and the EPA notified and advised of appropriate remedial action in the event that monitoring reveals offensive or noxious odour at the work site and/or evidence of gross contamination not previously detected.

In the event that grossly contaminated soils in addition to those detected during site investigations are identified during the course of construction, work in that area is to cease and the contamination is to be delineated by a member of a prescribed organisation and contained on site at a standard satisfactory to the EPA.

5.0 MAINTENANCE AND MONITORING REQUIREMENTS

Site Inspections

- 5.1 The following monitoring and reporting is to be undertaken by a suitably qualified person in accordance with Section 381 of the *Environmental Protection Act 1994* during excavations works.
- Notification to the Administering Authority within 24 hours of any problems associated with fulfilling the requirements of the SMP;
- Visual monitoring of the removal and replacement of soils over the site;
- Inspection and confirmation of the adequacy of the capping layers;
- Sampling and testing (including validation testing) of excavated soils where off-site disposal permits are required or where unexpected contamination is detected or suspected;
- Submission of a report, prepared in accordance with the 'Draft Guidelines for the Assessment and Management of Contaminated Land in Queensland, May 1998', to the Administering Authority within 28 days from the completion of the final capping barriers across the site, documenting details of:
- The site barriers (capping) as constructed, including the surveyed thicknesses of the capping layers.
- Results of sampling undertaken
- Records of soil excavations and disposals (with associated material types and quantities); and
- SMP compliance.
- 5.2 An annual inspection of the development site area is to be undertaken by the owner to ensure that the capping layer and surface covers remain in good condition and that settlement of fill has not affected the integrity of the capping layer or building structures.

Records are to be kept of the inspections including review of soil excavations, soil disposal, safety records and site management plan compliance is to be undertaken. All records shall be kept by the owner and are to be made available to an authorised officer under the *Environmental Protection Act 1994* upon request.

The EPA may undertake regular site inspections to monitor the site in relation to the above conditions.

The SMP has been developed to manage residual site contamination at the effective date. Subsequent uses of the site may result in the need to review the plan.

The SMP makes reference to plan attachments (SMP A and SMP 5) that are available from the EPA if required.



Geotechnical & Environmental Consultants & Laboratories

CARTHTECH CONSULTANTS (QLD) Pty Ltd RPEUQ 2078 ACN 010 826 561

Ph: 61-7-3343 3166 Fax: 61-7-3849 4705

BRISBANE GOLD COAST Ph: 61-7-5503 1245 Fax: 61-7-5503 1385 consultant@earthtech.com.au goldcoast@earthtech.com.au



Website: www.earthtech.com.au

FACSIMILE MESSAGE

To:

Brisbane City Council

Fax No.: 3403 5311

Attention:

Julian Bunting

Date: 17 December, 2001

From:

Nº of Pages:

SUBJECT:

Development Application No. 779 520 - Lagoon Apartments

The information contained in this document is confidential and may also be legally privileged, intended only for the addressee. If you are not the addressee, any use or dissemination of the information or any copying of the document is strictly prohibited. If you are not the addressee, please notify us and we will arrange return of the document to us.

Julian,

The EPA have responded to the Site Contamination Assessment Report carried out at the above site, stating that the site will remain on the EPA's EMR, and will be managed according to a site management plan.

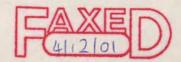
The EPA have requested additional information in their letter dated 11 December, 2001. This information will be used to finalise the plan of remediation and site management strategies for the site.

The minor issues raised in the EPA's request for information are currently being addressed by Earthtech Consultants in terms of some additional sampling (on lot 19 RP880216), additional survey plan and preparation of a site management plan.

On the basis of current and previous investigations, and close liaison with the EPA through the process, we believe all points in the Notice to Supply Additional Information will be answered conclusively, satisfying all of the known EPA's concerns with regard to health and environment issues at the site.

Our discussions with the EPA satisfy us that further delays to the project (and DA process) with regard to contamination issues should be avoided.

Kind Regards





Enquiries

Anne McCartin

Telephone (07) 3:

(07) 3225 8425 Facsimile (07) 3247 3278

Your reference

DRS/USE-793919

Our reference 900622 Appln No: 149 Part 1

Environmental Protection Agency

Incorporating the

Queensland Parks and Wildlife Service

Mr Julian Bunting
Development Assessment Team East
Brisbane City Council
GPO Box 1434
BRISBANE QLD 4001

4 December 2001

DRS 056 HOL 7939 19

XREF. PLI30 3 0

INFORMATION MANAGEMENT

ATTACH No. A 01/134358

Dear Mr Bunting

The Environmental Protection Agency, acting as a concurrence agency under the *Integrated Planning Act 1997* for your application, advises that the correspondence indicated is attached:

Information request about contaminated land				
Information request about environmentally relevant activities				
Notification of information request				
Notification of receipt of applicant's response to information request				
Extension of information request/assessment period				
Request for applicant's written agreement to extension of information request/assessment period				
Concurrence agency response cover sheet				
Concurrence agency response about environmentally relevant activities				
Concurrence agency response about contaminated land				
Request for applicant's written acceptance of concurrence agency response after assessment period expires				
Amended concurrence agency response about environmentally relevant activities				
Amended concurrence agency response about contaminated land				
Notification of decision in relation to a request to change or cancel a condition				
Notification of proposal to change or cancel a condition				
Notification of decision in relation to a proposal to change or cancel a condition				

Application information:

Concurrence agency office: Contaminated Land Unit

Responsible officer: Anne McCartin

Postal address: GPO Box 2771, BRISBANE QLD 4001

Telephone: 3225 8425 Fax: 3247 3278 E-mail: Anne.McCartin@env.qld.gov.au

EPA no.: 149 Part 1

Application no.: DRS/USE-793919

Street address of subject land: 26-30 Cairns Street, Kangaroo Point

Real Property Description.: Lot 19 on RP880216 and Lot 7 on SL807308

Signed

Sch4 Pt4 (6)

Toni Groves

A/Chief Scientific Advisor (Contaminated Land Unit)

Information request

Integrated Planning Act 1997 ss3.3.6 and 3.3.7

EPA no.:

149 Part 1

Applicant:

Stencraft Pty Ltd, c/-Cameron Chisholm & Nicol

Application no.:

DRS/USE-793919

Date received by EPA:

20/11/2001

Jurisdiction:

Environmental Protection Act 1994

Role:

Concurrence

Description:

Material Change of Use - 26-30 Cairns Street, Kangaroo Point

Lot 19 on RP880216 and Lot 7 on SL807308

This development application and supporting information have been reviewed. The Environmental Protection Agency (EPA), acting as a concurrence agency for contaminated land, requires the following further information for the application to be assessed fully.

a) Sufficient information provided in accordance with the Environmental Protection Act 1994 and the *Draft Guidelines for the Assessment and Management of Contaminated Land in Queensland* (DEH, 1998) to enable Suitability Statements to be issued for Lot 7 on SL807308 and Lot 19 on RP880216 specifying that the land is suitable for the intended use.

The Environmental Protection Agency recognises that a Stage 1 Site Contamination Assessment report has been submitted to the EPA Contaminated Land Unit in relation to the above. This submitted information is insufficient to enable the EPA to determine that the land is suitable for the intended use and additional investigations and / or a draft Site Management Plan are required which meet the requirements of the EP Act and the *Draft Guidelines for the Assessment and Management of Contaminated Land in Queensland* (DEH, 1998).

It should be noted that the above-mentioned Stage 1 investigations have only addressed contamination of specific areas within Lot 7 on SL807308 and Lot 19 on RP880216. It is considered there is potential for high volume of public access to this general area due to the nature of the development within this area of Kangaroo Point. Therefore, the investigations required above are expected to include all areas of contamination within the lot boundaries.

Under the *Integrated Planning Act 1997* s3.3.8(1), an applicant receiving an information request from the assessment manager or a concurrence agency (the "requesting authority") must respond by giving the requesting authority-

- (a) all of the information requested; or
- (b) part of the information requested together with a notice asking the requesting authority to proceed with the assessment of the application; or
- (c) a notice-
 - (i) stating that the applicant does not intend to supply any of the information requested; and
 - (ii) asking the requesting authority to proceed with the assessment of the application.

Under s3.2.12(2)(b), the application lapses if the applicant does not respond to the information request within 12 months.

As required by s3.3.6(5), the Agency is forwarding a copy of the information request to the assessment manager.

A response to this information request should be posted or facsimiled to: Contaminated Land Unit Environmental Protection Agency GPO Box 2771 BRISBANE QLD 4001

End of information request

m....

Notification of information request

Integrated Planning Act 1997 ss3.3.6 and 3.3.14

EPA no.:

149 Part 1

Applicant:

Stencraft Pty Ltd

c/-Cameron Chisholm & Nicol Architects

Application no.:

DRS/USE-793919

Date received by EPA:

20/11/2001

Jurisdiction:

Environmental Protection Act 1994

Role:

Concurrence

Description:

Material Change of Use

26-30 Cairns Street, Kangaroo Point

(Lot 19 on RP880216 and Lot 7 on SL807308)

The Environmental Protection Agency, acting as a concurrence agency for contaminated land, has requested further information from the applicant. The Agency sent the request by post/facsimile on 4 December 2001

A copy of the information request is attached.

This Agency's assessment period will recommence on receiving the applicant's response.

End of Notification

Application No:

DRS/USE-793919 Julian Bunting (07)3407-1354

Contact: Telephone:

12 November 2001

Stencraft Pty Ltd C/-Cameron Chisholm & Nicol Architects GPO Box 1124 Brisbane QLD 4001



Acknowledgment notice under section 3.2.3 of the *Integrated Planning Act 1997*: Development Application for Multi Unit Dwelling (18 Units) on land at 26-30 Cairns Street, Kangaroo Point Qld 4169 and described as Lot 19 on RP880216 and Lot 7 on SL807308, Parish of Sth Brisbane.

I refer to the above application that the Council received on 6 November 2001 and advise that I have been appointed as the Council's Assessment Manager for this application. Please find attached the acknowledgment notice details in accordance with the requirements of section 3.2.3 of the *Integrated Planning Act 1997*. I would appreciate it if you would check the attached details and contact me if any of these are incorrect or incomplete.

I anticipate that I will be able to advise you of the progress of your application within 10 business days.

The team has also identified a number of issues that require comment from the agencies listed on the attached acknowledgment notice details.

The Senior Town Planner is the delegate appointed by the Council to determine the application.

If there is any matter that you would like to discuss please telephone me on (07)3407-1354.

Yours faithfully,

Julian Bunting
Assessment Manager
Development Assessment Team East
Development and Regulatory Services
Customer and Community Services

Acknowledgment Notice Details

(Section 3.2.3 of the Integrated Planning Act 1997)

APPLICANT DETAILS:

Stencraft Pty Ltd C/-Cameron Chisholm & Nicol Architects GPO Box 1124 Brisbane QLD 4001

SITE:

Address of Site:

26-30 Cairns Street, Kangaroo Point Qld 4169

Real Property Description:

Lot 19 on RP880216 and Lot 7 on SL807308, Parish of Sth Brisbane

Area Classification:

High Density Residential Area

Name of Owner:

Stencraft Pty Ltd

Name of Ward:

East Brisbane

APPLICATION:

Aspects of development and development approvals sought:

Material Change of Use - Development Permit

Description of Proposal:

Multi Unit Dwelling (18 units)

Council File Reference:

DRS/USE-793919

Lodgement Date:

11 June 2001

CODE OR IMPACT ASSESSMENT:

In accordance with section 3.2.3(2) of the *Integrated Planning Act 1997*, Council advises that the application will be assessed using Impact Assessment procedures.

APPLICABLE CODES

In accordance with section 3.2.3(2)(c) of the *Integrated Planning Act 1997*, Council advises that the following codes may be applicable to your application:

Local Plan Code (primary code)

Residential Design - High Density Code (primary code)

REFERRAL AGENCIES:

There were no Advice Agencies for this application.

The following were Concurrence Agencies for this application:

Environmental Protection Agency Contaminated Land Unit PO BOX 155 BRISBANE Albert Street QLD 4002 Attention: Louise Gilshenan Telephone 3225 1827

The Council did not refer this application to any other State Agency.

You are therefore required (under section 3.3.3 of the *Integrated Planning Act 1997*) to forward a copy of this acknowledgment notice and your application to the above addresses (where agencies are external to the Council) together with any applicable fee.

PUBLIC NOTIFICATION REQUIRED:

Public notification is to be carried out in accordance with the requirements of section 3.4.4(1) of the *Integrated Planning Act 1997*. You are therefore required to:

- (a) publish a notice at least once in a newspaper circulating generally in the locality of the land; and
- (b) place a notice on the land in the way prescribed under the regulations; and
- (c) give a notice to the owners of all land adjoining the land.

The notification period for this application is to be not less than 15 business days starting on the last day after the last action under section 3.4.4(1) of the Act.

INFORMATION REQUEST:

The Council will not make an 'information request' under section 3.3.6 of the *Integrated Planning Act 1997*.



Property Details

Links

Property Type

Parcel

Lot Plan

L.7/SL.807308

UPRN

000/0026- ^01735

Description

L.7 SL.807308 PAR STH BRISBANE

Creation Date

08-NOV-1990

Retirement Date

Area

4.357

Ward

69 EAST BRISBANE

Subdivision Number

7973

Subdivision Number (retiring)

Title Reference Number Lot Type Description

Tenure Type Description

LANDS LEASE

Easement

Balance

M₁₆

Orthophoto Map Four Chain Map

105

Redundant Property Description

Comments

L.7 SL.807308 PAR STH BRISBANE

Reserve Number

Reserve Creation Date

CMS Number Entitlement

Contribution

UBD MAP REFERENCES

Map Col Row

160 C12

PLAN DETAILS

SL807308

Creation Date

08-NOV-1990

Registration Date

LINKED PROPERTIES

UPRN

08-NOV-1990

Retirement Date

Subdivision

Common Property

Description

Lot Plan

Ineffective Date

Holding 001/0026-4 ^01735 L.19 RP.880216 & SL.06/52766 - L.7

SL.807308 PAR STH BRISBANE

(LEASE ON L.7 ONLY)

FRONTAGES

Type

Description	Address	Width	
Uprn (Official Location	n) 26 CAIRNS ST KANGAROO POINT QLD 4169	38.5	
Postal	26 CAIRNS ST KANGAROO POINT QLD 4169	38.5	
Valuation	26 CAIRNS ST KANGAROO POINT QLD 4169	38.5	
Narrow Frontage	26 CAIRNS ST KANGAROO POINT QLD 4169	38.5	
Wide Frontage	DEAKIN ST KANGAROO POINT QLD 4169	65.8	
LEACTO	THE RELIGIOUS CONTRACTOR OF THE RESIDENCE OF THE RESIDENCE OF THE PROPERTY OF THE RESIDENCE OF THE PROPERTY OF	*******************************	

LEASES

Area Lease Number	Start Date	Expiry Date	Reference	Condition
SL06/52766	30-JUL-1993			lease for 8 years from 30/07/1993 to 29/07/2001

Lessee: Stencraft Pty Ltd

Lessor: Department Of Natural Resources

TRANSFERS

No transfers were found.

CITY PLAN FLAGS

CP-HR HIGH DENSITY RESIDENTIAL AREA HR

Summary - The High Density Residential Area Is Designed To Accommodate High Density, High Rise Multi-Unit Dwellings Of Up To 10 Storeys In Height. It Will Be Situated In Inner City Areas With Very Good Access To Public Transport, Facilities, And The City Centre. For Details See Chapter 3, Section 5.

CP-HPA HERITAGE PLACE - ADJOINING

Summary - Adjoining Heritage Places Are Sites That Are Immediately Adjacent To Heritage Places. Development On These Sites Is Subject To The Heritage Place Code. For Details See Chapter 5.

CP-KPP KANGAROO POINT PENSINSULA LOCAL PLAN

Local Plans Provide Detailed Guidance For Development On Sites Within A Local Plan Boundary. For Details See Chapter 4.

TOWN PLAN FLAGS / ZONINGS (1987)

10 CHARAC BLDG AREA

1987 Town Plan - Property In A Residential Zone, Inside The Heritage

And Character Building Area

Superseded By Brisbane City Plan 2000

6R KANGAROO PT PEN DP

1987 Town Plan - Kangaroo Point Peninsula Development Plan

Superseded By Brisbane City Plan 2000

6T KANGAROO PT DP - P 2

Kangaroo Point Peninsula Development Plan - Precinct 2

75 CITY FRAME AREA

1987 Town Plan - City Frame Area Superseded By Brisbane City Plan 2000

KPP2 Kangaroo Point Peninsula Development Plan Precinct 2

OTHER PROPERTY FLAGS

CNTM

Contaminated Land Flag

This Is A Notifiable Activity Site. Current Or Previous Activities On The Site May Cause The Land Contamination.

Contact Fan Chen On 340 34710 For Further Information.

Our Business - A Better Brisbane

& Brisbane City Council

Application: Properties on the Web

Module:

bccpdsly. display_property_detail

Package Body Revision: 1.56 © 1999-2001, Brisbane City Council Page generated: Jul 9, 2001 2:27pm

CONTAMINATED LAND CHECK

DA No:

793919

DEVELOPMENT TYPE: MCU / RECONFIG / OPERATIONAL WORKS

SITE LISTED ON BCC'S CONTAMINATED LAND DATABASE UNDER GIVEN REAL PROPERTY DESCRIPTION

SITE LISTED ON BCC'S CONTAMINATED LAND DATABASE UNDER GIVEN YES NO STREET ADDRESS

PREVIOUS LAND USE AS STATED ON APPLICATION:

TRIGGERS CONCURRENCE AGENCY INVOLVEMENT

REFER APPLICATION TO POAE

DATE: 8/1 OFFICER:



Department of Environment and Science (DES) ABN 46 640 294 485 400 George St Brisbane, Queensland 4000 GPO Box 2454 Brisbane QLD 4001 AUSTRALIA www.des.qld.gov.au

SEARCH RESPONSE

ENVIRONMENTAL MANAGEMENT REGISTER (EMR) CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 50720052 EMR Site Id: 215443 16 September 2021

This response relates to a search request received for the site:

Lot: 1 Plan: SP324724

SEARCH RESULT

The site you have searched is a lot resulting from the amalgamation of the following sites, which are included on the Environmental Management Register (EMR) or the Contaminated Land Register (CLR), as indicated below. Further details for these sites are available by contacting this Agency via email: emr.clr.registry@des.qld.gov.au

Lot Plan 19 RP880216 EMR 7 SL807308 EMR

ADDITIONAL ADVICE

All search responses include particulars of land listed in the EMR/CLR when the search was generated. The EMR/CLR does NOT include:-

- 1. land which is contaminated land (or a complete list of contamination) if DES has not been notified
- 2. land on which a notifiable activity is being or has been undertaken (or a complete list of activities) if DES has not been notified

If you have any queries in relation to this search please phone 13QGOV (13 74 68)

Administering Authority



Department of Environment and Science (DES) ABN 46 640 294 485 400 George St Brisbane, Queensland 4000 GPO Box 2454 Brisbane QLD 4001 AUSTRALIA www.des.qld.gov.au

SEARCH RESPONSE

ENVIRONMENTAL MANAGEMENT REGISTER (EMR) CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 50720053 EMR Site Id: 16934 16 September 2021

This response relates to a search request received for the site:

Lot: 19 Plan: RP880216

EMR RESULT

The above site IS included on the Environmental Management Register.

Lot: 19 Plan: RP880216

Address: "DOCKSIDE" KANGAROO POINT

BRISBANE 4000

The site has been subject to the following Notifiable Activity or Hazardous Contaminant.

METAL TREATMENT OR COATING - treating or coating metal including, for example, anodising, galvanising, pickling, electroplating, heat treatment using cyanide compounds and spray painting using more than 5 L of paint per week (other than spray painting within a fully enclosed booth).

A site management plan has been prepared for this site and is included with this search response as Annexure 1. It has been determined that this site is suitable for the following uses, providing the site is used and managed according to the site management plan:

The final land use must be for high density residential with minimal opportunities for soil access; including high-rise apartments and flats. The balance of Lot 7 on SL807308 is not suitable for any use until further investigation work enables the administering authority to issue a suitability statement for this land.

Following the date of effect of the site management plan, subsequent uses of the site for notifiable activities or for situations where a hazardous contaminant is released into the soil may result in the need to review suitable uses or amend the attached site management plan.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

All search responses include particulars of land listed in the EMR/CLR when the search was generated. The EMR/CLR does NOT include:-

- 1. land which is contaminated land (or a complete list of contamination) if DES has not been notified
- 2. land on which a notifiable activity is being or has been undertaken (or a complete list of activities) if DES has not been notified

If you have any queries in relation to this search please phone 13QGOV (13 74 68)

Administering Authority



Department of Environment and Science (DES) ABN 46 640 294 485 400 George St Brisbane, Queensland 4000 GPO Box 2454 Brisbane QLD 4001 AUSTRALIA www.des.qld.gov.au

ANNEXURE 1 - SITE MANAGEMENT PLAN

LOT: 19 PLAN: RP880216 FILE REF: 900622 PRINTED: 16/09/2021

DATE OF EFFECT: 22/02/2002

1.0 INTRODUCTION

This Site Management Plan (SMP) only applies to the hatched area shown on Drawing No. SMP 'A' for Lot 7 on SL807308 and Lot 19 on RP880216. The balance of Lot 7 on SL807308 has not been subject to a contaminated land investigation. No activity or use is permitted on the balance of Lot 7 SL807308 without the prior approval of the administering authority (EPA). Further investigation work is required to obtain this approval.

The owner of the land, as defined in the *Environmental Protection Act 1994*, is to ensure that this SMP and any variations approved or required by the administering authority are complied with. The obligations and conditions set out in this SMP bind the owner, from time to time, of the land.

2.0 SUMMARY OF CONTAMINATION

The site lies within an area formerly occupied by operations associated with the Kangaroo Point 'Dry-Dock'. Site investigations carried out in November - December 2001 identified that ground conditions over the site comprise shallow depths of fill (average 0.6m deep) overlying weathered rock (tuff). Analysis indicated isolated occurrences of heavy metals (Cu, Pb, Zn and Sn) and TPH at levels exceeding the Environmental Investigation Levels (EIL's). However these concentrations were less than Health Based Investigation Levels for standard residential use (HBIL A). Two locations encountered levels of Lead and PAH exceeding the HBIL A levels (refer to Drawing No. SMP 5).

3.0 OBJECTIVES OF THE PLAN

The objective of the plan is to manage the contamination remaining on the site during the construction phase and post development to protect human health and the environment.

The objective will be achieved by:

- Establishment and maintenance of barriers between users of the site and the contamination (eg. site capping);
- Application of controls on site excavations works;

- The application of maintenance and monitoring programs; and
- Restrict the use on balance of Lot 7 SL807308 until further investigation work enables the administering authority to issue a suitability statement for this land.

4.0 ACHIEVEMENT AND MANAGEMENT OF OBJECTIVES

To ensure the plans objectives are achieved and maintained, the owner of the site is required to comply with the following conditions unless otherwise specified.

- 4.1 Landuse. The site (see hatched area on Drawing No. SMP 'A') must be used for high density residential with minimal opportunities for soil access; including high-rise apartments and flats. The balance of Lot 7 on SL807308 is not suitable for any use until further investigation work enables the administering authority to issue a suitability statement for this land.
- 4.2 Development Design. The development design is to ensure that environmental harm is prevented and public health maintained by planning, minimising and strictly controlling excavation into the areas of contamination (see Drawing Nos. SMP 'A' and SMP5).
- 4.3 Supervision of Works. All excavation works (including scraping for the profiling of soils) must be supervised by a member of a prescribed organisation with relevant qualifications and experience in accordance with Section 381 of the Environmental Protection Act 1994. The person shall be responsible for the development of suitable working plans; for stopping excavation works in the event of identified contaminants being exposed; for visual monitoring of the removal and replacement of soils over the site; and inspection and confirmation of the adequacy of the capping layers.
- 4.4 Site Capping. A capping layer consisting of concrete slab, bitumen/asphalt paving over 150mm compacted roadbase, a minimum of 0.5m thick compacted medium plasticity clay soil with a permeability of at least 1x10-9 m/s or a synthetic liner such as HDPE or a geosynthetic clay liner (GCL) shall be installed over the areas around TP1 and TP5 (see Drawing No. SMP5) prior to the commencement of excavation works on the site. The synthetic liner may be required in areas (such as slopes) where the placement and compaction of a clay liner is not possible.

The integrity of the capping must be maintained in good condition at all times to ensure that water does not infiltrate through the contaminated zone and prevent/minimise erosion of clay capping layers (where installed).

Approval from the Administering Authority must be obtained before the capping layer is penetrated for any reason.

- 4.5 Landscaped Areas. Areas to be capped (see Drawing No. SMP 5) and require landscaping are to be covered with at least 0.3m clean (imported) top soil (AS4419) on top of a minimum of 0.3m of compacted clay (or equivalent capping material). To minimise erosion of all other areas that are not covered by buildings or sealed with an impervious cover such as pavers, concrete or bitumen/asphalt, these must be overlain by a minimum 0.2m of topsoil with either garden beds or healthy grass cover, to a lawn turf standard.
- 4.6 Contaminated Soil Disposal. Contaminated soil must not be excavated and removed from the site without adequate sampling and without prior approval of the Administering Authority under Section 424 of the Environmental Protection Act 1994 (or equivalent).
- 4.7 Advice to building designers, site workers and lessees. The owner must provide all persons involved in building, design and planning, and all contractors conducting building and/or excavation works with a copy of the approved Site Management Plan (SMP) prior to commencement of works on-site. The owner must provide a copy of the SMP to any lessee who intends to undertake site excavations.

- 4.8 Workplace Health and Safety. A Workplace Health and Safety Plan (WH&S Plan) which deals with contamination and conforms to the requirements of the Workplace Health and Safety Act 1995 and subordinate legislation (or its equivalent) is to be developed for all site excavation works. The WH&S plan must specifically address measures to minimise dermal, ingestion and inhalation exposures to site contaminants of Lead and PAH. This WH&S plan shall be developed prior to the commencement of any construction works on-site.
- 4.9 General Environmental Protection. Site works relating to the excavation, removal and/or disposal of soil from the site must be conducted in a manner which ensures that the environment is protected. Environmental harm is to be prevented by:
- Ensuring that noxious or offensive odours are not released with water sprays and/or covered with plastic.
- Ensuring that contaminant spillages are cleaned up as quickly as practicable and are not hosed, swept or otherwise released to any stormwater system, roadside gutter or waters.
- Ensuring that all trucks exiting the site and carrying contaminated soil have watertight bodies and all loads are covered with appropriate covers.
- Ensuring that all trucks exiting the site have clean tyres, with the use of wheel wash-down bays.
- Suppressing dust emissions by use of a fine water spray whenever dust is generated.
- Establishing sediment traps throughout and around the site to capture sediment transported by stormwater or water used for dust control or wheel washdown purposes.
- Ensuring that rill and gully erosion and mobilisation and deposition of sediments offsite is prevented.

All contamination safety and excavation processes are to be documented and records kept which demonstrate SMP compliance.

4.10 Unexpected or gross contamination. It is a requirement of this SMP that excavation works are to immediately cease and the EPA notified and advised of appropriate remedial action in the event that monitoring reveals offensive or noxious odour at the work site and/or evidence of gross contamination not previously detected.

In the event that grossly contaminated soils in addition to those detected during site investigations are identified during the course of construction, work in that area is to cease and the contamination is to be delineated by a member of a prescribed organisation and contained on site at a standard satisfactory to the EPA.

5.0 MAINTENANCE AND MONITORING REQUIREMENTS

Site Inspections

- 5.1 The following monitoring and reporting is to be undertaken by a suitably qualified person in accordance with Section 381 of the *Environmental Protection Act 1994* during excavations works.
- Notification to the Administering Authority within 24 hours of any problems associated with fulfilling the requirements of the SMP;
- Visual monitoring of the removal and replacement of soils over the site;
- Inspection and confirmation of the adequacy of the capping layers;
- Sampling and testing (including validation testing) of excavated soils where off-site disposal permits are required or where unexpected contamination is detected or suspected;
- Submission of a report, prepared in accordance with the 'Draft Guidelines for the Assessment and Management of Contaminated Land in Queensland, May 1998', to the Administering Authority within 28 days from the completion of the final capping barriers across the site, documenting details of:
- The site barriers (capping) as constructed, including the surveyed thicknesses of the capping layers.

- Results of sampling undertaken
- Records of soil excavations and disposals (with associated material types and quantities); and
- SMP compliance.
- 5.2 An annual inspection of the development site area is to be undertaken by the owner to ensure that the capping layer and surface covers remain in good condition and that settlement of fill has not affected the integrity of the capping layer or building structures.

Records are to be kept of the inspections including review of soil excavations, soil disposal, safety records and site management plan compliance is to be undertaken. All records shall be kept by the owner and are to be made available to an authorised officer under the *Environmental Protection Act 1994* upon request.

The EPA may undertake regular site inspections to monitor the site in relation to the above conditions.

The SMP has been developed to manage residual site contamination at the effective date. Subsequent uses of the site may result in the need to review the plan.

The SMP makes reference to plan attachments (SMP A and SMP 5) that are available from the EPA if required.





ANNEXURE 1 - SITE MANAGEMENT PLAN

LOT: 19 PLAN: RP880216 FILE REF: 900622 PRINTED: 25/02/2002

DATE OF EFFECT: 22/02/2002

1.0 INTRODUCTION

This Site Management Plan (SMP) only applies to the hatched area shown on Drawing No. SMP 'A' for Lot 7 on SL807308 and Lot 19 on RP880216. The balance of Lot 7 on SL807308 has not been subject to a contaminated land investigation. No activity or use is permitted on the balance of Lot 7 SL807308 without the prior approval of the administering authority (EPA). Further investigation work is required to obtain this approval.

The owner of the land, as defined in the *Environmental Protection Act 1994*, is to ensure that this SMP and any variations approved or required by the administering authority are complied with. The obligations and conditions set out in this SMP bind the owner, from time to time, of the land.

2.0 SUMMARY OF CONTAMINATION

The site lies within an area formerly occupied by operations associated with the Kangaroo Point 'Dry-Dock'. Site investigations carried out in November - December 2001 identified that ground conditions over the site comprise shallow depths of fill (average 0.6m deep) overlying weathered rock (tuff). Analysis indicated isolated occurrences of heavy metals (Cu, Pb, Zn and Sn) and TPH at levels exceeding the Environmental Investigation Levels (EIL's). However these concentrations were less than Health Based Investigation Levels for standard residential use (HBIL A). Two locations encountered levels of Lead and PAH exceeding the HBIL A levels (refer to Drawing No. SMP 5).

3.0 OBJECTIVES OF THE PLAN

The objective of the plan is to manage the contamination remaining on the site during the construction phase and post development to protect human health and the environment.

The objective will be achieved by:

- Establishment and maintenance of barriers between users of the site and the contamination (eg. site capping);
- Application of controls on site excavations works;
- The application of maintenance and monitoring programs; and
- Restrict the use on balance of Lot 7 SL807308 until further investigation work enables the administering authority to issue a suitability statement for this land.

4.0 ACHIEVEMENT AND MANAGEMENT OF OBJECTIVES

To ensure the plans objectives are achieved and maintained, the owner of the site is required to comply with the following conditions unless otherwise specified.

4.1 Landuse. The site (see hatched area on Drawing No. SMP 'A') must be used for high density residential with minimal opportunities for soil access; including high-rise apartments and flats. The

balance of Lot 7 on SL807308 is not suitable for any use until further investigation work enables the administering authority to issue a suitability statement for this land.

- 4.2 Development Design. The development design is to ensure that environmental harm is prevented and public health maintained by planning, minimising and strictly controlling excavation into the areas of contamination (see Drawing Nos. SMP 'A' and SMP5).
- 4.3 Supervision of Works. All excavation works (including scraping for the profiling of soils) must be supervised by a member of a prescribed organisation with relevant qualifications and experience in accordance with Section 381 of the Environmental Protection Act 1994. The person shall be responsible for the development of suitable working plans; for stopping excavation works in the event of identified contaminants being exposed; for visual monitoring of the removal and replacement of soils over the site; and inspection and confirmation of the adequacy of the capping layers.
- 4.4 Site Capping. A capping layer consisting of concrete slab, bitumen/asphalt paving over 150mm compacted roadbase, a minimum of 0.5m thick compacted medium plasticity clay soil with a permeability of at least 1x10-9 m/s or a synthetic liner such as HDPE or a geosynthetic clay liner (GCL) shall be installed over the areas around TP1 and TP5 (see Drawing No. SMP5) prior to the commencement of excavation works on the site. The synthetic liner may be required in areas (such as slopes) where the placement and compaction of a clay liner is not possible.

The integrity of the capping must be maintained in good condition at all times to ensure that water does not infiltrate through the contaminated zone and prevent/minimise erosion of clay capping layers (where installed).

Approval from the Administering Authority must be obtained before the capping layer is penetrated for any reason.

- 4.5 Landscaped Areas. Areas to be capped (see Drawing No. SMP 5) and require landscaping are to be covered with at least 0.3m clean (imported) top soil (AS4419) on top of a minimum of 0.3m of compacted clay (or equivalent capping material). To minimise erosion of all other areas that are not covered by buildings or sealed with an impervious cover such as pavers, concrete or bitumen/asphalt, these must be overlain by a minimum 0.2m of topsoil with either garden beds or healthy grass cover, to a lawn turf standard.
- 4.6 Contaminated Soil Disposal. Contaminated soil must not be excavated and removed from the site without adequate sampling and without prior approval of the Administering Authority under Section 424 of the Environmental Protection Act 1994 (or equivalent).
- 4.7 Advice to building designers, site workers and lessees. The owner must provide all persons involved in building, design and planning, and all contractors conducting building and/or excavation works with a copy of the approved Site Management Plan (SMP) prior to commencement of works onsite. The owner must provide a copy of the SMP to any lessee who intends to undertake site excavations.
- 4.8 Workplace Health and Safety. A Workplace Health and Safety Plan (WH&S Plan) which deals with contamination and conforms to the requirements of the Workplace Health and Safety Act 1995 and subordinate legislation (or its equivalent) is to be developed for all site excavation works. The WH&S plan must specifically address measures to minimise dermal, ingestion and inhalation exposures to site contaminants of Lead and PAH. This WH&S plan shall be developed prior to the commencement of any construction works on-site.
- 4.9 General Environmental Protection. Site works relating to the excavation, removal and/or disposal of soil from the site must be conducted in a manner which ensures that the environment is protected.

Environmental harm is to be prevented by:

- Ensuring that noxious or offensive odours are not released with water sprays and/or covered with plastic.
- Ensuring that contaminant spillages are cleaned up as quickly as practicable and are not hosed, swept or otherwise released to any stormwater system, roadside gutter or waters.
- Ensuring that all trucks exiting the site and carrying contaminated soil have watertight bodies and all loads are covered with appropriate covers.
- Ensuring that all trucks exiting the site have clean tyres, with the use of wheel wash-down bays.
- Suppressing dust emissions by use of a fine water spray whenever dust is generated.
- Establishing sediment traps throughout and around the site to capture sediment transported by stormwater or water used for dust control or wheel washdown purposes.
- Ensuring that rill and gully erosion and mobilisation and deposition of sediments offsite is prevented.

All contamination safety and excavation processes are to be documented and records kept which demonstrate SMP compliance.

4.10 Unexpected or gross contamination. It is a requirement of this SMP that excavation works are to immediately cease and the EPA notified and advised of appropriate remedial action in the event that monitoring reveals offensive or noxious odour at the work site and/or evidence of gross contamination not previously detected.

In the event that grossly contaminated soils in addition to those detected during site investigations are identified during the course of construction, work in that area is to cease and the contamination is to be delineated by a member of a prescribed organisation and contained on site at a standard satisfactory to the EPA.

5.0 MAINTENANCE AND MONITORING REQUIREMENTS

Site Inspections

- 5.1 The following monitoring and reporting is to be undertaken by a suitably qualified person in accordance with Section 381 of the *Environmental Protection Act 1994* during excavations works.
- Notification to the Administering Authority within 24 hours of any problems associated with fulfilling the requirements of the SMP;
- Visual monitoring of the removal and replacement of soils over the site;
- Inspection and confirmation of the adequacy of the capping layers;
- Sampling and testing (including validation testing) of excavated soils where off-site disposal permits are required or where unexpected contamination is detected or suspected;
- Submission of a report, prepared in accordance with the 'Draft Guidelines for the Assessment and Management of Contaminated Land in Queensland, May 1998', to the Administering Authority within 28 days from the completion of the final capping barriers across the site, documenting details of:
- The site barriers (capping) as constructed, including the surveyed thicknesses of the capping layers.
- Results of sampling undertaken
- Records of soil excavations and disposals (with associated material types and quantities); and
- SMP compliance.
- 5.2 An annual inspection of the development site area is to be undertaken by the owner to ensure that the capping layer and surface covers remain in good condition and that settlement of fill has not affected the integrity of the capping layer or building structures.

Records are to be kept of the inspections including review of soil excavations, soil disposal, safety records and site management plan compliance is to be undertaken. All records shall be kept by the owner and are to be made available to an authorised officer under the *Environmental Protection Act 1994* upon request.

The EPA may undertake regular site inspections to monitor the site in relation to the above conditions.

The SMP has been developed to manage residual site contamination at the effective date. Subsequent uses of the site may result in the need to review the plan.

The SMP makes reference to plan attachments (SMP A and SMP 5) that are available from the EPA required.



288 Edward Street • Brisbane, Queensland • GPO Box 2771 • QLD 4001 • AUSTRALIA Telephone (07) 3225 1827 • Facsimile (07) 3247 3278 • www.env.qld.gov.au/environment/business/contaminated

SUITABILITY STATEMENT

OWNER

DATE PRINTED: 22/02/2002

STENCRAFT PTY LTD - PROPERTY AND LEASING MANAGER 14TH FLOOR, 410 QUEEN STREET BRISBANE

QLD 4000

DATE OF ISSUE: 22/02/2002

PROPERTY DESCRIPTION

LOT: 19 PLAN: RP880216 "DOCKSIDE" KANGAROO POINT

BRISBANE 4000

BRISBANE CITY COUNCIL

EMR Site ID: 16934 FILE REFERENCE: 900622

STUDIES UNDERTAKEN BY APPLICANT OR REQUESTED BY DIRECTOR

Stage 1 Site Contamination Assessment Proposed Lagoon Apartments, Corner Cairns Street and Deakin Street, Kangaroo Point (Volume 1 and 2) prepared by Earthtech Consultants (Qld) Pty Ltd, dated October-November 2001 (Job No. ME2057).

Information provided by Earthtech Consultants (Qld) Pty Ltd in correspondence dated 12 November 2001, 19th December 2001 and 29th January 2002.

STATEMENT OF SUITABILITY

On the basis of the information supplied to this Department, the subject site is suitable for the following use(s) providing the site is used and managed as per the Site Management Plan attached as Annexure 1. The final land use must be for high density residential with minimal opportunities for soil access; including high-rise apartments and flats. The balance of Lot 7 on SL807308 is not suitable for any use until further investigation work enables the administering authority to issue a suitability statement for this

Other specific uses may be suitable for the site, please contact this Department for further advice. The suitability statement provides information on appropriate land uses at the date of effect. Subsequent uses of the site for notifiable activities or for situations where a hazardous contaminant is released into the soil may result in the need to review suitable uses or amend the attached site management plan.

ENVIRONMENTAL MANAGEMENT REGISTER

LOT: 19 PLAN: RP880216 is recorded on the Environmental Management Register with a Site Management Plan. A copy of the Site Management Plan is attached as Annexure 1.

ch4 Pt4 (6)

Delegate of Administering Authority Environmental Protection Act 1994





Disclosure Log Release

Disclosure Log Release



Department of Environment and Science (DES) ABN 46 640 294 485 400 George St Brisbane, Queensland 4000 GPO Box 2454 Brisbane QLD 4001 AUSTRALIA www.des.qld.gov.au

SEARCH RESPONSE

ENVIRONMENTAL MANAGEMENT REGISTER (EMR) CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 50720055 EMR Site Id: 149 16 September 2021

This response relates to a search request received for the site:

Lot: 7 Plan: SL807308

EMR RESULT

The above site IS included on the Environmental Management Register.

Lot: 7 Plan: SL807308 Address: 26 CAIRNS STREET

KANGAROO POINT 4169

The site has been subject to the following Notifiable Activity or Hazardous Contaminant.

METAL TREATMENT OR COATING - treating or coating metal including, for example, anodising, galvanising, pickling, electroplating, heat treatment using cyanide compounds and spray painting using more than 5 L of paint per week (other than spray painting within a fully enclosed booth).

A site management plan has been prepared for this site and is included with this search response as Annexure 1. It has been determined that this site is suitable for the following uses, providing the site is used and managed according to the site management plan:

The final land use must be for high density residential with minimal opportunities for soil access; including high-rise apartments and flats. The balance of Lot 7 on SL807308 is not suitable for any use until further investigation work enables the administering authority to issue a suitability statement for this land.

Following the date of effect of the site management plan, subsequent uses of the site for notifiable activities or for situations where a hazardous contaminant is released into the soil may result in the need to review suitable uses or amend the attached site management plan.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

All search responses include particulars of land listed in the EMR/CLR when the search was generated. The EMR/CLR does NOT include:-

- 1. land which is contaminated land (or a complete list of contamination) if DES has not been notified
- 2. land on which a notifiable activity is being or has been undertaken (or a complete list of activities) if DES has not been notified

If you have any queries in relation to this search please phone 13QGOV (13 74 68)

Administering Authority



Department of Environment and Science (DES) ABN 46 640 294 485 400 George St Brisbane, Queensland 4000 GPO Box 2454 Brisbane QLD 4001 AUSTRALIA www.des.qld.gov.au

ANNEXURE 1 - SITE MANAGEMENT PLAN

LOT: 7 PLAN: SL807308 FILE REF: 900622 PRINTED: 16/09/2021

DATE OF EFFECT: 22/02/2002

1.0 INTRODUCTION

This Site Management Plan (SMP) only applies to the hatched area shown on Drawing No. SMP 'A' for Lot 7 on SL807308 and Lot 19 on RP880216. The balance of Lot 7 on SL807308 has not been subject to a contaminated land investigation. No activity or use is permitted on the balance of Lot 7 SL807308 without the prior approval of the administering authority (EPA). Further investigation work is required to obtain this approval.

The owner of the land, as defined in the *Environmental Protection Act 1994*, is to ensure that this SMP and any variations approved or required by the administering authority are complied with. The obligations and conditions set out in this SMP bind the owner, from time to time, of the land.

2.0 SUMMARY OF CONTAMINATION

The site lies within an area formerly occupied by operations associated with the Kangaroo Point 'Dry-Dock'. Site investigations carried out in November - December 2001 identified that ground conditions over the site comprise shallow depths of fill (average 0.6m deep) overlying weathered rock (tuff). Analysis indicated isolated occurrences of heavy metals (Cu, Pb, Zn and Sn) and TPH at levels exceeding the Environmental Investigation Levels (EIL's). However these concentrations were less than Health Based Investigation Levels for standard residential use (HBIL A). Two locations encountered levels of Lead and PAH exceeding the HBIL A levels (refer to Drawing No. SMP 5).

3.0 OBJECTIVES OF THE PLAN

The objective of the plan is to manage the contamination remaining on the site during the construction phase and post development to protect human health and the environment.

The objective will be achieved by:

- Establishment and maintenance of barriers between users of the site and the contamination (eg. site capping);

- Application of controls on site excavations works;
- The application of maintenance and monitoring programs; and
- Restrict the use on balance of Lot 7 SL807308 until further investigation work enables the administering authority to issue a suitability statement for this land.

4.0 ACHIEVEMENT AND MANAGEMENT OF OBJECTIVES

To ensure the plans objectives are achieved and maintained, the owner of the site is required to comply with the following conditions unless otherwise specified.

- 4.1 Landuse. The site (see hatched area on Drawing No. SMP 'A') must be used for high density residential with minimal opportunities for soil access; including high-rise apartments and flats. The balance of Lot 7 on SL807308 is not suitable for any use until further investigation work enables the administering authority to issue a suitability statement for this land.
- 4.2 Development Design. The development design is to ensure that environmental harm is prevented and public health maintained by planning, minimising and strictly controlling excavation into the areas of contamination (see Drawing Nos. SMP 'A' and SMP5).
- 4.3 Supervision of Works. All excavation works (including scraping for the profiling of soils) must be supervised by a member of a prescribed organisation with relevant qualifications and experience in accordance with Section 381 of the Environmental Protection Act 1994. The person shall be responsible for the development of suitable working plans; for stopping excavation works in the event of identified contaminants being exposed; for visual monitoring of the removal and replacement of soils over the site; and inspection and confirmation of the adequacy of the capping layers.
- 4.4 Site Capping. A capping layer consisting of concrete slab, bitumen/asphalt paving over 150mm compacted roadbase, a minimum of 0.5m thick compacted medium plasticity clay soil with a permeability of at least 1x10-9 m/s or a synthetic liner such as HDPE or a geosynthetic clay liner (GCL) shall be installed over the areas around TP1 and TP5 (see Drawing No. SMP5) prior to the commencement of excavation works on the site. The synthetic liner may be required in areas (such as slopes) where the placement and compaction of a clay liner is not possible.

The integrity of the capping must be maintained in good condition at all times to ensure that water does not infiltrate through the contaminated zone and prevent/minimise erosion of clay capping layers (where installed).

Approval from the Administering Authority must be obtained before the capping layer is penetrated for any reason.

- 4.5 Landscaped Areas. Areas to be capped (see Drawing No. SMP 5) and require landscaping are to be covered with at least 0.3m clean (imported) top soil (AS4419) on top of a minimum of 0.3m of compacted clay (or equivalent capping material). To minimise erosion of all other areas that are not covered by buildings or sealed with an impervious cover such as pavers, concrete or bitumen/asphalt, these must be overlain by a minimum 0.2m of topsoil with either garden beds or healthy grass cover, to a lawn turf standard.
- 4.6 Contaminated Soil Disposal. Contaminated soil must not be excavated and removed from the site without adequate sampling and without prior approval of the Administering Authority under Section 424 of the Environmental Protection Act 1994 (or equivalent).
- 4.7 Advice to building designers, site workers and lessees. The owner must provide all persons involved in building, design and planning, and all contractors conducting building and/or excavation works with a copy of the approved Site Management Plan (SMP) prior to commencement of works on-site. The owner

must provide a copy of the SMP to any lessee who intends to undertake site excavations.

- 4.8 Workplace Health and Safety. A Workplace Health and Safety Plan (WH&S Plan) which deals with contamination and conforms to the requirements of the Workplace Health and Safety Act 1995 and subordinate legislation (or its equivalent) is to be developed for all site excavation works. The WH&S plan must specifically address measures to minimise dermal, ingestion and inhalation exposures to site contaminants of Lead and PAH. This WH&S plan shall be developed prior to the commencement of any construction works on-site.
- 4.9 General Environmental Protection. Site works relating to the excavation, removal and/or disposal of soil from the site must be conducted in a manner which ensures that the environment is protected. Environmental harm is to be prevented by:
- Ensuring that noxious or offensive odours are not released with water sprays and/or covered with plastic.
- Ensuring that contaminant spillages are cleaned up as quickly as practicable and are not hosed, swept or otherwise released to any stormwater system, roadside gutter or waters.
- Ensuring that all trucks exiting the site and carrying contaminated soil have watertight bodies and all loads are covered with appropriate covers.
- Ensuring that all trucks exiting the site have clean tyres, with the use of wheel wash-down bays.
- Suppressing dust emissions by use of a fine water spray whenever dust is generated.
- Establishing sediment traps throughout and around the site to capture sediment transported by stormwater or water used for dust control or wheel washdown purposes.
- Ensuring that rill and gully erosion and mobilisation and deposition of sediments offsite is prevented.

All contamination safety and excavation processes are to be documented and records kept which demonstrate SMP compliance.

4.10 Unexpected or gross contamination. It is a requirement of this SMP that excavation works are to immediately cease and the EPA notified and advised of appropriate remedial action in the event that monitoring reveals offensive or noxious odour at the work site and/or evidence of gross contamination not previously detected.

In the event that grossly contaminated soils in addition to those detected during site investigations are identified during the course of construction, work in that area is to cease and the contamination is to be delineated by a member of a prescribed organisation and contained on site at a standard satisfactory to the EPA.

5.0 MAINTENANCE AND MONITORING REQUIREMENTS

Site Inspections

- 5.1 The following monitoring and reporting is to be undertaken by a suitably qualified person in accordance with Section 381 of the *Environmental Protection Act 1994* during excavations works.
- Notification to the Administering Authority within 24 hours of any problems associated with fulfilling the requirements of the SMP;
- Visual monitoring of the removal and replacement of soils over the site;
- Inspection and confirmation of the adequacy of the capping layers;
- Sampling and testing (including validation testing) of excavated soils where off-site disposal permits are required or where unexpected contamination is detected or suspected;
- Submission of a report, prepared in accordance with the 'Draft Guidelines for the Assessment and Management of Contaminated Land in Queensland, May 1998', to the Administering Authority within 28 days from the completion of the final capping barriers across the site, documenting details of:

- The site barriers (capping) as constructed, including the surveyed thicknesses of the capping layers.
- Results of sampling undertaken
- Records of soil excavations and disposals (with associated material types and quantities); and
- SMP compliance.
- 5.2 An annual inspection of the development site area is to be undertaken by the owner to ensure that the capping layer and surface covers remain in good condition and that settlement of fill has not affected the integrity of the capping layer or building structures.

Records are to be kept of the inspections including review of soil excavations, soil disposal, safety records and site management plan compliance is to be undertaken. All records shall be kept by the owner and are to be made available to an authorised officer under the *Environmental Protection Act 1994* upon request.

The EPA may undertake regular site inspections to monitor the site in relation to the above conditions.

The SMP has been developed to manage residual site contamination at the effective date. Subsequent uses of the site may result in the need to review the plan.

The SMP makes reference to plan attachments (SMP A and SMP 5) that are available from the EPA if required.



22 February 2002

Site ID: 16934

File Number: 900622

Enquiries to: Contaminated Land Unit

Telephone: (07) 3227 6870

ATT: Contaminated Land Pollution Prevention, Health & Safety Brisbane City Council GPO Box 1434 BRISBANE QLD 4001

CERTIFICATE OF APPROVAL OF A SITE MANAGEMENT PLAN

This document provides written notification that, in accordance with the *Environmental Protection Act* 1994 (EP Act), a site management plan has been approved for the parcel of land described below, which is recorded on the Environmental Management Register (EMR). A copy of the suitability statement and the site management plan is attached.

Lot: 19 Plan: RP880216 BRISBANE CITY COUNCIL

"DOCKSIDE" KANGAROO POINT BRISBANE 4000

Section 417 of the EP Act states -

A local government must not, under an approval or other authority under the *Integrated Planning Act 1997* or any other Act, allow the use or development of, or an activity to be carried out on, land in a way that contravenes a site management plan for the land.

For further information regarding this notice please contact the Contaminated Land Unit, EPA on telephone (07) 322 58487.



Delegate of Administering Authority Environmental Protection Act 1994 288 Edward Street • Brisbane, Queensland • GPO Box 2771 • QLD 4001 • AUSTRALIA Telephone (07) 3225 1827 • Facsimile (07) 3247 3278 • www.env.qld.gov.au/environment/business/contaminated

SUITABILITY STATEMENT

DATE PRINTED: 22/02/2002

OWNER

STENCRAFT PTY LTD

C/- Sch4Pt4s6 - PROPERTY AND LEASING MANAGER 14TH FLOOR, 410 QUEEN STREET BRISBANE

OLD 4000

DATE OF ISSUE: 22/02/2002

PROPERTY DESCRIPTION

LOT: 19 PLAN: RP880216 "DOCKSIDE" KANGAROO POINT

BRISBANE 4000

BRISBANE CITY COUNCIL

EMR Site ID: 16934 FILE REFERENCE: 900622

STUDIES UNDERTAKEN BY APPLICANT OR REQUESTED BY DIRECTOR

Stage 1 Site Contamination Assessment Proposed Lagoon Apartments, Corner Cairns Street and Deakin Street, Kangaroo Point (Volume 1 and 2) prepared by Earthtech Consultants (Qld) Pty Ltd, dated October-November 2001 (Job No. ME2057).

Information provided by Earthtech Consultants (Qld) Pty Ltd in correspondence dated 12 November 2001, 19th December 2001 and 29th January 2002.

STATEMENT OF SUITABILITY

On the basis of the information supplied to this Department, the subject site is suitable for the following use(s) providing the site is used and managed as per the Site Management Plan attached as Annexure 1. The final land use must be for high density residential with minimal opportunities for soil access; including high-rise apartments and flats. The balance of Lot 7 on SL807308 is not suitable for any use until further investigation work enables the administering authority to issue a suitability statement for this land.

Other specific uses may be suitable for the site, please contact this Department for further advice. The suitability statement provides information on appropriate land uses at the date of effect. Subsequent uses of the site for notifiable activities or for situations where a hazardous contaminant is released into the soil may result in the need to review suitable uses or amend the attached site management plan.

ENVIRONMENTAL MANAGEMENT REGISTER

LOT: 19 PLAN: RP880216 is recorded on the Environmental Management Register with a Site Management Plan. A copy of the Site Management Plan is attached as Annexure 1.

Sch4Pt4s6

Delegate of Administering Authority Environmental Protection Act 1994



288 Edward Street • Brisbane, Queensland • GPO Box 2771 • QLD 4001 • AUSTRALIA Telephone (07) 3225 1827 • Facsimile (07) 3247 3278 • www.env.qld.gov.au/environment/business/contaminated

ANNEXURE 1 - SITE MANAGEMENT PLAN

LOT: 19

PLAN: RP880216 FILE REF: 900622 PRINTED: 22/02/2002

DATE OF EFFECT: 22/02/2002

1.0 INTRODUCTION

This Site Management Plan (SMP) only applies to the hatched area shown on Drawing No. SMP 'A' for Lot 7 on SL807308 and Lot 19 on RP880216. The balance of Lot 7 on SL807308 has not been subject to a contaminated land investigation. No activity or use is permitted on the balance of Lot 7 SL807308 without the prior approval of the administering authority (EPA). Further investigation work is required to obtain this approval.

The owner of the land, as defined in the *Environmental Protection Act 1994*, is to ensure that this SMP and any variations approved or required by the administering authority are complied with. The obligations and conditions set out in this SMP bind the owner, from time to time, of the land.

2.0 SUMMARY OF CONTAMINATION

The site lies within an area formerly occupied by operations associated with the Kangaroo Point 'Dry-Dock'. Site investigations carried out in November - December 2001 identified that ground conditions over the site comprise shallow depths of fill (average 0.6m deep) overlying weathered rock (tuff). Analysis indicated isolated occurrences of heavy metals (Cu, Pb, Zn and Sn) and TPH at levels exceeding the Environmental Investigation Levels (EIL's). However these concentrations were less than Health Based Investigation Levels for standard residential use (HBIL A). Two locations encountered levels of Lead and PAH exceeding the HBIL A levels (refer to Drawing No. SMP 5).

3.0 OBJECTIVES OF THE PLAN

The objective of the plan is to manage the contamination remaining on the site during the construction phase and post development to protect human health and the environment.

The objective will be achieved by:

- Establishment and maintenance of barriers between users of the site and the contamination (eg. site capping);
- Application of controls on site excavations works;
- The application of maintenance and monitoring programs; and
- Restrict the use on balance of Lot 7 SL807308 until further investigation work enables the administering authority to issue a suitability statement for this land.

4.0 ACHIEVEMENT AND MANAGEMENT OF OBJECTIVES

To ensure the plans objectives are achieved and maintained, the owner of the site is required to comply with the following conditions unless otherwise specified.

4.1 Landuse. The site (see hatched area on Drawing No. SMP 'A') must be used for high density residential with minimal opportunities for soil access; including high-rise apartments and flats. The

balance of Lot 7 on SL807308 is not suitable for any use until further investigation work enables the administering authority to issue a suitability statement for this land.

- 4.2 Development Design. The development design is to ensure that environmental harm is prevented and public health maintained by planning, minimising and strictly controlling excavation into the areas of contamination (see Drawing Nos. SMP 'A' and SMP5).
- 4.3 Supervision of Works. All excavation works (including scraping for the profiling of soils) must be supervised by a member of a prescribed organisation with relevant qualifications and experience in accordance with Section 381 of the Environmental Protection Act 1994. The person shall be responsible for the development of suitable working plans; for stopping excavation works in the event of identified contaminants being exposed; for visual monitoring of the removal and replacement of soils over the site; and inspection and confirmation of the adequacy of the capping layers.
- 4.4 Site Capping. A capping layer consisting of concrete slab, bitumen/asphalt paving over 150mm compacted roadbase, a minimum of 0.5m thick compacted medium plasticity clay soil with a permeability of at least 1x10-9 m/s or a synthetic liner such as HDPE or a geosynthetic clay liner (GCL) shall be installed over the areas around TP1 and TP5 (see Drawing No. SMP5) prior to the commencement of excavation works on the site. The synthetic liner may be required in areas (such as slopes) where the placement and compaction of a clay liner is not possible.

The integrity of the capping must be maintained in good condition at all times to ensure that water does not infiltrate through the contaminated zone and prevent/minimise erosion of clay capping layers (where installed).

Approval from the Administering Authority must be obtained before the capping layer is penetrated for any reason.

- 4.5 Landscaped Areas. Areas to be capped (see Drawing No. SMP 5) and require landscaping are to be covered with at least 0.3m clean (imported) top soil (AS4419) on top of a minimum of 0.3m of compacted clay (or equivalent capping material). To minimise erosion of all other areas that are not covered by buildings or sealed with an impervious cover such as pavers, concrete or bitumen/asphalt, these must be overlain by a minimum 0.2m of topsoil with either garden beds or healthy grass cover, to a lawn turf standard.
- 4.6 Contaminated Soil Disposal. Contaminated soil must not be excavated and removed from the site without adequate sampling and without prior approval of the Administering Authority under Section 424 of the Environmental Protection Act 1994 (or equivalent).
- 4.7 Advice to building designers, site workers and lessees. The owner must provide all persons involved in building, design and planning, and all contractors conducting building and/or excavation works with a copy of the approved Site Management Plan (SMP) prior to commencement of works onsite. The owner must provide a copy of the SMP to any lessee who intends to undertake site excavations.
- 4.8 Workplace Health and Safety. A Workplace Health and Safety Plan (WH&S Plan) which deals with contamination and conforms to the requirements of the Workplace Health and Safety Act 1995 and subordinate legislation (or its equivalent) is to be developed for all site excavation works. The WH&S plan must specifically address measures to minimise dermal, ingestion and inhalation exposures to site contaminants of Lead and PAH. This WH&S plan shall be developed prior to the commencement of any construction works on-site.
- 4.9 General Environmental Protection. Site works relating to the excavation, removal and/or disposal of soil from the site must be conducted in a manner which ensures that the environment is protected.

Environmental harm is to be prevented by:

- Ensuring that noxious or offensive odours are not released with water sprays and/or covered with plastic.
- Ensuring that contaminant spillages are cleaned up as quickly as practicable and are not hosed, swept or otherwise released to any stormwater system, roadside gutter or waters.
- Ensuring that all trucks exiting the site and carrying contaminated soil have watertight bodies and all loads are covered with appropriate covers.
- Ensuring that all trucks exiting the site have clean tyres, with the use of wheel wash-down bays.

- Suppressing dust emissions by use of a fine water spray whenever dust is generated.

- Establishing sediment traps throughout and around the site to capture sediment transported by stormwater or water used for dust control or wheel washdown purposes.
- Ensuring that rill and gully erosion and mobilisation and deposition of sediments offsite is prevented.

All contamination safety and excavation processes are to be documented and records kept which demonstrate SMP compliance.

4.10 Unexpected or gross contamination. It is a requirement of this SMP that excavation works are to immediately cease and the EPA notified and advised of appropriate remedial action in the event that monitoring reveals offensive or noxious odour at the work site and/or evidence of gross contamination not previously detected.

In the event that grossly contaminated soils in addition to those detected during site investigations are identified during the course of construction, work in that area is to cease and the contamination is to be delineated by a member of a prescribed organisation and contained on site at a standard satisfactory to the EPA.

5.0 MAINTENANCE AND MONITORING REQUIREMENTS

Site Inspections

- 5.1 The following monitoring and reporting is to be undertaken by a suitably qualified person in accordance with Section 381 of the *Environmental Protection Act 1994* during excavations works.
- Notification to the Administering Authority within 24 hours of any problems associated with fulfilling the requirements of the SMP;
- Visual monitoring of the removal and replacement of soils over the site;

- Inspection and confirmation of the adequacy of the capping layers;

- Sampling and testing (including validation testing) of excavated soils where off-site disposal permits are required or where unexpected contamination is detected or suspected;

- Submission of a report, prepared in accordance with the 'Draft Guidelines for the Assessment and Management of Contaminated Land in Queensland, May 1998', to the Administering Authority within 28 days from the completion of the final capping barriers across the site, documenting details of:
- The site barriers (capping) as constructed, including the surveyed thicknesses of the capping layers.
- Results of sampling undertaken
- Records of soil excavations and disposals (with associated material types and quantities); and
- SMP compliance.
- 5.2 An annual inspection of the development site area is to be undertaken by the owner to ensure that the capping layer and surface covers remain in good condition and that settlement of fill has not affected the integrity of the capping layer or building structures.

Records are to be kept of the inspections including review of soil excavations, soil disposal, safety records and site management plan compliance is to be undertaken. All records shall be kept by the owner and are to be made available to an authorised officer under the *Environmental Protection Act 1994* upon request.

The EPA may undertake regular site inspections to monitor the site in relation to the above conditions.

The SMP has been developed to manage residual site contamination at the effective date. Subsequent uses of the site may result in the need to review the plan.

The SMP makes reference to plan attachments (SMP A and SMP 5) that are available from the EPA if required.



288 Edward Street • Brisbane, Queensland • GPO Box 2771 • QLD 4001 •AUSTRALIA
Telephone (07) 3225 1827 • Facsimile (07) 3247 3278 • www.env.qld.gov.au/environment/business/contaminated

22 February 2002

Site ID: 149

File Number: 900622

Enquiries to: Contaminated Land Unit

Telephone: (07) 3227 6870

ATT: Contaminated Land Pollution Prevention, Health & Safety Brisbane City Council

GPO Box 1434

BRISBANE QLD 4001

CERTIFICATE OF APPROVAL OF A SITE MANAGEMENT PLAN

This document provides written notification that, in accordance with the *Environmental Protection Act* 1994 (EP Act), a site management plan has been approved for the parcel of land described below, which is recorded on the Environmental Management Register (EMR). A copy of the suitability statement and the site management plan is attached.

Lot: 7 Plan: SL807308

BRISBANE CITY COUNCIL

26 CAIRNS STREET KANGAROO POINT 4169

Section 417 of the EP Act states -

A local government must not, under an approval or other authority under the *Integrated Planning Act 1997* or any other Act, allow the use or development of, or an activity to be carried out on, land in a way that contravenes a site management plan for the land.

For further information regarding this notice please contact the Contaminated Land Unit, EPA on telephone (07) 322 58487.

Delegate of Administering Authority

Environmental Protection Act 1994

288 Edward Street • Brisbane, Queensland • GPO Box 2771 • QLD 4001 •AUSTRALIA Telephone (07) 3225 1827 • Facsimile (07) 3247 3278 • www.env.qld.gov.au/environment/business/contaminated

SUITABILITY STATEMENT

DATE PRINTED: 22/02/2002

OWNER

STENCRAFT PTY LTD
C/-Sch4Pt4s6
PROPERTY AND LEASING MANAGER
14TH FLOOR, 410 QUEEN STREET
BRISBANE
OLD 4000

DATE OF ISSUE: 22/02/2002

PROPERTY DESCRIPTION

LOT:7

PLAN: SL807308

26 CAIRNS STREET

KANGAROO POINT

4169

BRISBANE CITY COUNCIL

EMR Site ID: 149

FILE REFERENCE: 900622

STUDIES UNDERTAKEN BY APPLICANT OR REQUESTED BY DIRECTOR

Stage 1 Site Contamination Assessment Proposed Lagoon Apartments, Corner Cairns Street and Deakin Street, Kangaroo Point (Volume 1 and 2) prepared by Earthtech Consultants (Qld) Pty Ltd dated October-November 2001 (Job No. ME2057).

Information provided by Earthtech Consultants (Qld) Pty Ltd in correspondence dated 12 November 2001, 19th December 2001 and 29th January 2002.

STATEMENT OF SUITABILITY

On the basis of the information supplied to this Department, the subject site is suitable for the following use(s) providing the site is used and managed as per the Site Management Plan attached as Annexure 1.

The final land use must be for high density residential with minimal opportunities for soil access; including high-rise apartments and flats. The balance of Lot 7 on SL807308 is not suitable for any use until further investigation work enables the administering authority to issue a suitability statement for this land.

Other specific uses may be suitable for the site, please contact this Department for further advice. The suitability statement provides information on appropriate land uses at the date of effect. Subsequent uses of the site for notifiable activities or for situations where a hazardous contaminant is released into the soil may result in the need to review suitable uses or amend the attached site management plan.

ENVIRONMENTAL MANAGEMENT REGISTER

LOT: 7 PLAN: SL807308 is recorded on the Environmental Management Register with a Site Management Plan. A copy of the Site Management Plan is attached as Annexure 1.

Delegate of Administering Authority Environmental Protection Act 1994 288 Edward Street • Brisbane, Queensland • GPO Box 2771 • QLD 4001 • AUSTRALIA Telephone (07) 3225 1827 • Facsimile (07) 3247 3278 • www.env.qld.gov.au/environment/business/contaminated

ANNEXURE 1 - SITE MANAGEMENT PLAN

LOT: 7

PLAN: SL807308

FILE REF: 900622 PRINTED: 22/02/2002

DATE OF EFFECT: 22/02/2002

1.0 INTRODUCTION

This Site Management Plan (SMP) only applies to the hatched area shown on Drawing No. SMP 'A' for Lot 7 on SL807308 and Lot 19 on RP880216. The balance of Lot 7 on SL807308 has not been subject to a contaminated land investigation. No activity or use is permitted on the balance of Lot 7 SL807308 without the prior approval of the administering authority (EPA). Further investigation work is required to obtain this approval.

The owner of the land, as defined in the Environmental Protection Act 1994, is to ensure that this SMP and any variations approved or required by the administering authority are complied with. The obligations and conditions set out in this SMP bind the owner, from time to time, of the land.

2.0 SUMMARY OF CONTAMINATION

The site lies within an area formerly occupied by operations associated with the Kangaroo Point 'Dry-Dock'. Site investigations carried out in November - December 2001 identified that ground conditions over the site comprise shallow depths of fill (average 0.6m deep) overlying weathered rock (tuff). Analysis indicated isolated occurrences of heavy metals (Cu, Pb, Zn and Sn) and TPH at levels exceeding the Environmental Investigation Levels (EIL's). However these concentrations were less than Health Based Investigation Levels for standard residential use (HBIL A). Two locations encountered levels of Lead and PAH exceeding the HBIL A levels (refer to Drawing No. SMP 5).

3.0 **OBJECTIVES OF THE PLAN**

The objective of the plan is to manage the contamination remaining on the site during the construction phase and post development to protect human health and the environment.

The objective will be achieved by:

- Establishment and maintenance of barriers between users of the site and the contamination (eg. site capping);
- Application of controls on site excavations works;
- The application of maintenance and monitoring programs; and
- Restrict the use on balance of Lot 7 SL807308 until further investigation work enables the administering authority to issue a suitability statement for this land.

4.0 ACHIEVEMENT AND MANAGEMENT OF OBJECTIVES

To ensure the plans objectives are achieved and maintained, the owner of the site is required to comply with the following conditions unless otherwise specified.

Landuse. The site (see hatched area on Drawing No. SMP 'A') must be used for high density 4.1 residential with minimal opportunities for soil access; including high-rise apartments and flats. The balance of Lot 7 on SL807308 is not suitable for any use until further investigation work enables the administering authority to issue a suitability statement for this land.

- 4.2 Development Design. The development design is to ensure that environmental harm is prevented and public health maintained by planning, minimising and strictly controlling excavation into the areas of contamination (see Drawing Nos. SMP 'A' and SMP5).
- 4.3 Supervision of Works. All excavation works (including scraping for the profiling of soils) must be supervised by a member of a prescribed organisation with relevant qualifications and experience in accordance with Section 381 of the Environmental Protection Act 1994. The person shall be responsible for the development of suitable working plans; for stopping excavation works in the event of identified contaminants being exposed; for visual monitoring of the removal and replacement of soils over the site; and inspection and confirmation of the adequacy of the capping layers.
- 4.4 Site Capping. A capping layer consisting of concrete slab, bitumen/asphalt paving over 150mm compacted roadbase, a minimum of 0.5m thick compacted medium plasticity clay soil with a permeability of at least 1x10-9 m/s or a synthetic liner such as HDPE or a geosynthetic clay liner (GCL) shall be installed over the areas around TP1 and TP5 (see Drawing No. SMP5) prior to the commencement of excavation works on the site. The synthetic liner may be required in areas (such as slopes) where the placement and compaction of a clay liner is not possible.

The integrity of the capping must be maintained in good condition at all times to ensure that water does not infiltrate through the contaminated zone and prevent/minimise erosion of clay capping layers (where installed).

Approval from the Administering Authority must be obtained before the capping layer is penetrated for any reason.

- 4.5 Landscaped Areas. Areas to be capped (see Drawing No. SMP 5) and require landscaping are to be covered with at least 0.3m clean (imported) top soil (AS4419) on top of a minimum of 0.3m of compacted clay (or equivalent capping material). To minimise erosion of all other areas that are not covered by buildings or sealed with an impervious cover such as pavers, concrete or bitumen/asphalt, these must be overlain by a minimum 0.2m of topsoil with either garden beds or healthy grass cover, to a lawn turf standard.
- 4.6 Contaminated Soil Disposal. Contaminated soil must not be excavated and removed from the site without adequate sampling and without prior approval of the Administering Authority under Section 424 of the Environmental Protection Act 1994 (or equivalent).
- 4.7 Advice to building designers, site workers and lessees. The owner must provide all persons involved in building, design and planning, and all contractors conducting building and/or excavation works with a copy of the approved Site Management Plan (SMP) prior to commencement of works onsite. The owner must provide a copy of the SMP to any lessee who intends to undertake site excavations.
- 4.8 Workplace Health and Safety. A Workplace Health and Safety Plan (WH&S Plan) which deals with contamination and conforms to the requirements of the Workplace Health and Safety Act 1995 and subordinate legislation (or its equivalent) is to be developed for all site excavation works. The WH&S plan must specifically address measures to minimise dermal, ingestion and inhalation exposures to site contaminants of Lead and PAH. This WH&S plan shall be developed prior to the commencement of any construction works on-site.
- 4.9 General Environmental Protection. Site works relating to the excavation, removal and/or disposal of soil from the site must be conducted in a manner which ensures that the environment is protected.

Environmental harm is to be prevented by:

- Ensuring that noxious or offensive odours are not released with water sprays and/or covered with plastic.
- Ensuring that contaminant spillages are cleaned up as quickly as practicable and are not hosed, swept or otherwise released to any stormwater system, roadside gutter or waters.
- Ensuring that all trucks exiting the site and carrying contaminated soil have watertight bodies and all loads are covered with appropriate covers.
- Ensuring that all trucks exiting the site have clean tyres, with the use of wheel wash-down bays.
- Suppressing dust emissions by use of a fine water spray whenever dust is generated.
- Establishing sediment traps throughout and around the site to capture sediment transported by stormwater or water used for dust control or wheel washdown purposes.
- Ensuring that rill and gully erosion and mobilisation and deposition of sediments offsite is prevented.

All contamination safety and excavation processes are to be documented and records kept which demonstrate SMP compliance.

4.10 Unexpected or gross contamination. It is a requirement of this SMP that excavation works are to immediately cease and the EPA notified and advised of appropriate remedial action in the event that monitoring reveals offensive or noxious odour at the work site and/or evidence of gross contamination not previously detected.

In the event that grossly contaminated soils in addition to those detected during site investigations are identified during the course of construction, work in that area is to cease and the contamination is to be delineated by a member of a prescribed organisation and contained on site at a standard satisfactory to the EPA.

5.0 MAINTENANCE AND MONITORING REQUIREMENTS

Site Inspections

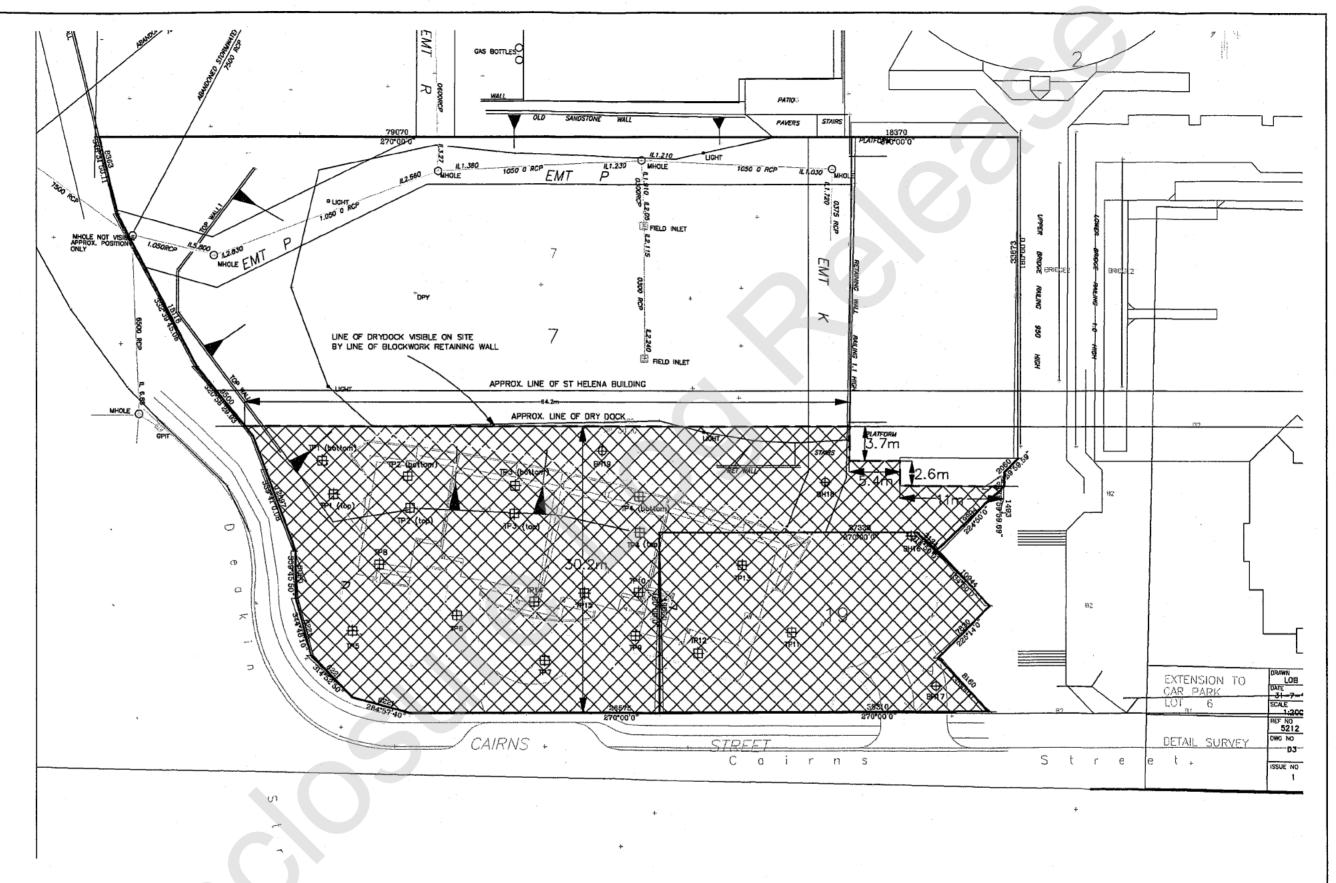
- 5.1 The following monitoring and reporting is to be undertaken by a suitably qualified person in accordance with Section 381 of the *Environmental Protection Act 1994* during excavations works.
- Notification to the Administering Authority within 24 hours of any problems associated with fulfilling the requirements of the SMP;
- Visual monitoring of the removal and replacement of soils over the site;
- Inspection and confirmation of the adequacy of the capping layers;
- Sampling and testing (including validation testing) of excavated soils where off-site disposal permits are required or where unexpected contamination is detected or suspected;
- Submission of a report, prepared in accordance with the 'Draft Guidelines for the Assessment and Management of Contaminated Land in Queensland, May 1998', to the Administering Authority within 28 days from the completion of the final capping barriers across the site, documenting details of:
- The site barriers (capping) as constructed, including the surveyed thicknesses of the capping layers.
- Results of sampling undertaken
- Records of soil excavations and disposals (with associated material types and quantities); and
- SMP compliance.
- 5.2 An annual inspection of the development site area is to be undertaken by the owner to ensure that the capping layer and surface covers remain in good condition and that settlement of fill has not affected the integrity of the capping layer or building structures.

Records are to be kept of the inspections including review of soil excavations, soil disposal, safety records and site management plan compliance is to be undertaken. All records shall be kept by the owner and are to be made available to an authorised officer under the *Environmental Protection Act 1994* upon request.

The EPA may undertake regular site inspections to monitor the site in relation to the above conditions.

The SMP has been developed to manage residual site contamination at the effective date. Subsequent uses of the site may result in the need to review the plan.

The SMP makes reference to plan attachments (SMP A and SMP 5) that are available from the EPA if required.



AREAS TO BE MANAGED ACCORDING TO SMP (PART OF LOT 7 ON PLAN SL807308 AND LOT 19 ON RP880216)

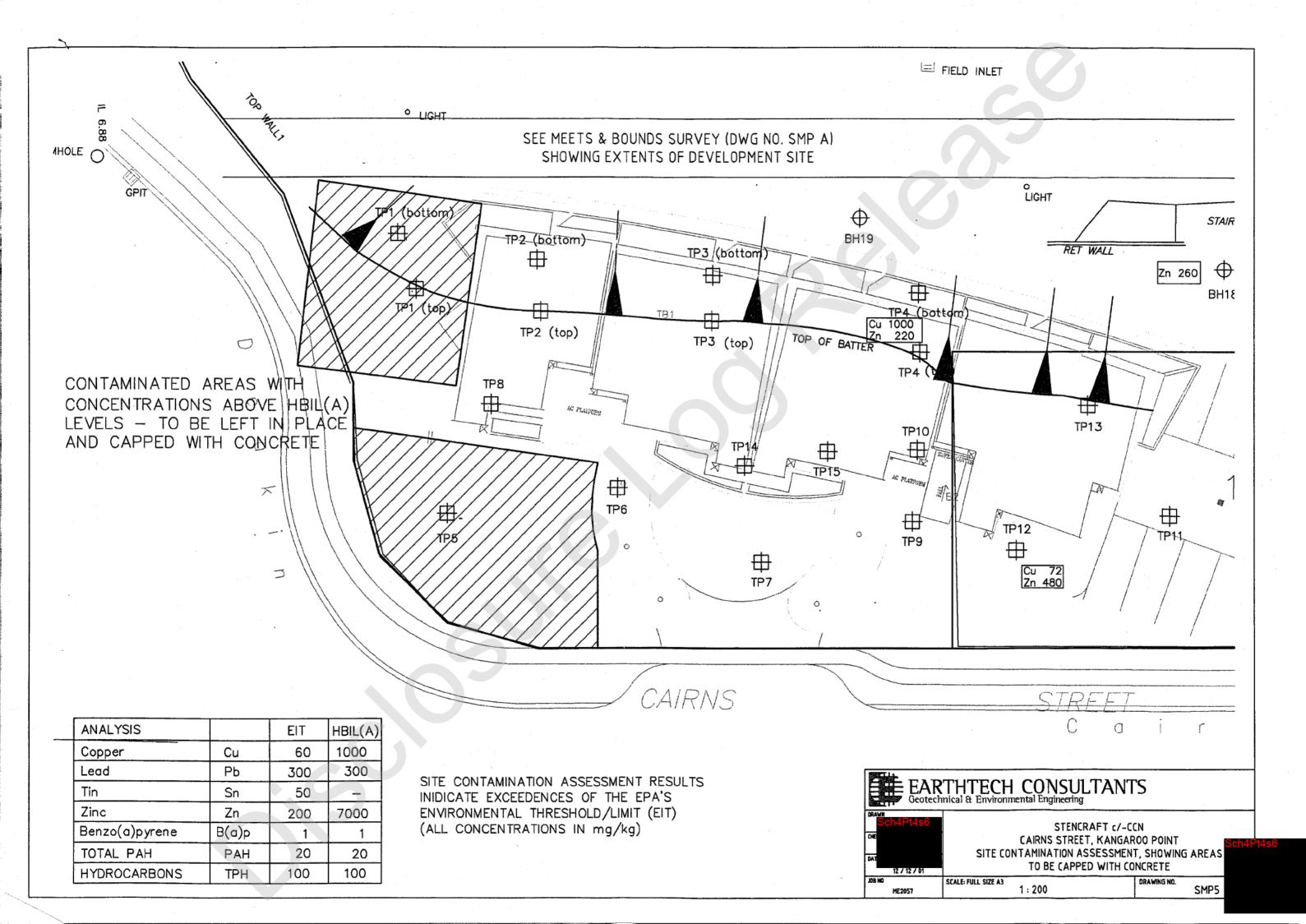
REMAINDER AREA OF LOT 7 ON PLAN SL807308
TO BE SECURED AND NOT TO BE USED FOR ANY PURPOSES



1:400

ME2057

SMPA





Queensland Department of Environment and Heritage

160 Ann Street • Brisbane Queensland • PO Box 155 • BRISBANE ALBERT STREET QLD 4002 Telephone (07) 227 7111 • Facsimile (07) 227 6534

Contaminated Land Unit (07) 227 7369/227 7370

Reference: 900622 Telephone

Your reference

Our reference

The Town Clerk

Brisbane City Council GPO Box 1434

BRISBANE QLD 4001 24 May 1994

NOTIFICATION UNDER THE CONTAMINATED LAND ACT 1991

In accordance with the requirements of Section 23 of the Contaminated Land Act 1991 please note that the parcel of land described in the Schedule below has been classified as a PROBABLE site and its particulars recorded in the Contaminated Sites Register.

SCHEDULE

7 ON PLAN SL807308

LOCATION

26 CAIRNS STREET

KANGAROO POINT

4169

OWNER

DEPARTMENT OF LANDS REGIONAL DIRECTOR

LAND ADMINSTRATION BUILDING

130-148 GEORGE STREET

BRISBANE

4000

PRESCRIBED PURPOSE: METAL SPRAYERS

Yours sincerely

Director, Waste Management Branch Division of Environment

	BRISHANE CITY			
PAPER FOR R	EGISTRATIC	N OR ATTAC	CHMENT	
Tick	applicable box	/cs thus:		4
MEMORANDUM: Central Reco	ords			
Register				
Attach to an	y relevant P/P's	s		
Forward file	to:			
	Code AOC	the same of the sa	5 MLC	
2. Officer (Floor		
3. Officer (Code	Floor _		
File				
Sa	A.dal	O S DINO	fficer Code:	700.
Signature	Was .	_10/3/190	illicer Code:	MUCC

CHECK LIST - Contaminated Land System	
Owner: Steneraft Pty Uta	
Address: 26 Cairns St	
Kangaroo Point P.C. 4169	
Lot No: 7	
RP No: 50807308	
CLS: 582 Remediation: Investigation: CLL: Contacts: Land Use:	
BiMap: Hazardous: DEH:	
DEH: Interested Pty: Contaminants:	
Results Categories:	
Update Details:	
Checking Officer:	1015194

Contaminated Site Summary Report 4 264/47/1-PLI30/26

Site Deta"

Site Ref. Number: 000582 Rotherham/deakin/darrah/goodwin/cairns

Address:

Rotherham/deakin/dar

Kangaroo Point

4169

Phone:

Owner:

Lot: 7

Plan: SL807308

Zone:

UPRN:

Lease#:

Expires: / /

Site Status

Class:

Status: Date: / /

Comments:

General Details

Manual File#:

Data Accuracy: Aerial Photo?

Comments:

Kangaroo Point (pro)

Remediation

Status:

Date: / /

Consultant:

Comments:

Investigation

Result:

Date:

Comments:

Land Use

Eff. Date

Exp. Date

Land Use

Comments

01/07/93

910-VACANT URBAN LAND

DEH

Sequence #

Notify Date Resp. Date Notification Code Comments



Queensland Department of Environment and Heritage

160 Ann Street • Brisbane Queensland • PO Box 155 • North Quay Qld 4002 • Telephone (07) 227 7111 • Facsimile (07) 227 6534

Enquiries to

Telephone

Contaminated Land Unit (07) 227 7369/227 7370

Your reference

Reference: 900622

Our reference

08 MAR 1993

The Town Clerk Brisbane City Council GPO Box 1434 BRISBANE OLD 4001

NOTIFICATION UNDER THE CONTAMINATED LAND ACT 1991

In accordance with the requirements of Section 23 of the Contaminated Land Act 1991 please note that the parcel of land described in the Schedule below has been classified as a PROBABLE site and its particulars recorded in the Contaminated Sites Register.

SCHEDULE

LOT 7 ON PLAN SL807308
LOCATION ROTHERDAM/DEAKIN/DARRAH/GOODWIN/CAI
RNS STS
KANGAROO POINT
4169

OWNER DEPARTMENT OF LANDS
REGIONAL DIRECTOR
LAND ADMINSTRATION BUILDING
130-148 GEORGE STREET
BRISBANE
4000

Yours sincerely Sch4 Pt4 (6)

David N. Miles Director Waste Management 910

recorded

Contact name:

Mr Peter Stevens

Jephone:

225 4710

Fax (direct):

225 5230

Your ref.:

Our ref.:

PJS:SJ

12 May 1994

NORTH QUAY 4002

Mr D N Miles Director, Waste Management Branch Department of Environment and Heritage PO Box 155

Notification Under the Contaminated Land Act 1991

Dear Sir

SL807308 for premises situated I refer notification for L7 Rotherdam/Deakin/Darrah/Goodwin/Cairns Sts, Kangaroo Point.

Perusal of Councils records reveals that the Real Property Description has been recorded incorrectly. The property description should be L7 SL807308, 26 Cairns St, Kangaroo Point.

It would be appreciated if you would amend your records accordingly.

Yours faithfully

Peter Stevens

SENIOR PROJECT OFFICER CONTAMINATED LAND DEPARTMENT OF RECREATION AND HEALTH

Brisbane City Council 69 Ann Street Brisbane Queensland GPO Box 1434 Brisbane Australia 4001



Queensland Department of Environment and Heritage

160 Ann Street • Brisbane Queensland • PO Box 155 • North Quay Qld 4002 • Telephone (07) 227 7111 • Facsimile (07) 227 6534

Enquiries to

Telephone

Contaminated Land Unit (07) 227 7369/227 7370

Your reference

Reference: 900622

Our reference

08 MAR 1993

The Town Clerk
Brisbane City Council
GPO Box 1434
BRISBANE QLD 4001

NOTIFICATION UNDER THE CONTAMINATED LAND ACT 1991

In accordance with the requirements of Section 23 of the Contaminated Land Act 1991 please note that the parcel of land described in the Schedule below has been classified as a PROBABLE site and its particulars recorded in the Contaminated Sites Register.

26 EAIRNS

SCHEDULE

LOT 7 ON PLAN SL807308
LOCATION ROTHERDAM/DEAKIN/DARRAH/GOODWIN/CAI
RNS STS
KANGAROO POINT

4169

OWNER DEPARTMENT OF LANDS
REGIONAL DIRECTOR
LAND ADMINSTRATION BUILDING
130-148 GEORGE STREET
BRISBANE
4000

Yours sincerely Sch4 Pt4 (6)

David N. Miles Director Waste Management 910

recorded