

SITE NAME	ADDRESS	REAL PROPERTY DESCRIPTIONS FOR ENTIRE LANDFILL AREA	CLOSED PRIOR TO 30/6/98 YES/NO	LANDFILL STILL OPERATING YES/NO	COUNCIL OPERATED/ ILLEGAL/ PRIVATE	COMMENTS
s.73 Irrelevant information						
SANITARY LANDFILL-MT COTTON RD,CORNUBIA	1801-1827 MT COTTON RD, CORNUBIA	357SL11256				23411
CITENAME	4.45 WALLER ROAD, BROWNS BLAINS					
s.73 Irrelevant information						

Published on DES Disclosure Log
RTI Act 2009

~~L 357 SL11256~~

Logan City Council

PO Box 155 Brisbane Albert Street, Brisbane, QLD 4002

Enquiries to K Barry
Telephone (07) 3227 8264 Fax: (07) 3227 7677
Your reference 2147 / 469574
Our reference 900821 Appln No:3349

28 May, 1999

Chief Executive Officer
Logan City Council
PO Box 226
WOODRIDGE Q 4114

Dear Ms W Paton

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

- ☐ Information request
- ☐ 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 about environmentally relevant activities
- ☒ Concurrence agency response about contaminated land
- ☐ Request for applicant's written acceptance of concurrence agency response after assessment period expires

Application information:

Concurrence agency office: Contaminated Land Section

Responsible officer: K Barry

Postal address: PO Box 155, BRISBANE ALBERT STREET Q 4002

Telephone: 3227 8264 Fax: 3227 7677

EPA no.: 3349 Application no.: 2147 / 139574

Released

Street address of subject land: 1801-1827 Mt Cotton Road

Suburb/locality: Cornubia

Lot no.: 357 Registered Plan no.: SL11256

Parish: MacKenzie

Signed

sch4p4(6) F

Greg O'Brien
Chief Scientific Advisor (Contaminated Sites Section)

Concurrence agency response

Integrated Planning Act 1997 ss3.3.16 and 3.3.18

EPA No.: 3349
Application no.: 2147 / 139574
Date received by EPA: 14 May 1999
Jurisdiction: *Environmental Protection Act 1994*
Role: Concurrence

Description: Material Change of Use, 1801-1827 Mt Cotton Road, Cornubia
Lot 357 on SL11256)

1 Type of development

- ☒ Material change of use
- ☐ Reconfiguration of a Lot

where:

- ☐ 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.

2 Response to development application

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

The concurrence agency response is that -

- ☐ 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;
- ☐ the application must be refused

Released

3 Condition(s)

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

Not applicable

4 Reasons for including condition(s) or refusal

State full reasons for including condition(s) listed above:

Not applicable

5 Additional comments or advice

The removal of any contaminated soil requires prior approval from the EPA under S118ZZF of the Environmental Protection Act 1994 (EP Act).

6 Additional information

This concurrence response under the *Environmental Protection Act 1994* does not remove the need to obtain any further approval for this development which might be required by other State and/or Commonwealth legislation. Applicants are advised to check with all relevant statutory authorities. Applicants also should comply with all relevant legislation.

Other EPA approvals, licences and/or sanctions (for example, *Harbours Act 1955*, *Beach Protection Act 1968*, *Marine Parks Act 1982*, *Queensland Heritage Act 1992*, *Nature Conservation Act 1992*) may be required. This response does not infer that the other necessary approvals, licences and/or sanctions will be granted.

Signed

sch4p4(6) P

Greg O'Brien
Chief Scientific Advisor (Contaminated Sites Section)

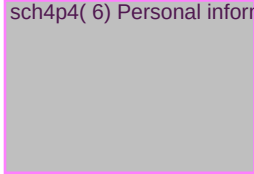
File Note

File Number: 900821

Application Number: 3349

- Applicant Logan City Council
- Currently landfill - council wants to install a septic tank
- Recommendations
 - Advice only
 - advise clause re S118ZZF requirements under EPA.

sch4p4(6) Personal infor



28/05/89

Published on DES Disclosure Log
RTI Act 2009

Your Ref:

Enquiry Phone:

Please Quote File:

Document Reference:

Property No:

W Paton (3826 5314)

2147/139574

147454/WKP:WKP:WKP

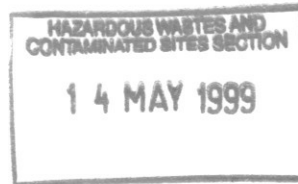
App'n No: 3349
File No: 900821

C/SITES

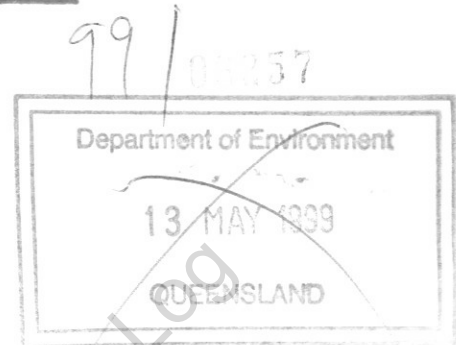


LOGAN WASTE SERVICES

11 May 1999



Environmental Protection Agency
GPO Box 2771
BRISBANE QLD 4001



Attention: Kim Barry

Dear Kim

IDAS DEVELOPMENT APPLICATION - CARBROOK LANDFILL

Further to telephone conversation on 27 April, with Wendy Paton of Logan Waste Services, please find attached a development application for proposed installation of site office and septic tank at the Carbrook Landfill, as it constitutes a material change of use under the Integrated Planning Act (1997).

It was discussed in the above mentioned conversation that if installation of the proposed facilities is to penetrate the waste within the landfill, a development application should be submitted to the Environmental Protection Agency.

Licence Conditions for the site (SR779) have detailed a minimum cover of 600mm. Estimates taken from previous soil profiles in the area indicate that after the proposed development there may be approximately 400mm of cover between waste and the septic tank.

If there are any further queries regarding this matter please contact Wendy Paton on ph: 3826 5314.

Yours faithfully

G R Kellar

CHIEF EXECUTIVE OFFICER

pro

sch4p4(6) Personal information

Mount Cotton Rd, Carnubia

App'n No: 3349
File No: 900821
Due by: 28/5/99

LOGAN CITY COUNCIL
ADMINISTRATION CENTRE
150 WEMBLEY ROAD
LOGAN CENTRAL
QLD 4114

PO BOX 226
WOODRIDGE, QLD 4114

TEL: (07) 3826 5318
FAX: (07) 3808 0014
EMAIL: waste@logan.qld.gov.au



LOGAN Development Services

150 Wembley Road
LOGAN CENTRAL QLD 4114

Phone: (07) 3826 5300
Fax: (07) 3808 0014
Email: devserv@logan.qld.gov.au

Approval No: _____ / _____

File No: _____ / _____

FORM 1A - IDAS DEVELOPMENT APPLICATION (Integrated Planning Act 1997 S 3.2.1)

LDS Doc No: 69772

This form MUST be used for all applications involving assessment under the Building Act 1975. It may also be used for other development applications instead of Form 1. Form 1A incorporates the application form for plumbing and drainage work under the Sewerage and Water Supply Act 1949.

Mandatory Information items 1 - 12

1. Applicant Details

Name in full (or Company Name & Contact)

Logan Waste Services - Wendy Paton

Postal Address

PO Box 226
WOODRIDGE Q
Postcode 4114

Phone No.

Fax No.

3826 5314

3808 0014

Email

wendy.paton@logan.qld.gov.au

Signature (* See below)

sch4p4(6) Personal info

2. Builder's Details

Name in full (if Applicant, leave blank)

Atco Structures Pty Ltd

Phone

Fax

3803 6345

3803 6590

Mobile

John Chora 0418 888 242

E-Mail

Builder's Registration Number

701 337

3. Owner's Declaration

Name/company name of owner

LOGAN CITY COUNCIL

Postal address include no., street, suburb & postcode

PO Box 226
WOODRIDGE Q 4114

DECLARATION:

I consent to the making of this application

I am the: ☐ registered owner

☐ registered Crown lessee

I declare that this land: ☐ is ☐ is not a registered place under Hereditary Legislation

Signature, company, sch4p4(6) Personal information
Seal or CAN

LOGAN CITY COUNCIL

CHIEF EXECUTIVE OFFICER

4. Property Description

Street address include no., street, suburb & postcode

1801-1927 Mant Cotton Road
CORNBURIA QLD 4130

Shop/Tenancy no if applicable

Level

Lot

357

RP/GTP/BUP/CP No.

SL11256

5. Application and Approval Type

What best describes the development applied for and the approval/s sought?

	Development Permit	Preliminary Approval
Carry out building works	☒	☐
Carry out plumbing/drainage works	☒	☐
Carry out operational works	☐	☐
Making a material change of use of premises	☒	☐
Reconfigure a lot	☐	☐

☐ Tick here if you DO NOT wish the information on this application form to be published.

ENGAGEMENT AS BUILDING CERTIFIER

NOTE: This engages Logan Development Services to carry out the building certification on the proposed development in accordance with the requirements of the Integrated Planning Act and the Standard Building Regulation. Logan Development Services is authorised to act as the owners' / applicants' agent for the purpose of obtaining relevant approvals.

Logan Development Services are engaged to assess the application and carry out the following inspections for the agreed fee:

☐ Footing ☐ Frame ☐ Swimming Pool Steel
☐ Slab ☐ Final ☐ Swimming Pool Final

☐ Other (specify): _____

☐ Other (specify): _____

6. Superseded Planning Scheme

Do you wish the application to be assessed under a Superseded Planning Scheme?

No ☒ Go to 7

Yes ☐ Provide details which will identify the Superseded Planning Scheme under which assessment is sought or development is proposed:

Planning Scheme

Date adoption notified in Gazette

7. Plans and Supporting Documentation

Plans and supporting documentation are required to illustrate the intent of the application.

If the application is for building work involving assessment under the Building Act, the plans and supporting documentation must comply with the requirements in Schedule 1.

See explanatory notes over.

Have plans and supporting documentation been attached?

No ☐ Yes ☒

8. Referral Trigger (Refer Explanatory Notes)

Do you consider this application triggers referral coordination of information requests?

No ☒ Yes ☐

Do you consider this application triggers referral to a referral agency?

No ☒ Go to 9

Yes ☒ Specify each trigger (eg, ERA, special fire services)

Site on Environmental Management Register

Specify each referral agency indicating whether a concurrence or advice agency (eg. Dept of Environment (concurrence), Qld Fire & Rescue Authority (advice))

concurrence - EPA

If a referral response has already been received from a referral agency, indicate the agency and attach the response

9. Development Description

Please complete to assist in the assessment of this application, eg, addition to house, new shop. If insufficient room attach additional information

installation of site office and septic tank

10. Reconfiguring a Lot

Is this application for reconfiguring a lot?

No ☒ Go to 11 Yes ☐

Specify the total area of land involved in this application

Ha/m²

11. Building Work

Is this application for building work required to be assessed under the Building Act?

No ☐ Go to 12 Yes ☒ Complete the following:

New work ☒ Alterations ☐

What is the total value of the building work? Estimated value including all labour and materials.

\$ 24,000

Construction details

External walls

Double Brick ☐ Brick Veneer ☐ Stone, Concrete ☐

Fibro Cement ☐ Timber ☐ Curtain Glass ☐

Steel ☒ Aluminium ☐ Other ☐

Frame

Timber ☒ Steel ☒ Aluminium ☐

Other ☐

Floor

Timber ☐ Concrete ☐ Other ☒

Roof Covering

Tiles ☐ Concrete ☐ Fibre Cement ☐

Steel ☐ Aluminium ☐ Other ☒

No. of storeys

Floor Area - m²

New

Existing

TOTAL

Complete for residential work only

What best describes the dwelling type?

Single detached house

☐

Kit house

☐

Transportable/Relocatable house

☐

Attached housing includes row, terrace, townhouse

☐

Semi-attached housing duplexes, dual occupancies

☐

Apartment, unit or flat attached to an existing house

☐

Apartment building/unit where units are layered one above another

☐

No of existing dwelling units

No. of dwelling units to be demolished

No of new/additional self contained dwelling units

If dwelling unit, gross area of site

Release of Building Work information

Some local governments provide summary information of approvals, including the owner's name and address, for use by industry in marketing products.

No ☐ Yes ☐

12. Plumbing and Drainage Work

Is this application for plumbing or drainage work required to be assessed under the Sewerage and Water Supply Act?

No ☐ Submit application Yes ☒ Complete the following

Water supply plumbing

Is this application for a new water supply?

No ☒ Yes ☐ Lodge a site plan showing the location of proposed driveways

Purpose of Supply

Domestic ☐ Commercial ☒ Industrial ☐

Fire ☐ Other

Nature of work

New ☐ Repair ☐ Alteration ☒

Disconnect existing service

Other

Size of water service required

Type and Class of pipe to be used on premises

Medium Density Poly Class 16
PVC Sewer pipe Class 9

Type of backflow prevention device If applicable
Attach list if necessary

Sanitary Plumbing and Drainage

Nature of work ☐

Alter an existing installation ☐

Disconnect existing service ☐

New/additional sewer connection required ☒

Other

On Site Sewerage Facility

On-site sewerage treatment plant ☐

Type

Septic Tank ☒

Method of sillage disposal

Plumbing / Drainage Plan

Are Council to prepare design?

No ☒ Yes ☐

Is design submitted for approval?

No ☐ Yes ☒

Release

Number of new fixtures to be installed

Sinks <input type="text" value="1"/>	Basins <input type="text" value="1"/>	Laundry Tubs <input type="text" value="1"/>
Showers <input type="text" value="1"/>	Baths <input type="text" value="1"/>	WC's <input type="text" value="1"/>
Urinals <input type="text" value="1"/>	Other <input type="text" value="1"/>	

Total number of new fixtures

Office Use Only

Fee Paid: Yes / No Date Rec'd: _____

Receiving Officer's Signature: _____

Census District No: _____

QBSA Insurance Receipt No: _____

Owner Builder: Yes / No

Owner/Builder No: _____

PLS Levy Receipt No: _____ Date Paid: _____

Date Issued: _____

Fire Fighting Facilities

Complete this section where the development required fire safety installations or special fire services.

Fire Safety Installations**Structural Features**Access panels through fire-rated construction ☐ Penetrations through fire-rated construction ☐Fire dampers ☐ fire curtains ☐Fire windows ☐ Structural fire protection ☐Fire shutters & doors ☐ Fire control centres ☐**Fire protection systems**Sprinklers (including wall-wetting sprinklers) ☐Special automatic fire suppression systems (incl. Foam, deluge and gas flooding systems) ☐Fire detection and alarm systems (other than stand alone smoke alarms not required to be inter-connected or connected to a Fire Indicator Panel) ☐Stairwell pressurisation systems ☐Air handling systems ☐Smoke exhaust systems ☐Smoke and heat venting systems ☐**Fire fighting equipment**Fire mains ☐ Fire extinguishers (portable) ☐Fire hydrants (incl. hydrant boosters) ☐ Fire hose reels ☐**Occupant safety features**Emergency warning & intercommunication systems ☐Exit door hardware ☐ Emergency lighting ☐Emergency power supply ☐ Fire doors ☐Solid core doors ☐ Smoke proof doors ☐**Other features**Vehicular access for large buildings ☐Services provided under conditions imposed under Standard Building Regulation, Section 71 ☐Services required under Clause E1.10 of the Building Code of Australia ☐**Special Fire Services**Fire mains ☐Fire hydrants ☐Sprinklers (incl. Wall-wetting sprinklers) ☐Special automatic fire suppression systems (incl. foam, deluge and gas flooding systems) ☐Fire detection and alarm systems (other than stand alone smoke alarms not required to be inter-connected or connected to a Fire Indicator Panel) ☐Fire control centres ☐Stairwell pressurisation systems ☐Air-handling systems used for smoke control ☐Smoke and heat venting systems ☐Smoke exhaust systems ☐Emergency warning & intercommunication systems ☐Emergency lifts ☐Vehicular access for large isolated buildings ☐Services provided under conditions imposed under Standard Building Regulation Section 71 ☐Services required under Clause E1.10 of the Building Code of Australia ☐

Released

FURTHER INFORMATION

Septic Tank Installation

Depth of Cover

The proposed location of the Carbrook Site Office is at approximately E4790, N5235, refer Figure 1. Boreholes have been taken around the site in October, 1998 to determine the depth of cover material. A borehole from this survey in 1998 was taken close to the proposed location of the site office (labelled P7, Figure 2). The interpolation from the graph of sub-surface profile, presented on Figure 3 indicates at this location the depth of cover is approximately 2m. The latest survey of the site shows that the level is at least 27.5, Figure 1.

Depth of Cover - approx. 2m

Septic Tank Depth

A septic tank is to be installed on site. The distance between the bottom of the invert level of the input pipe to the tank (located at approximately ground level) and the base of the tank is 1470mm. A further 100mm of sand is required below the tank. This will mean that there is approximately 400mm of soil cover between refuse and the septic tank. Licence conditions for the site require a minimum of 600mm soil cover as capping.

Septic Tank Depth - approx. 1.6m

EVAPOTRANSPIRATION AREA

Discharge from the septic tank will discharge to an evapotranspiration area approximately 15m x 15m in area, refer Figure 1. This area will be planted with suitable vegetation such as grasses and ground covers, to encourage the process of evapotranspiration.

EMR REGISTERED SITE - V1.1.0 EMM1020

Lot 357 Plan SL11256 Category NOTIFIABLE ACTIVITY Rec Type BP ID 3349 Hist ID 70-4121

LGA LOGAN CITY COUNCIL Region SE AMA
Site Name SANITARY LANDFILL-MT COTTON RD,CO
Street 1801-1827 MT COTTON RD
Suburb CORNUBIA Post code 4130
Owner COUNCIL OF CITY OF LOGAN
Owner Address P O BOX 226
WOODRIDGE
QLD
Post code 4114
Notified By DATACONV Notif Rec'd
Entry Date 27/06/1998 Last Altered Date
Notifiable Activities LANDFILL
Ext Ref
Haz Cont

Parcel Status C Area 0 m² File 0 Officer NIL
Offsite Disposal Date

Comments Amend Log Categ. Hist Hist. Repgs New Parcels SMP
PAGE ONE Print Query F7 Rec List Sh-F4 Commit F10 Exit

Count: *1 Count: *0

Exit

Rows Found 3

Lot	Plan	Prev Lot	Prev Plan	Pd	LGA	Site ID	Rec Level	Cat	Type
357	SL11256			C	127	3349	BP	1	N
10	SP109317	357	SL11256	C	127	24480	NP	2	
11	SP109317	357	SL11256	C	127	24481	NP	2	

Notified 19-3-97


**LOGAN
CITY COUNCIL**

070-0013

PRQ

All communications to be addressed to:
The Town Clerk
P.O. Box 226
WOODRIDGE, Q. 4114

**ENVIRONMENTAL PROTECTION UNIT
SUSPECTED SITE DETAILS**

DATE: _____

FILE NO: 57106/47517

**NOTIFICATION TO
DEPARTMENT OF ENVIRONMENT AND HERITAGE
CONTAMINATED LAND UNIT**

Local Authority: **LOGAN CITY COUNCIL**

Site Name: _____

Location: 1801-1827 MOUNT COTTON ROADSuburb: CORNUBIA Postcode: 4130Lot No: 357 On Registered Plan No: SL 11256Owner's Name: COUNCIL OF THE CITY OF LOGANOwners Address: PO BOX 226Owners Suburb: WOODRIDGE Owners Postcode: 4114Area: 18.5782 HCurrent Use: (431) SANITARY LANDFILL SITEPast Use: (431) SANITARY LANDFILL SITEComments: CURRENTLY OPERATING LANDFILL

Released



Notified 19-3-97



070-0013

PRO

All communications to be addressed to:
 The Town Clerk
 P.O. Box 226
 WOODRIDGE, Q. 4114

ENVIRONMENTAL PROTECTION UNIT
SUSPECTED SITE DETAILS

DATE: _____

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Released





Your Ref:
Enquiry Phone: Mr B Lee (3826 5329)
Please Quote File: 107306/119380

WPHEALTH: ID: 60787
BTL:LMB

22 January 1998

198/1185

Regional Manager - Environment
Southeastern Region
Department of Environment
GPO Box 2771
BRISBANE QLD 4001

Dear Sir/Madam

ENVIRONMENTAL AUTHORITY LICENCE SR779

Environmental Authority licence number SR779 relating to Council's landfills was issued on 25 November 1997. Following Internal Review, an amended licence was reissued on 18 December 1997.

Please find enclosed a draft Environmental Management Program (EMP). This EMP is being voluntarily submitted pursuant to section 83 of the Environmental Protection Act.

It is understood that any fee for consideration will be levied at the conclusion of that consideration.

Please contact the Department of Environmental Health Services as referenced above if you require any further information regarding this matter.

Yours faithfully

G R Kellar
CHIEF EXECUTIVE OFFICER

pro sch4p4(6) Personal information

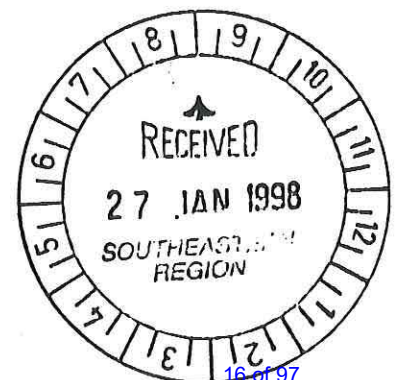
encl.

All communications
to be addressed to:
Chief Executive Officer
P.O. Box 226
WOODRIDGE Q 4114

Logan City Council
Administration Centre
Wembley Road
Logan Central Q 4114
Ph (07) 3826 5555
Fax (07) 3808 0014

20-149

File A



16 of 97

ERA 82 - Waste transfer station - operating waste transfer station designed to receive waste at the rate of 20 000 tonnes or more per year.

ERA 84 - Regulated waste storage - receiving and storing other regulated waste.

The conditions attached to the licence will be incorporated into Council's Integrated Environmental Management System. Of these, there may be a number of conditions on which Council is still working to achieve compliance. For this reason, this Environmental Management Program (EMP) has been voluntarily submitted for the administering authority's consideration pursuant to Part 6, and particularly section 83, of the Environmental Protection Act.

2.0 EMP OBJECTIVE

The objective of this EMP is to ensure compliance with all conditions attached to the aforementioned licence SR779. This objective will be achieved by listing:

- a) All conditions on which Council is still working to achieve compliance; and
- b) The current compliance status with each of these conditions; and
- c) Further action required to achieve compliance; and
- d) Timetables and performance indicators relating to these actions.

3.0 PROGRAM METHODOLOGY

3.1 Licence Part 1 - Condition C2 - Leachate Collection and Disposal

3.1.1 Condition Requirement

Condition C2 requires that a leachate collection system be installed at both landfills.

3.1.2 Current Compliance Status

A leachate collection system is in place at the Browns Plains landfill. With respect to the Carbrook landfill a design for a collection system has been prepared, however, the system has not yet been installed. (The design was, in fact, referred to the administering authority for comment in mid-1997.).

Released

3.2.1 Condition Requirements

All of the above conditions relate to the prevention of contaminated runoff being released from the licensed place to any stormwater drain or waters. The types of erosion protection measures that may be employed, and the maintenance thereof, are also detailed.

The site specific conditions relate to descriptions of contaminants permitted to be released from the licensed place, release points for contaminants and quality characteristics of contaminant releases to waters.

3.2.2 Current Compliance Status

Council in early 1996 obtained preliminary concept stormwater management plans for both the Carbrook and Browns Plains landfill sites. While the recommendations of the plans have been implemented, incorporating a range of erosion protection measures, it has not been determined that these measures are sufficient to ensure that releases meet the standards set in conditions C3 and C6 in Parts 2 and 3 respectively of the licence conditions.

3.2.3 Action Required to Achieve Compliance

It is intended that more detailed stormwater management plans, designed specifically to meet the aforementioned release criteria, be obtained. The plans will be to a standard suitable for construction purposes. It is anticipated that design will cost approximately \$10,000. It is not possible to estimate construction costs before design is obtained.

3.2.4 Timeframes, Performance Indicators and Monitoring

- By July 1999 the aforementioned design will be obtained.
- Due to the uncertainty over construction costs associated with the stormwater management system, it is not possible to provide a deadline for construction completion before December 2000.
- Ongoing monitoring required by conditions C3 and C6 in Parts 1 and 2 respectively of the licence will assist in determining the effectiveness of the implemented stormwater management system.

3.3 Part 1 - Condition D10 - Bunding (Cathodic Protection)

3.3.1 Condition Requirement

The condition requires all underground waste storage tanks to be fitted with cathodic protection.

Release

3.5 Part 1 - Condition D13 - Bunding (Drum Storages)

3.5.1 Condition Requirement

The condition requires that all chemical drum storages, fuel drum storages and waste drum storages be bunded with capacity to contain at least 25% of the maximum design drum storage volume within the bund.

3.5.2 Current Compliance Status

There are 2 bunded drum storage areas at the Browns Plains landfill which have proven to be adequate. There is, however, no bunded area for drums at the Carbrook landfill.

3.5.3 Action Required to Achieve Compliance

A bunded drum storage area must be constructed at the Carbrook landfill.

3.5.4 Timeframes, Performance Indicators and Monitoring

- The proposed bunded drum storage area for the Carbrook landfill will be constructed by January 2000.

3.6 Part 1 - Condition D15 - Bunding (Roofing)

3.6.1 Condition Requirement

The condition requires all bunded areas to be roofed.

3.6.2 Current Compliance Status

The two existing bunded areas at the Browns Plains landfill are not roofed.

The contractor's above-ground fuel storage tank at the Browns Plains landfill (which is also not currently bunded) is not roofed.

No roofing exists at the Carbrook landfill for the proposed waste oil tank bunding or the proposed drum storage bunding.

3.6.3 Action Required to Achieve Compliance

The two existing bunded areas at the Browns Plains landfill must be roofed.

The contractor's above-ground fuel storage tank at the Browns Plains landfill must be removed from the site if it is not bunded and roofed.

Released

3.8.2 Current Compliance Status

Batteries are stored under cover on impervious and resistant trays at the Browns Plains landfill

Batteries are stored on impervious and resistant trays, but not under cover, at the Carbrook landfill.

3.8.3 Action Required to Achieve Compliance

Cover needs to be provided for the battery storage at the Carbrook landfill.

3.8.4 Timeframe, Performance Indicators and Monitoring

- Cover for the battery storage at the Carbrook landfill will be provided by January 1999.

3.9 Part 1 - Condition G39 - Regulated Waste Receival and Storage (Tyres)

3.9.1 Condition Requirement

The condition requires that tyres be stored under cover.

3.9.2 Current Compliance Status

All tyres at the Browns Plains landfill are stored under cover.

Tyres at the Carbrook landfill are not stored under cover.

3.9.3 Action Required to Achieve Compliance

Tyres at the Carbrook landfill must be stored under cover.

3.9.4 Timeframes, Performance Indicators and Monitoring

- Cover for the tyre storage at the Carbrook landfill will be provided by January 1999.

3.10 Part 1 - Condition H24 - Groundwater Monitoring (Frequency) - Condition H34 - Receiving Surface Water Monitoring (Frequency)

3.10.1 Condition Requirements

The conditions require that groundwater and receiving surface water monitoring be conducted at least every 3 months.

Relea

3.11.4 Timeframes, Performance Indicators and Monitoring

- All lockable caps on groundwater monitoring bores shall be fitted with locks by July 1998.

3.12 Part 2 - Condition H1 - Monitoring of Contaminant Releases to Waters

Condition H2 - Sampling and In Situ Monitoring Point Details

Part 3 - Condition H1 - Monitoring of Contaminant Releases to Waters

Condition H2 - Sampling and In Situ Monitoring Point Details

3.12.1 Condition Requirements

The conditions require contaminant releases to waters be sampled and analysed for a range of 4 parameters at least once per quarter in the event of a release. Records are to be kept with respect to the results obtained at both landfill sites.

3.12.2 Current Compliance Status

The quality of stormwater contaminant releases is not currently monitored.

3.12.3 Action Required to Achieve Compliance

A program to monitor and record the quality of contaminant releases to waters for the 4 specified parameters at least once per quarter in the event of a release must be implemented.

3.12.4 Timeframes, Performance Indicators and Monitoring

- The program to monitor and record the quality of contaminant releases to waters for the 4 specified parameters at least once per quarter in the event of a release will be implemented in December 2000 when the stormwater management system referred to in point 3.2 is constructed.

4.0 REPORTING

A report on progress of implementation of this EMP will be submitted to the Department at 6 monthly intervals following its approval.

Releas

Your Ref: 961EA508/SR779/EMP508001083
Enquiry Phone: **B Lee 3826 5329**
Please Quote File: F107306/137032
Document Reference: 84597/::
Property No:



LOGAN WASTE SERVICES

28 August 1998

New copy of
EMP No. 508001083
With Amendments.

Southeastern Regional Manager (Environment)
Department of Environment and Heritage
GPO Box 2771
BRISBANE Q 4001

Attention: Robert Kijak

Dear Sir

AMENDED DRAFT ENVIRONMENTAL MANAGEMENT PROGRAM

Reference is made to your correspondence of 20 August 1998 which related to the above matter.

Please find enclosed the Draft Environmental Management Program (EMP) with amendments as requested.

Further, please note that the original sections 3.7 (Waste Disposal - Cover of Deposited Waste), 3.11 (Frequency of Groundwater and Receiving Surface Water Monitoring), 3.12 (Groundwater Monitoring - Locking of Bores) and 3.12 (Sampling and Monitoring or Contaminant Releases to Waters) have been omitted from the amended Draft EMP as compliance with these matters has now been achieved.

Inquiries relating to these matters may be directed to Logan Waste Services as referenced above.

Yours faithfully

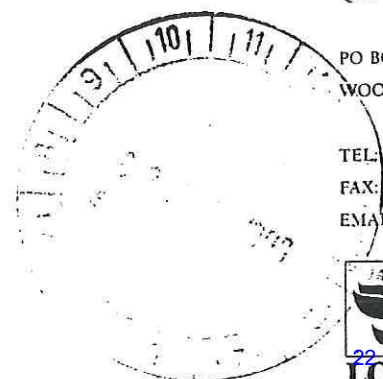
sch4p4(6) Personal information

S Murray
LOGAN WASTE SERVICES MANAGER

LOGAN CITY COUNCIL
ADMINISTRATION CENTRE
150 WEMBLEY ROAD
LOGAN CENTRAL
QLD 4114

PO BOX 226
WOODRIDGE, QLD 4114

TEL: (07) 3826 5318
FAX: (07) 3808 0014
EMAIL: waste@logan.qld.gov.au



ERA 74(h) - General waste disposal facility - operating a facility for disposing of general waste designed to receive waste at the rate of 100 000 tonnes or more, but less than 200 000 tonnes, per year.

ERA 76 - Regulated waste disposal facility - operating a facility for disposing of regulated waste.

ERA 82 - Waste transfer station - operating waste transfer station designed to receive waste at the rate of 20 000 tonnes or more per year.

ERA 84 - Regulated waste storage - receiving and storing other regulated waste.

The conditions attached to the licence will be incorporated into Council's Integrated Environmental Management System. Of these, there may be a number of conditions on which Council is still working to achieve compliance. For this reason, this Environmental Management Program (EMP) has been voluntarily submitted for the administering authority's consideration pursuant to Part 6, and particularly section 83, of the Environmental Protection Act.

2.0 EMP OBJECTIVE

The objective of this EMP is to ensure compliance with all conditions attached to the aforementioned licence SR779. This objective will be achieved by listing:

- a) All conditions on which Council is still working to achieve compliance; and
- b) The current compliance status with each of these conditions; and
- c) Further action required to achieve compliance; and
- d) Timetables and performance indicators relating to these actions.

Release

**Part 3 - Condition C4 - Description of Release: Browns
Plains Road Licensed Place**

**Condition C5 - Release Points: Browns Plains
Road Licensed Place**

**Condition C6 - Quality Characteristics of Release
to Waters: Browns Plains Road
Licensed Place**

3.1.3 Condition Requirements

All of the above conditions relate to the prevention of contaminated runoff being released from the licensed place to any stormwater drain or waters. The types of erosion protection measures that may be employed, and the maintenance thereof, are also detailed.

The site specific conditions relate to descriptions of contaminants permitted to be released from the licensed place, release points for contaminants and quality characteristics of contaminant releases to waters.

3.2.2 Action Required to Achieve Compliance

Council in early 1996 obtained preliminary concept stormwater management plans for both the Carbrook and Browns Plains landfill sites. While the recommendations of the plans have been implemented, incorporating a range of erosion protection measures, it has not been determined that these measures are sufficient to ensure that releases meet the standards set in conditions C3 and C6 in Parts 2 and 3 respectively of the licence conditions.

3.2.3 Action Required to Achieve Compliance

It is intended that more detailed stormwater management plans, designed specifically to meet the aforementioned release criteria, be obtained. The plans will be to a standard suitable for construction purposes. It is anticipated that design will cost approximately \$10,000. It is not possible to estimate construction costs before design is obtained.

3.2.4 Timeframes, Performance Indicators and Monitoring

- January 1999 - No action will have been taken.
- July 1999 - The aforementioned design will be obtained.
- January 2000 - No further action will have been taken
- July 2000 - No further action will have been taken.
- January 2001 - Construction of the system could be complete.

Released

3.3.4 Timeframes, Performance Indicators and Monitoring

- January 1999 - Notice to remove or adequately bund the Browns Plains landfill tank has already been sent to the relevant contractor. Failure by the contractor to take action by January 1999 will result in the tank being removed from the site and delivered to the contractor's depot.
- July 1999 - No further action will have been taken.
- January 2000 - The waste oil storage tank at the Carbrook landfill will be banded in accordance with requirements.

3.5 Part 1 - Condition D13 - Bunding (Drum Storages)

3.5.1 Condition Requirement

The condition requires that all chemical drum storages, fuel drum storages and waste drum storages be banded with capacity to contain at least 25% of the maximum design drum storage volume within the bund.

3.5.2 Current Compliance Status

There are 2 banded drum storage areas at the Browns Plains landfill which have proven to be adequate. There is, however, no banded area for drums at the Carbrook landfill.

3.5.3 Action Required to Achieve Compliance

A banded drum storage area must be constructed at the Carbrook landfill.

3.5.4 Timeframes, Performance Indicators and Monitoring

- January 1999 - No action will have been taken.
- July 1999 - No action will have been taken.
- January 2000 - The proposed banded drum storage area for the Carbrook landfill will be constructed.

3.6 Part 1 - Condition D15 - Bunding (Roofing)

3.6.1 Condition Requirement

The condition requires all banded areas to be roofed.

3.6.2 Current Compliance Status

The two existing banded areas at the Browns Plains landfill are not roofed.

Release

3.7.4 Timeframes, Performance Indicators and Monitoring

- January 1999 - No action will have been taken.
- July 1999 - Relocatable litter screens will be in use.

3.8 Part 1 - Condition G38 - Regulated Waste Receival and Storage (Batteries)

3.8.1 Condition Requirement

The condition requires that batteries be stored under cover on spill trays impervious to and resistant to corrosion by materials held within the batteries.

3.8.2 Current Compliance Status

Batteries are stored under cover on impervious and resistant trays at the Browns Plains landfill.

Batteries are stored on impervious and resistant trays, but not under cover, at the Carbrook landfill.

3.8.3 Action Required to Achieve Compliance

Cover needs to be provided for the battery storage at the Carbrook landfill.

3.8.4 Timeframes, Performance Indicators and Monitoring

- Cover for the battery storage at the Carbrook landfill will be provided by January 1999.

3.9 Part 1 - Condition G46 - Regulated Waste Receival and Storage (Tyres)

3.9.1 Condition Requirement

The condition requires that tyres be stored under cover.

3.9.2 Current Compliance Status

All tyres at the Browns Plains landfill are stored under cover.

Tyres at the Carbrook landfill are not stored under cover.

Released



Queensland Government

**Department of
Environment and Heritage
Southeastern Region**

GPO Box 2771
BRISBANE QLD 4001

Telephone enquiry: (07) 3224 5641

Environmental Protection Act 1994

Certificate of Approval of Draft Environmental Management Program

Section 90(2)

Enquiries to: R Kijak
Telephone: (07) 32247062
Your reference: 78894/BTL:BTL:HJH
Our reference: 961EA508/SR779//EMP5080001083

Chief Executive Officer
Logan City Council
Administration Centre
Wembley Road
LOGAN CENTRAL QLD 4114

Attn.: Mr B Lee

Dear Sir

Re: Submission of draft environmental management program (EMP) for the operations at licensed places described as Lot 357 on SL11256, County of Stanley, Parish of MacKenzie, 1801-1927 Mount Cotton Road, CORNUBIA QLD 4130 and Lot 1 on RP151732, Lot 2 on RP199977, Lots 1, 2, 3 and 4 on RP115300; Lot 49, 50 and 51 on RP123589; Lot 53 on RP853030, County of Stanley, Parish of Mitchell, 339-355 Browns Plains Road, HERITAGE PARK QLD 4118

This Certificate of Approval is issued subject to the following conditions:

GENERAL CONDITIONS

- (1) The document described as the draft environmental management program titled as "Logan City Council: Environmental Authority Licence SR779. Environmental Management Program", prepared by Logan City Council, dated 28 August 1998 with subsequent amendments included in Logan City Council letter dated 23 September 1998 has been approved as amended by the administering authority, subject to all the undertakings outlined within that document.
- (2) The holder of this Certificate of Approval shall commence the implementation of the environmental management program approved herein no later than on the date of Certificate of Approval.
- (3) The holder of this Certificate of Approval shall ensure that all persons engaged in the conduct of the environmentally relevant activities and the operation of any works and control equipment are instructed in procedures necessary to comply with the conditions of this Certificate of Approval.

- (4) The holder of this Certificate of Approval shall install and operate such works and control equipment, take such measures and do such other acts and things as may be necessary to ensure compliance with the conditions of this Certificate of Approval.

VERIFICATION

- (5) The holder of this Certificate of Approval shall forward reports on progress made in implementing the environmental management program, along with the requirements and conditions of the Certificate of Approval in accordance with the approved EMP (Part 4: Reporting).
- (6) Notwithstanding condition (5) of this Certificate of Approval, within 30 days of achieving compliance or within 30 days of the final date for completion of the issues of this environmental management program as stated in condition 9, Table 1 of this Certificate of Approval, whichever is the earlier, the holder of this Certificate of Approval must forward a report in relation to the completed issue to the administering authority detailing compliance with the conditions of the Certificate of Approval.
- (7) The holder of this Certificate of Approval shall ensure that compliance be verified in each report referred to in conditions (5) and (6) of this Certificate of Approval by inclusions of such certified copies of plans, manuals, monitoring results, statutory declarations by the person and other documentation as may be necessary to demonstrate such compliance.
- (8) The person must have due regard to any comments made by the administering authority on any reports and other documents submitted to the administering authority.

PERIOD IN FORCE

- (9) The final dates or completion of the environmental management program are included in Table 1

Table 1: The Final Dates or Completion of the Environmental Management Program

Issue	Final Date
Leachate Collection and Disposal (Part 3.1 of the EMP)	July 1999
Erosion Control and Stormwater Management (Part 3.2. of the EMP)	July 2001
Bunding (Cathodic Protection) (Part 3.3. of the EMP)	January 1999
Bunding (Tank Storages) (Part 3.4. of the EMP)	January 2000
Bunding (Drum Storages) (Part 3.5. of the EMP)	January 2000
Bunding (Roofing) (Part 3.6. of the EMP)	January 2000
Waste Disposal (Litter Screens) (Part 3.7. of the EMP)	July 1999
Regulated Waste Receival and Storage (Batteries) (Part 3.8. of the EMP)	January 1999
Regulated Waste Receival and Storage (Tyres) (Part 3.9. of the EMP)	January 1999

DATE OF CERTIFICATE OF APPROVAL

The term "date of Certificate of Approval" in this Certificate of Approval means the date which is 10 days after the date on which this Certificate of Approval is signed by the delegate of the administering authority.

In accordance with the provisions of the *Environmental Protection Act 1994* and *Environmental Protection Regulation 1998*, a fee of \$260.00 is payable, and an invoice for this amount will be forwarded at a later date.

Information relating to a review of the decision or appeals under this Act is attached to this letter.

signed sch4p4(6) Perso

Delegate of Administering Authority
Environmental Protection Act

date 29/10/98



Queensland Government
Environmental Protection Agency
Queensland Parks and Wildlife Service

Southern Regional Office (Brisbane)
 GPO Box 2771 BRISBANE QLD 4001
 Phone: (07) 3224 5641 Fax: (07) 3225 8723
 www.env.qld.gov.au ABN: 87221158786

Integrated Authority No. SR779

Section 311 Environmental Protection Act 1994

This integrated authority, issued in accordance with section 311 of the Environmental Protection Act 1994 (the EP Act), provides for the carrying out of different Environmentally Relevant Activities or Environmentally Relevant Activities at different places managed in an integrated way. This integrated authority comprises of one or more types of environmental authority(ies) in accordance with sections 86, 93, 95, 104, 113 and 311, of the EP Act, and this integrated authority details the conditions that are relevant to each stated type of environmental authority.

**Under the provisions of the
 Environmental Protection Act 1994 this integrated authority is issued to:**

Logan City Council
 Administration Centre
 Wembley Road
 LOGAN CENTRAL QLD 4111

**in respect of carrying out the Environmentally Relevant Activities (ERAs) at the
 different places and under the type of environmental authority
 described in Table 1.**

This integrated authority is subject to the conditions set out in the attached schedules.

The anniversary date of this licence is 18 December.

This amended integrated authority takes effect from 21 December 2001.

sch4p4(6) Personal informa

Signed

Date

Dr Stephen Skull
Acting Manager (Licensing)
 Delegate of Administering Authority
Environmental Protection Act 1994

Note: This integrated authority document is not proof of the current status of the integrated authority. The current status of the integrated authority may be ascertained by contacting the Environmental Protection Agency.

Table 1: This integrated authority consists of the following part(s):

Licence/s (without development approval) (Section 93)

Applicable Part & Schedule(s)	ERA No.	ERA name	Lot	Plan	Location
Parts 1 and 2 All schedules	84(a)	Regulated waste storage-operating a facility for receiving and storing more than 500 tyres in whole or equivalent parts (other than tyres stored for recycling or reprocessing under item 80.)	357	SL11256	1801-1927 Mount Cotton Road CORNUBIA QLD 4130
Parts 1 and 2 All schedules	84(b)	Regulated waste storage-operating a facility for receiving and storing other regulated wastes, other than waste stored- (i) on a farm for use as a soil conditioner or fertiliser in carrying out an agricultural activity; or (ii) for use in manufacturing a saleable product under another item of this schedule; or (iii) for incineration under item 76; or (iv) recycling, reprocessing or reconditioning under items 77 to 79 or 81	357	SL11256	1801-1927 Mount Cotton Road CORNUBIA QLD 4130
Parts 1 and 3 All schedules	20(c)	Extracting rock or other material - extracting rock (other than rock mined in block or slab form for building purposes), sand (other than foundry sand), clay (other than clay used for its ceramic properties, kaolin or bentonite), gravel, loam or other material (other than under a mining authority) from a pit or quarry using plant or equipment having a design capacity of 100 000 tonnes or more per year	903	SP100915	339-355 Browns Plains Road HERITAGE PARK QLD 4118
Parts 1 and 3 All schedules	75(a)(viii)	Waste disposal - operating a facility for disposing of only general waste or limited regulated waste, if the facility is designed to receive waste at the rate of 100 000 tonnes or more, but less than 200 000 tonnes per year	903	SP100915	339-355 Browns Plains Road HERITAGE PARK QLD 4118
Parts 1 and 3 All schedules	82	Waste transfer station - operating a waste transfer station designed to receive waste at the rate of 20 000 tonnes or more of waste per year	903	SP100915	339-355 Browns Plains Road HERITAGE PARK QLD 4118
Parts 1 and 3 All schedules	84(b)	Regulated waste storage-operating a facility for receiving and storing other regulated wastes, other than waste stored- (i) on a farm for use as a soil conditioner or fertiliser in carrying out an agricultural activity; or (ii) for use in manufacturing a saleable product under another item of this schedule; or (iii) for incineration under item 76; or (iv) recycling, reprocessing or reconditioning under items 77 to 79 or 81	903	SP100915	339-355 Browns Plains Road HERITAGE PARK QLD 4118

sch4p4(6

LICENCE(S) (WITHOUT DEVELOPMENT APPROVAL) (Section 93)

This part is for the carrying out of a level 1 environmentally relevant activity without a development approval, under chapter 4, part 3, division 2, subdivision 1 of the Environmental Protection Act 1994.

PART 1 Common conditions

The conditions set out in the schedules in Part 1 apply to the carrying out of all environmentally relevant activities unless otherwise stated. Part 1 contains the following schedules:

- Schedule A - General Conditions
- Schedule B - Air
- Schedule C - Water
- Schedule D - Stormwater Management
- Schedule F - Noise
- Schedule G - Waste Management
- Schedule H - Self Monitoring and Reporting
- Schedule I - Definitions

Part 1 - Schedule A - General conditions

Maintenance of Plant and Equipment

(A1) The holder of this environmental authority must:

- (i) install all plant and equipment necessary to ensure compliance with the conditions; and
- (ii) maintain such plant and equipment in a proper and efficient condition; and
- (iii) operate such plant and equipment in a proper and efficient manner.

In this condition, "plant and equipment" includes:

- (i) plant and equipment used to prevent and/or minimise the likelihood of environmental harm being caused;
- (ii) devices and structures to contain reasonably foreseeable escapes of contaminants and waste;
- (iii) fuel burning equipment;
- (iv) devices and structures used to store, handle, treat and dispose of waste;
- (v) monitoring equipment and associated alarms; and
- (vi) backup systems that act in the event of failure of a primary system.

Records

(A2) Any record or document required to be kept by a condition of this environmental authority must be kept at the Logan City Council Administration Centre, and where practicable to do so, at the licensed place at which the activities are carried out for a period of, except as otherwise provided, at least five (5) years and be available for examination by an authorised person. The record retention requirements of this condition will be satisfied if any daily and weekly records are kept for a period of at least three (3) years and these records are then kept in the form of annual summaries after that period.

Alterations

(A3) No change, replacement or operation of any plant or equipment is permitted if the change, replacement or operation of the plant or equipment increases, or is likely to substantially increase, the risk of environmental harm above that expressly provided by this environmental authority.



An example of a substantial increase in the risk of environmental harm is an increase of 10% or more in the quantity of the contaminant to be released into the environment.

Integrated Environmental Management System (IEMS)

- (A4) The holder of this environmental authority must develop and implement an Integrated Environmental Management System (IEMS) in accordance with the conditions of this environmental authority that provides for the effective and appropriate management by the holder of this environmental authority of the actual and potential environmental impacts resulting from the carrying out of the environmentally relevant activities.
- (A5) The Integrated Environmental Management System must provide for at least the following functions:
- (i) The monitoring of releases of contaminants into the environment, for example measurement of the quantities and concentrations of releases of contaminants to the environment as required under this environmental authority;
 - (ii) The assessment of the environmental impacts of any releases of contaminants into the environment, for example any ambient environmental quality monitoring, noise monitoring or complaints monitoring required under this environmental authority; and
 - (iii) The training of all relevant staff, agents and contractors ("staff") to competent levels in at least the following:
 - (a) the environmental policy of the holder of this environmental authority so that staff are aware of any relevant commitments to environmental management; and
 - (b) any relevant environmental objectives and targets so that all staff are aware of the relevant performance objectives and can work towards these; and
 - (c) control procedures for routine operations for day to day operational activities to prevent or minimise environmental harm, however occasioned or caused; and
 - (d) contingency plans and emergency procedures for non-routine situations to deal with foreseeable risks and hazards including corrective responses to prevent and mitigate environmental harm (including any necessary site rehabilitation); and
 - (e) organisational structure and responsibility to ensure that roles, responsibilities and authorities are appropriately defined to manage environmental issues effectively; and
 - (f) effective communication to ensure two-way communication on environmental matters between operational staff and management, as well as communications with the administering authority; and
 - (g) documentation systems so that appropriate records of environmental matters are kept to satisfy the holder of this environmental authority, the administering authority, and the community that the applicant is meeting environmental commitments; and
 - (h) responsibilities of the holder of this environmental authority and staff under the Environmental Protection Act 1994 so that these can be met.
 - (iv) The conduct of environmental and energy audits to review periodically:
 - (a) the level of environmental performance; and
 - (b) the effectiveness of environmental management procedures adopted; and
 - (c) efficiency in using energy and resources and opportunities for more efficient usage.
 - (v) The implementation of effective and appropriate practices and procedures for waste prevention, treatment and disposal.
 - (vi) development and implementation of Site-Based Environmental Management Plans that address the management of the actual and potential environmental impacts resulting from the carrying out of the environmentally relevant activity/activities at the following sites:



ERA Site	Address
Mount Cotton Road Licensed Place	Mount Cotton Road, Cornubia
Browns Plains Road Licensed Place	Browns Plains Road, Heritage Park

- (A6) The conduct of environmental and energy audits required by licence condition A5(iv) must be carried out as often as necessary but not less frequently than the frequency specified below:
- (i) the level of environmental performance: annually;
 - (ii) the effectiveness of environmental management procedures adopted: once every two (2) years;
 - (iii) efficiency in using energy and resources and opportunities for more efficient usage: within two (2) years of the granting of this environmental authority and then not less than once every five (5) years.
- (A7) The holder of this environmental authority must prepare a report summarising the outcomes of the environmental and energy audits required by licence condition number A5(iv) and submit the report with the annual return that follows the conduct of the audits.
- (A8) An up to date copy of the Integrated Environmental Management System must be kept at the Logan City Council Administration Centre and, where practicable to do so, at the licensed place at which the activities are carried out so as to be readily accessible to personnel that are carrying out the environmentally relevant activity, and be available for examination by an authorised person on request.
- (A9) The holder of this environmental authority must submit details of any amendment to the Integrated Environmental Management System annually to the administering authority with the annual return which immediately follows the making any such amendment.

Rehabilitation

- (A10) The holder of this environmental authority must rehabilitate the licensed place in a manner such that:
- (i) suitable native species of vegetation are planted and established;
 - (ii) potential for erosion of the site is minimised;
 - (iii) the quality of stormwater released from the site is such that releases of suspended solids, turbidity and total dissolved salts are not likely to cause environmental harm;
 - (iv) the likelihood of environmental nuisance being caused by release of dust is minimised; and
 - (v) the final landform is stable and not subject to slumping.
- (A11) Rehabilitation of disturbed areas must take place progressively as works are staged and new areas of waste disposal and/or extraction are commenced within the licensed place, with revegetation of filled areas carried out as soon as reasonably practicable upon the completion of the final cover system.
- (A12) Access to areas awaiting or being rehabilitated must be restricted by suitable barriers to prevent disturbance of these areas.

END OF CONDITIONS FOR PART 1 - SCHEDULE A

sch4p4(6)

PART 1 - SCHEDULE B - AIR

Noxious or Offensive Odour

- (B1) Notwithstanding any other condition of this environmental authority no release of contaminants from the licensed place is to cause a noxious or offensive odour beyond the boundaries of the licensed place at any odour sensitive place.

Management of Landfill Gas

- (B2) The release of landfill gas from the facility must be such that the concentration of landfill gas must not exceed:
- (i) 25 percent of the lower explosive limit for methane when measured in facility structures (but excluding facility structures used for landfill gas control and landfill gas recovery system components); and
 - (ii) the lower explosive limit for methane at the landfill facility boundary.

Dust and Particulate Emissions

- (B3) The following materials must not be used for dust suppression purposes:
- (i) leachate; and
 - (ii) stormwater that has become contaminated following contact with waste.
- (B4) The holder of this environmental authority must undertake all reasonable and practicable measures to minimise wind-borne and traffic generated dust and particulate emissions to the atmosphere from the licensed place. Such measures may include, but not necessarily be limited to:
- (i) minimising the area of land disturbed at any one (1) time;
 - (ii) use of dust suppressants such as water or proprietary chemical products adjusted to account for variations in evaporation rates and soil moisture conditions such that dust emissions are suppressed to the greatest practicable extent;
 - (iii) revegetation of disturbed areas;
 - (iv) handling dusty waste and earthen materials in calm weather conditions; and
 - (v) maintaining wind breaks.
 - (vi) for stockpiles, use of water sprays as required during winds likely to generate such release, use of dust-suppressant and shielding; and storage of stockpiled materials in storage in bunkers.
 - (vii) for trafficable areas, keeping surfaces clean, using of water sprays, adopting and adhering to speed limits and using dust suppressants and wind breaks.

The reasonable and practicable measures adopted for the licensed place must be incorporated into the relevant procedure(s) implemented under the integrated environmental management system.

- (B5) There must be no release of dust and/or particulate matter:
- (i) that causes dust deposition, monitored in accordance with Australian Standard AS 3580.10.1 of 1991, to exceed 130 milligrams per square metre per day beyond the boundary of the licensed place; nor
 - (ii) that causes the concentration of particulate matter with an aerodynamic diameter less than 10 micrometre (μm) (PM_{10}) suspended in the atmosphere downwind and beyond the boundary of the licensed place to exceed 150 micrograms per cubic metre over a 24 hour averaging time, when monitored in accordance with Australian Standard AS 3580.9.6 'Ambient air - Particulate matter - Determination of suspended particulate PM_{10} , high-volume sampler with size-selective inlet - Gravimetric method' or an alternate method for PM_{10} , permitted in the "Air Quality Sampling Manual" published by the administering authority".

- (B6) Rehabilitation must be carried out in such a manner as to minimise releases of wind-blown dust and erosion.

END OF CONDITIONS FOR PART 1 - SCHEDULE B

Part 1 - Schedule C - Water

- (C1) Contaminants must not be directly or indirectly released from the licensed place to any waters or the bed and banks of any waters except:
- (i) as permitted under a water schedule of this environmental authority; or
 - (ii) as permitted under a stormwater management schedule of this environmental authority; or
 - (iii) to a sewer as permitted or otherwise agreed from time to time by the relevant Local Government.

Leachate Collection and Disposal

- (C2) A leachate collection system must be installed and maintained to effectively and efficiently:
- (i) collect leachate generated in the landfill unit;
 - (ii) convey the collected leachate to an appropriate leachate storage facility; and
 - (iii) minimise the height of the leachate above the liner system.

Prohibition on Releasing Leachate

- (C3) Leachate and stormwater runoff which has been in contact with waste materials in the landfill unit must only be collected in leachate storage facility and be re-circulated through waste disposed in the landfill unit or released to sewer in accordance with the requirements of the relevant Local Government. Such leachate and stormwater runoff must not be released to any sedimentation pond or any other element of the sediment control system that releases contaminants to such waters.

END OF CONDITIONS FOR PART 1 - SCHEDULE C

Part 1 - Schedule D - Stormwater management

Contaminant Releases Caused by Rainfall

- (D1) Except as otherwise provided by the conditions of the stormwater management schedule and the water schedule of this environmental authority, the environmentally relevant activity must be carried out by such reasonable and practicable means necessary to prevent and/or minimise the release or likelihood of release of contaminated runoff from the licensed place to any stormwater drain or waters or the bed or banks of any such waters. "Contaminated runoff" for the purposes of this condition means stormwater and/or stormwater runoff that contains contaminants that may cause environmental harm.



Erosion Protection Measures and Sediment Controls

- (D2) Erosion protection measures and sediment controls must be provided and maintained to effectively minimise any likelihood of erosion and release of sediments from the licensed place and be maintained during site clearing, construction and rehabilitation. Such measures may include but necessarily be limited to:
- (i) diversion drainage works to divert uncontaminated stormwater runoff away from disturbed areas;
 - (ii) sedimentation traps;
 - (iii) diversion drainage works installed to ensure surface waters from disturbed areas, including operational and any uncovered trafficable areas, are diverted to the sediment control system;
 - (iv) designing drainage to minimise surface flow velocities.
- (D3) Erosion protection measures and the sediment control structures must be installed before any construction, site disturbance and/or rehabilitation take place.
- (D4) Erosion control and sediment control structures must be maintained at all times during the periods of the environmentally relevant activities are carried out and during rehabilitation. Procedures must be implemented to check and, if necessary, repair or replace the erosion control and sediment control structures after each rain event likely to adversely affect the efficiency of those structures.

Minimisation of leachate generation

- (D5) A system of diversion drains and or embankments must be constructed and maintained to divert surface waters away from any area of the licensed place where contact with waste may occur, excluding any unprocessed green waste that is not likely contaminate such surface waters.

Sediment Control System

- (D6) A sediment control system must be installed and maintained to collect and treat stormwater runoff from those parts of the licensed place from which stormwater runoff is likely to be contaminated by sediment, for example, disturbed areas and areas in which any earthen material is stored.

The sediment control system:

- (i) may include but not necessarily be limited to waste prevention measures such as minimising, re-vegetating or mulching disturbed areas and control and treatment measures such as sediment traps, sedimentation ponds, silt fences, and hay bale barriers; and
 - (ii) must provide for any release of treated stormwater runoff from the sediment control system to any surface waters to be via a drain or overflow structure that is accessible for monitoring purposes and identified on a plan submitted to the administering authority.
- (D7) Excepting any release of contaminants to sewer in accordance with the requirements of the relevant Local Government, release of contaminants from any sedimentation pond to waters must only occur as a result of rainfall at the licensed place. The contents of the sedimentation pond must not be pumped or otherwise siphoned or drained into any waters.
- (D8) All ponds used for the storage or treatment of contaminants or wastes must be installed and maintained to prevent any release of the stored contaminants or wastes through the bed or banks of the pond(s) such that the likelihood of environmental harm being caused to any waters (including groundwater) is minimised.
- (D9) All ponds used for the storage or treatment of contaminants or wastes must be installed and maintained so that a freeboard of not less than 0.5 metre is maintained at all times except in emergencies or adverse weather conditions. The sedimentation pond must be constructed and maintained to ensure that the relevant release limits are complied with.



Bunding

- (D10) All underground waste storage tanks must be fitted with cathodic protection.
- (D11) The available capacity of the underground waste storage tank(s) must be checked prior to placement of waste in the tank(s), for example by measurement with a dip stick at the commencement of the days operations to record available capacity of the tank(s) for that day, so as to ensure that sufficient capacity is available in the tank(s) to accept the volume of waste placed in the tank(s).
- (D12) All chemical tank storages (including any liquid waste tank storages) must be bunded so as to effectively contain a volume equivalent to at least that of 100% of the largest storage tank plus 10% of the second largest tank within the bund.
- (D13) All chemical drum storages, fuel drum storages and waste drum storages must be bunded so that the capacity of the bund is sufficient to contain at least 25% of the maximum design drum storage volume within the bund.
- (D14) All bunding must be constructed of materials which are impervious to the materials contained.
- (D15) All bunding must be roofed where practicable.
- (D16) Where it is impractical to completely roof a bunded area the holder of this environmental authority must ensure that any stormwater captured within the bund is free from contaminants or wastes prior to any release.
- (D17) All pipework required from the bunded areas must be directed over the bund wall and not through it.
- (D18) All empty drums (excepting empty drums disposed of in the landfill unit) must be stored with their closures in place on a concrete hardstand area or on an alternate surface impervious to the materials originally contained in the drums stored.
- (D19) Any spillage of wastes, contaminants or other materials must be cleaned up as quickly as practicable. Unless authorised by an emergency direction under section 157 of the Environmental Protection Act 1994, such spillage must not be cleaned up by hosing, sweeping or otherwise releasing such wastes, contaminants or material to any stormwater drainage system, roadside gutter or waters.

END OF CONDITIONS FOR PART 1 - SCHEDULE D

Part 1 - Schedule F - Noise

Release of Noise

- (F1) The environmentally relevant activity must be carried out by such reasonable and practicable means necessary to prevent the emission or likelihood of emission of noise that constitutes an unreasonable intrusive noise. The reasonable and practicable measures adopted for the licensed place must be incorporated into the relevant procedure(s) implemented under the integrated environmental management system.
- (F2) In the event of a complaint about noise that constitutes an unreasonable intrusive noise being made to the administering authority, that the administering authority considers is not frivolous or vexatious, then the emission of noise from the licensed place must not result in levels greater than those specified in Table 1 of the Noise Schedule.

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TABLE 1

NOISE LIMITS AT A NOISE SENSITIVE PLACE	
Period	Noise Level at a Noise Sensitive Place Measured as the Adjusted Maximum Sound Pressure Level $L_{Amax, adj T}$
7 am - 6 p.m.	Background noise level plus 5 dB(A)
6 p.m. - 10 p.m.	Background noise level plus 5 dB(A)
10 p.m. - 7 am	Background noise level plus 3 dB(A)
NOISE LIMITS AT A COMMERCIAL PLACE	
Period	Noise Level at a Commercial Place measured as the Adjusted Maximum Sound Pressure Level $L_{Amax, adj T}$
7 am - 6 p.m.	Background noise level plus 10 dB(A)
6 p.m. - 10 p.m.	Background noise level plus 10 dB(A)
10 p.m. - 7 am	Background noise level plus 8 dB(A)

END OF CONDITIONS FOR PART 1 - SCHEDULE F

Part 1 - Schedule G - Waste management

General

- (G1) Excepting any incineration or use of landfill gas collected at the licensed place, the holder of this environmental authority must not:
- (i) allow waste to burn or be burnt at or on the licensed place; nor
 - (ii) remove waste from the licensed place and burn such waste elsewhere.
- (G2) The integrated environmental management system must cause reasonable and practicable steps to be taken to ensure recyclable waste is not deposited in the general waste stream.

Waste Disposal

- (G3) The only waste to be accepted at the landfill facility must be a waste transported to the facility by any of the following persons or classes of persons:
- (i) the holder of this environmental authority;
 - (ii) contractors acting on behalf of the holder of this environmental authority;
 - (iii) another person or class of persons specifically authorised by the holder of this environmental authority to dispose of the type of waste carried by that person.

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- (G4) In the event of the holder of this environmental authority becoming aware of prohibited wastes being commingled in the waste stream the holder of this environmental authority must:
- (i) cease the depositing of such waste if depositing of such waste is occurring;
 - (ii) remove the prohibited waste and store it in a proper and efficient manner;
 - (iii) notify the person who sent the prohibited waste to the licensed place of the detection of prohibited waste in the waste received;
 - (iv) as soon as practicable arrange for a person who can lawfully transport such waste to collect such waste;
 - (v) arrange for the person transporting the prohibited waste to transport such waste to a facility that can lawfully accept such waste;
 - (vi) produce the following records:
 - (a) type of prohibited waste;
 - (b) quantity of prohibited waste;
 - (c) date of disposal;
 - (d) name and address of the person(s) transporting the prohibited waste to the facility;
 - (e) name and address of the person(s) who generated the prohibited waste (if such person(s) can be reasonably identified).

For the purpose of this condition, "prohibited waste" means a waste that, by a condition of this environmental authority, is not permitted to be accepted at that landfill facility, and, for a waste transfer station, a waste that is not permitted to be deposited in any waste container used at the waste transfer station.

- (G5) The holder of this environmental authority must use all practicable means to exclude access of birds, dogs and other pest species to that extent necessary to ensure that such birds, dogs and other pest species do not cause any:
- (i) nuisance to occupiers of neighbouring premises; or
 - (ii) any nuisance or danger to aircraft; or
 - (iii) any danger or risk to the health of any persons; or
 - (iv) environmental harm.
- (G6) Where litter is blown or washed from the facility in amounts which are not insignificant in scale or extent, the holder of this environmental authority must take all reasonable and practicable actions to retrieve the litter and ensure that it is disposed of in an appropriate manner.
- Site Security**
- (G7) The licensed place must be enclosed by a security fence with lockable gates provided and maintained to a standard that will prevent as far as practicable unauthorised access to the licensed place.
- (G8) The holder of this environmental authority must ensure that, at all times while the facility is open, at least one person must be present who is responsible for the control and operation of the facility and whose duties must include but are not limited to:
- (a) controlling the reception, storage and removal of waste;
 - (b) maintaining the facility at the an appropriate environmental standard;
 - (c) controlling all employees working in the facility; and
 - (d) supervising all persons entering the facility.
- (G9) The holder of this environmental authority must ensure that all access gates are locked when the licensed activity is unattended.

Signage

- (G10) The holder of this environmental authority must prominently display at the licensed place appropriate signs specifying:
- (i) that unlawful entry and unauthorised scavenging is prohibited;
 - (ii) the appropriate locations at which specified waste may be deposited and any requirements as to the deposition of such waste;
 - (iii) the waste that is permitted to be deposited at the facility and advising that other waste must not be deposited at the facility; and
 - (iv) that lighting of fires is prohibited.

Fire Prevention

- (G11) Clear access for fire fighting vehicles to a water supply such as the sedimentation dam or any reticulated supply must be provided at all times.
- (G12) An effective fire break must be provided and maintained. The fire break must comply with any requirements of the Regional Fire Commander.

Public Health Issues

- (G13) The holder of this environmental authority must:
- (a) install and operate all works and control equipment, and
 - (b) take all measures, perform all acts and do all things,
- necessary to ensure that the carrying out of the environmentally relevant activity does not cause any adverse effect on public health or any nuisance, particularly in relation to propagation of diseases, fly breeding, mosquito breeding, and harbourage and/or breeding of rats and other pest organisms and/or vectors.
- (G14) In the event of any adverse effect upon public health and/or any nuisance arising from the conduct of the environmentally relevant activity, the holder of the environmental authority must do all such acts and things and carry out any such works as may be necessary to:
- (i) abate such adverse effects and such nuisance; and
 - (ii) prevent the likelihood of any recurrence of the circumstances which gave rise to such adverse effects and/or such nuisance.

Closure and Post-Closure Care

- (G15) When the deposition of waste to the landfill unit ceases, the holder of this environmental authority must install a final cover system to the landfill unit that effectively minimises:
- (i) infiltration of water into the landfill unit; and
 - (ii) the likelihood of any erosion occurring to either the final cover system or the landfilled materials.
- (G16) The final cover system (excluding any cover system that sealed the landfill unit with bitumen or concrete) covered by must include at least:
- (i) at the Mount Cotton Road waste disposal facility, a 600 mm layer of material of sufficiently low permeability to minimise infiltration; and
 - (ii) at the Browns Plains Road waste disposal facility, a 900 mm layer of material of sufficiently low permeability to minimise infiltration; and
 - (iii) an upper layer of earthen material that is capable of sustaining native plant growth.

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- (G17) The final cover system must be terraced and/or graded to a sufficiently gradual slope and re-vegetated as soon as practicable with suitable species so as to prevent erosion from this source.
- (G18) The final cover system must be graded to such an extent that water does not pond on the final cover system.
- (G19) For the purposes of preventing and/or minimising the likelihood of environmental harm being caused as a result of deposition of waste in the facility, the holder of this environmental authority must, following cessation of deposition of waste in the landfill unit, conduct post closure care of the landfill unit for:
- (i) a period of 30 years; or
 - (ii) such shorter period until it is demonstrated to the administering authority in a competent manner using factually correct information that the landfill unit and surrounding site are geotechnically stable and that no release of waste materials, leachate, landfill gas or other contaminants to the environment is likely.
- (G20) The program of post closure care implemented must be effective in preventing and/or minimising the likelihood of environmental harm being caused or allowed. The program must include measures to:
- (i) maintain the structural integrity and effectiveness of the final cover system;
 - (ii) maintain and operate the leachate collection system;
 - (iii) maintain the groundwater monitoring system and monitor quality of groundwater at a frequency sufficient to detect any release of contaminants to groundwater;
 - (iv) maintain and operate the landfill gas monitoring system; and
 - (v) maintain and operate any landfill gas collection system installed.
- (G21) The holder of this environmental authority must develop and provide to the administering authority a landfill unit rehabilitation plan at least 12 months before the expected final disposal of wastes in the landfill unit. The rehabilitation plan must detail the actions the holder of this environmental authority intends to take to implement the requirements of this environmental authority in respect of the final cover system and the program of post-closure care.
- (G22) The holder of this environmental authority must have due regard to any comments made by the administering authority on the landfill rehabilitation plan.
- (G23) The holder of this environmental authority must begin closure activities of the landfill unit no later than 28 days after the date on which the landfill unit receives the known final receipt of wastes.

Off Site Movement

- (G24) Where regulated waste is removed from the licensed place (other than by a release as permitted under another schedule of this environmental authority), the holder of this environmental authority must monitor and record the following:
- (a) the date, quantity and type of waste removed; and
 - (b) name of the waste transporter and/or disposal operator that removed the waste; and
 - (c) the intended treatment/disposal destination of the waste.

Regulated Waste Receipt and Storage

- (G25) The only regulated waste to be received and stored at the licensed place is regulated waste listed below subject to the conditions of this environmental authority:
- (i) oils;
 - (ii) batteries;
 - (iii) tyres; and
 - (iv) vegetable oils.

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- (G26) Batteries must be stored under cover on spill trays impervious to and resistant to corrosion by materials held within the batteries.
- (G27) Tyres must be stored under cover in a manner that minimises risk of fire and spread of any fire.

END OF CONDITIONS FOR PART 1 - SCHEDULE G

Part 1 - Schedule H - Monitoring and reporting

Complaint Recording

- (H1) All complaints received by the holder of this environmental authority relating to carrying out of the environmentally relevant activities at the licensed place must be recorded and kept with the following details:
- (i) time, date and nature of complaint;
 - (ii) type of communication (telephone, letter, personal etc.);
 - (iii) name, contact address and contact telephone number of complainant (Note: if the complainant does not wish to be identified then "Not identified" is to be recorded);
 - (iv) response and investigation undertaken as a result of the complaint (Note: if the complaint is considered frivolous or vexatious, the reasons for considering the complaint frivolous or vexatious must be recorded);
 - (v) name of person responsible for investigating complaint; and
 - (vi) action taken as a result of the complaint investigation and signature of responsible person.
 - (vii) if the complaint is about dust and/or odour, on-site meteorological data relevant to the time from a representative site including wind speed and direction, temperature, barometric pressure, daily rainfall and relative humidity.

Incident Recording

- (H2) A record must be maintained of events including but not limited to:
- (i) any fire at the licensed place;
 - (ii) any known release of leachate or stormwater runoff which has been in contact with any wastes and contaminants not likely to be in accordance with the conditions of this environmental authority to the receiving waters;
 - (iii) detection by the environmental monitoring program of any release of contaminants not likely to be in accordance with the conditions of this environmental authority; and
 - (iv) incidents which have adverse public health consequences and/or cause nuisance including time, date, duration and nature of the incident.

Exception Reporting

- (H3) The holder of this environmental authority must notify the administering authority in writing of any monitoring result which indicates an exceedance of any licence limit within 28 days of completion of analysis.
- (H4) The written notification required by condition number H3 above must include:
- (i) the full analysis results, and
 - (ii) details of investigation or corrective actions taken, and
 - (iii) any subsequent analysis.



(NOTE: Any relevant notification given under section 320 or section 350 of the Act that contains the information specified in condition H4 is also notification under condition H3.)

Notification of Emergencies and Incidents

- (H5) As soon as practicable after becoming aware of any emergency or incident that results in the release of contaminants not in accordance, or reasonably expected to be not in accordance with the conditions of this environmental authority, the holder of this environmental authority must notify the administering authority of the release by telephone or facsimile.
- (H6) The notification of emergencies or incidents as required by condition H5 must include but not be limited to the following:
- (i) the name (or identification) of the holder of the environmental authority;
 - (ii) the location of the emergency or incident;
 - (iii) the number of the environmental authority;
 - (iv) the name and telephone number of the designated contact person;
 - (v) the time of the release;
 - (vi) the time the holder of the environmental authority became aware of the release;
 - (vii) the suspected cause of the release;
 - (viii) the environmental harm and or environmental nuisance caused, threatened, or suspected to be caused by the release; and
 - (ix) actions taken to prevent any further release and mitigate any environmental harm caused by the release.

(NOTE: Any relevant notification given under section 320 or section 350 of the Act that contains the information specified in condition H6 is also notification under condition H5.)

- (H7) Not more than 14 days following the initial notification of an emergency or incident, the holder of the environmental authority must provide written advice of the information supplied in accordance with condition H6 in addition to:
- (i) proposed actions to prevent a recurrence of the emergency or incident;
 - (ii) outcomes of actions taken at the time to prevent or minimise environmental harm; and
 - (iii) the results of any environmental monitoring performed.

Noise Monitoring

- (H8) For the purposes of checking compliance with condition number F2 of the noise schedule, monitoring and recording the noise levels from the environmentally relevant activity must be undertaken for at least the following descriptors, characteristics and conditions:
- (i) $L_{Amax, adj T}$;
 - (ii) $L_{Aeq, T}$ (or $L_{A90, T}$);
 - (iii) $L_{AN, T}$ (where N equals statistical levels of 1, 10, 50, 90 and 99);
 - (iv) the level and frequency of occurrence of impulsive or tonal noise;
 - (v) atmospheric conditions including temperature, relative humidity and wind speed and direction; and
 - (vi) effects due to extraneous factors such as traffic noise.
- (H9) In conjunction with the measurement and recording of the noise, the following parameters and conditions must be recorded:
- (a) location of sampling point(s);
 - (b) date sample(s) taken; and
 - (c) time sample(s) taken.

- (H10) In the event of a complaint about noise that constitutes an unreasonable intrusive noise being made to the administering authority that the administering authority considers is not frivolous or vexatious, the holder of this environmental authority must undertake monitoring to investigate such a complaint upon written request from the administering authority.
- (H11) The method of measurement and reporting of noise levels must comply with the Department of Environment and Heritage Noise Measurement Manual, second edition, March 1995, or more recent additions or supplements to that document as become available.
- (H12) All measurement and reporting of noise levels must be performed by a person of body possessing appropriate experience and qualifications to perform the required measurements.

Monitoring of Contaminant Releases to Waters

- (H13) All determinations of the quality of contaminants must be performed by a person or body possessing appropriate experience and qualifications to perform the required determinations.
- (H14) All determinations of the quality of contaminants released to waters must be made in accordance with methods prescribed in the Department of Environment and Heritage Water Quality Sampling Manual, 2nd Edition, February 1995, or more recent additions or supplements to that document as such become available.

Groundwater Monitoring

- (H15) A groundwater monitoring system must be installed for the landfill unit. The system must include a sufficient number of wells installed at locations and depths which yield representative groundwater samples from the uppermost aquifer and that establish:
- (i) background groundwater quality in hydraulically up-gradient or background well(s) that have not been affected by any potential leakage of contaminants to groundwater from the licensed place; and
 - (ii) quality of groundwater down-gradient of any potential leakage of contaminants to groundwater from the licensed place including groundwater passing the relevant point(s) of compliance referred to in condition H18.
- (H16) The groundwater monitoring system must be developed by a person possessing appropriate qualifications and experience in the fields of hydrogeology and groundwater monitoring program design to be able to competently make recommendations about these matters.
- (H17) Locations referred to in condition H15 for groundwater monitoring facilities must be given with reference to horizontal coordinates of such facilities accurate to 1.0 metre.
- (H18) The point(s) of compliance for the groundwater monitoring system must be situated not more than 150 metres from the landfill unit or the boundary of the landfill facility whichever is the closest.
- (H19) The holder of this environmental authority must monitor and record quality of groundwater to detect any possible release(s) of contaminants in accordance with the Detection Groundwater Monitoring Program. The Detection Groundwater Monitoring Program must be undertaken for, at least, the following water quality characteristics:
- (1) Ammonia (as N)
 - (2) Bicarbonate (HCO_3)
 - (3) Calcium
 - (4) Chloride
 - (5) Iron (total)
 - (6) Manganese (dissolved)
 - (7) Nitrate (as N)

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- (8) pH (field measured)
- (9) Potassium
- (10) Sodium
- (11) Sulphate
- (12) Specific Conductance
- (13) Total Organic Carbon (TOC)
- (14) Zinc.

- (H20) The holder of this environmental authority must determine whether or not there has been any statistically significant increase over background values at locations hydraulically down-gradient of the landfill unit for any water quality characteristic required to be monitored under the Detection Groundwater Monitoring Program referred to in condition H19.
- (H21) The holder of this environmental authority must monitor and record groundwater quality and groundwater levels as often as is necessary but not less frequently than every three (3) months.
- (H22) On any occasion that samples are obtained in accordance with condition H19, the holder of this environmental authority must measure and record standing groundwater levels in metres, accurate to 0.01 metre. The elevation of the reference point, relative to Australian Height Datum, for use in any groundwater level measurement must be determined to an accuracy of 0.005 metre.
- (H23) Measurement of groundwater levels must be undertaken prior to any disturbance by sampling, and must be reported as the depth in metres from the established reference point to the water surface within the bore.
- (H24) All determinations of the quality of groundwater must be performed by a person or body possessing appropriate experience and qualifications to perform the required determinations.
- (H25) All determinations of the quality of groundwater must be made in accordance with methods prescribed in the Department of Environment and Heritage Water Quality Sampling Manual, 2nd Edition, February 1995, or more recent editions or supplements to that document as such become available.
- (H26) Any monitoring facility must be maintained in an operative condition and be reasonably accessible at all times to any authorised person.
- (H27) Each groundwater monitoring bore must be fitted with a locked cap at all times other than at the time of sampling.

Receiving Surface Water Monitoring

- (H28) The holder of this environmental authority must monitor and record quality of surface water at monitoring positions upstream and downstream of the landfill facility to detect any potential release(s) of contaminants to receiving surface waters in accordance with the Receiving Surface Water Monitoring Program. The Receiving Surface Water Monitoring Program must be undertaken for, at least, the following water quality characteristics:

- (1) Ammonia (as N)
- (2) Bicarbonate (HCO_3)
- (3) Calcium
- (4) Chloride
- (5) Iron (total)
- (6) Manganese (dissolved)
- (7) Nitrate (as N)
- (8) pH (field measured)
- (9) Phosphorus (total)
- (10) Potassium
- (11) Sodium

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- (12) Specific Conductance
 - (13) Sulphate
 - (14) Suspended Solids
 - (15) Total Organic Carbon (TOC)
 - (16) Zinc.
- (H29) The holder of this environmental authority must monitor and record receiving surface water quality, as often as is necessary, but not less frequently than once every three (3) months in the event that there is water present in the receiving surface waters.
- (H30) All determinations of the quality of the receiving surface waters must be performed by a person or body possessing appropriate experience and qualifications to perform the required determinations.
- (H31) All determinations of the quality of receiving surface waters must be made in accordance with methods prescribed in the Department of Environment and Heritage Water Quality Sampling Manual, 2nd Edition, February 1995, or more recent editions or supplements to that document as such become available.

Landfill Gas Monitoring

- (H32) The holder of the environmental authority must develop and implement a landfill gas monitoring program to ensure that the landfill facility complies with methane standards referred to in condition B2.
- (H33) Determination of all the methane gas levels must be performed as often as necessary to ensure protection of human health, having regard to:
- (i) the likely landfill gas generation rate;
 - (ii) any previous levels of methane gas detected by the monitoring program;
 - (iii) proximity of the landfill facility to any premises or persons likely to be adversely affected by landfill gas; and
 - (iv) the effectiveness of measures implemented to minimise any lateral migration of landfill gas.
- (H34) All determinations of the methane gas levels must be performed by a person or body possessing appropriate qualifications to perform the required determinations.
- (H35) If methane gas levels exceeding methane standards referred to in condition B2 are detected, the holder of the environmental authority must immediately take all necessary steps to ensure protection of human health.

Environmental Monitoring Program/Record Keeping and Report Submission

- (H36) In developing and implementing the integrated environmental management system required by this environmental authority, the holder of this environmental authority must develop and implement an effective environmental monitoring program as required by this environmental authority for monitoring of contaminant releases to waters, groundwater monitoring, receiving surface water monitoring and landfill gas monitoring.
- (H37) The environmental monitoring program required by condition H36 must address at least:
- (i) the type and location of all environmental monitoring facilities;
 - (ii) monitoring frequencies;
 - (iii) sampling and monitoring procedures;
 - (iv) a clear and understandable explanation of the methodology to be used in the assessment of the monitoring results (including statistical tests to be used in the interpretation of data collected in the groundwater quality monitoring program); and

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- (v) the proposed responses in the event of detection by the environmental monitoring program of any release of contaminants not likely to be in accordance with the conditions of this environmental authority.
- (H38) Records must be kept of the results of the environmental monitoring and other information required to be recorded in conjunction with such monitoring for a period of at least five (5) years. Records of baseline monitoring for the landfill unit must be kept over the life of the landfill unit and during the post closure care period.

Annual Return

- (H39) The holder of this environmental authority must ensure that the results of all monitoring performed in accordance with this environmental authority for the period covered by the return are submitted with the annual return.
- (H40) The holder of this environmental authority must submit with each annual return for the period covered by the return a report of the results of the Receiving Environment Monitoring Program including an assessment of the impact of the carrying out of the activities upon the receiving environment. The assessment must address whether environmental values are being protected with reference relevant standards such as water quality data, background sampling data and any other monitoring data obtained and state the basis on which the conclusions are drawn.

END OF CONDITIONS FOR PART 1 - SCHEDULE H

Part 1 - Schedule I - Definitions

For the purposes of this environmental authority the following definitions apply:

- (11) "Act" means the Environmental Protection Act 1994.
- (12) "administering authority" means the Environmental Protection Agency or its successor.
- (13) "authorised person" means a person holding office as an authorised person under an appointment under the Environmental Protection Act 1994 by the chief executive.
- (14) "mg/L" means milligrams per litre.
- (15) "µS/cm" means microsiemens per centimetre.
- (16) "maximum" means that the measured value of the quality characteristic or contaminant must not be greater than the release limit stated.
- (17) "minimum" means that the measured value of the quality characteristic or contaminant must not be less than the release limit stated.
- (18) "range" means that the measured value of the quality characteristic or contaminant must not be greater than the higher release limit stated nor less than the lower release limit stated.
- (19) "intrusive noise" means noise that, because of its frequency, duration, level, tonal characteristics, impulsiveness or vibration -
 - (a) is clearly audible to, or can be felt by, an individual; and
 - (b) annoys the individual.

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In determining whether a noise annoys an individual and is unreasonably intrusive, regard must be had to Australian Standard 1055.2 - 1997 Acoustics - Description and Measurement of Environmental Noise Part 2 Application to Specific Situations or supplements to that document as they become available.

- (I10) " $L_{Amax, T}$ " means the average maximum A-weighted sound pressure level, adjusted for noise character and measured over a time period of not less than 15 minutes, using Fast response.
- (I11) "background noise level" means either:
- $L_{A90, T}$ being the A-weighted sound pressure level exceeded for 90 percent of the time period not less than 15 minutes, using Fast response, or
- $L_{Avg, T}$ being the arithmetic average of the minimum readings measured in the absence of the noise under investigation during a representative time period of not less than 15 minutes, using Fast response.
- (I12) "commercial place" means a place used as an office or for business or commercial purposes.
- (I13) "noise sensitive place" means -
- (i) a dwelling, mobile home or caravan park, residential marina or other residential premises; or
 - (ii) a motel, hotel or hostel; or
 - (iii) a kindergarten, school, university or other educational institution; or
 - (iv) a medical centre or hospital; or
 - (v) a protected area; or
 - (vi) a park or gardens.
- (I14) "protected area" means -
- (a) a protected area under the Nature Conservation Act 1992; or
 - (b) a marine park under the Marine Parks Act 1992; or
 - (c) a World Heritage Area.
- (I15) "noxious" means harmful or injurious to health or physical well-being.
- (I16) "offensive" means causing unreasonable offense; is unreasonably disagreeable to the sense; is disgusting, nauseous or repulsive.
- (I17) "odour sensitive place" means -
- (a) a dwelling, mobile home or caravan park, residential marina or other residential premises; or
 - (b) a motel, hotel or hostel; or
 - (c) a kindergarten, school, university or other educational institution; or
 - (d) a medical centre or hospital; or
 - (e) a protected area; or
 - (f) a public park or gardens; or
 - (g) a place used as an office or for business or commercial purposes.
- and includes a place within the curtilage of such a place reasonably used by persons at that place.
- (I18) "geotechnical stability of a landfill unit" means a situation where instability related to the excessive settlement and subsidence caused by decomposition and consolidation of the wastes deposited in the landfill unit, and sliding instability of the unit slope has ceased.
- (I19) "groundwater monitoring system" means a system of groundwater monitoring devices, such as monitoring bores, used to provide data in respect to the level and quality of groundwater in the uppermost aquifer where the location of the groundwater monitoring devices is such that comparisons

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of groundwater quality and groundwater level can be made between groundwater flowing from beneath the site (down-gradient flow) of the activity and groundwater flowing towards the site of the activity (up-gradient flow).

- (I20) "regulated waste" means non-domestic waste mentioned in schedule 7 of the Environmental Protection Regulation 1998 (whether or not it been treated or immobilised), and includes-
- (i) for an element - any chemical containing the element; and
 - (ii) anything that has contained a regulated waste; and
 - (iii) regulated waste that has been treated or immobilised.
- (I21) "landfill unit" means a discrete area of land or an excavation that receives solid waste.
- (I22) "landfill facility" means all contiguous land and structures, other appurtenances, and improvements on the land used for the disposal of solid waste.
- (I23) "leachate" means a liquid that has passed through or emerged from, or is likely to have passed through or emerged from, a material stored, processed or disposed of at the licensed place which contains soluble, suspended or miscible contaminants likely to have been derived from the said material.
- (I24) "lower explosive limit" means the lowest percent by volume of a mixture of explosive gases in air that will propagate a flame at 25°C and atmospheric pressure.
- (I25) "public health problem" means an adverse effect or likely adverse effect on the health of any person(s) which results from the carrying out of the environmentally relevant activity and includes transmission of disease(s), and breeding and/or harbourage of flies, mosquitoes, rodents and other pests.
- (I26) "putrescible waste" means waste food or waste animal matter (including dead animals and animal parts), and includes any mixtures of such wastes.
- (I27) "special burial of waste" means a disposal method where earth moving equipment pushes the wastes to the bottom of the working face or into an excavated hole, and immediately covers it with earth or other waste material.
- (I28) "uppermost aquifer" means the geologic formation nearest to the natural ground surface that is an aquifer. The term includes any aquifers that are likely to be hydraulically interconnected with this aquifer within the landfill facility property boundary.
- (I29) "contractors" means contractors engaged by the holder of this environmental authority to carry out an environmentally relevant activity or activities authorised to be carried out by this environmental authority.
- (I30) "baseline monitoring" means environmental monitoring carried out before carrying out environmentally relevant activity or a stage of an environmentally relevant activity, for example groundwater monitoring representative of environmental condition prior to use of a landfill unit.
- (I31) "bund" and "bundling" includes a spill containment tray or similar containment structure.
- (I32) "receiving surface waters" means:
- (i) for the licensed place at Mount Cotton Road, Cornubia: the drain that flows from the licensed place to Native Dog Creek; and
 - (ii) for the licensed place at Browns Plains Road, Heritage Park: Scrubby Creek.
- (I33) "Sedimentation pond" means a void or depression in the ground that receives stormwater runoff from those parts of the licensed place from which stormwater runoff is likely to be contaminated by sediment.

END OF CONDITIONS FOR PART 1 - SCHEDULE I

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PART 2: Additional site specific conditions for the licensed place at 1801 - 1927 Mount Cotton Road, Cornubia

The conditions set out in the schedules in Part 3 are in addition to those set out in Part 1 and apply to the carrying out of environmentally relevant activities at the licensed place at 1801 - 1927 Mount Cotton Road, Cornubia. Part 2 contains the following schedules:

Schedule C - Water
Schedule H - Monitoring and Reporting

Part 2 - Schedule C - Water

Description of Release: Mount Cotton Road Licensed Place

- (C1) The only contaminants permitted to be released from the licensed place at the release point W1 are settled/treated stormwater runoff waters from those areas of the licensed place that drain to the sediment control system, including any sedimentation pond.

Release Points: Mount Cotton Road Licensed Place

- (C2) Contaminants must not be directly or indirectly released from any source on the licensed place to any waters at any location other than the contaminants and sources at the locations listed below:

Release point W1 - settled/treated stormwater runoff waters via the discharge structure, being either the drain from or overflow spillway of, the final element of sediment control system that collects drainage and stormwater runoff contaminated by sediment at the licensed place, to waters described as drain that flows to Native Dog Creek.

Quality Characteristics Of Release to Waters: Mount Cotton Road Licensed Place

- (C3) The release of contaminants to waters must comply, at the sampling and in situ monitoring point(s) specified in Part 2 - Schedule H, with each of the limits specified in Part 2 -Schedule C Table 1 for each quality characteristic.

PART 2 - SCHEDULE C TABLE 1 - RELEASE QUALITY CHARACTERISTIC LIMITS

QUALITY CHARACTERISTICS	RELEASE POINT NUMBER	RELEASE LIMIT	LIMIT TYPE
pH. (pH Units)	W1	6.5 - 9.0	Range
Specific Conductance. (µS/cm)	W1	1500	Maximum
Dissolved Oxygen. (mg/L)	W1	4.0	Minimum
Suspended Solids (mg/L)	W1	50	Maximum

- (C4) Notwithstanding the requirements specified in condition number C3, any release of contaminants to waters must comply with the following qualitative characteristics:

(i) the release must not produce any slick or other visible evidence of oil or grease, nor contain visible floating oil, grease, scum, litter or other objectionable matter.

- (C5) In addition to the requirements specified in condition number C3, the holder of this environmental authority must take all reasonable and practicable measures to ensure that the release does not have any other properties nor contain any organisms or other contaminants in concentrations that are capable of causing environmental harm.

END OF CONDITIONS FOR PART 2 - SCHEDULE C

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Part 2 - Schedule H - Monitoring and reporting

Monitoring of Contaminant Releases to Waters

- (H1) The holder of this environmental authority is responsible for the making of determinations and keeping of records of the quality of the contaminants released for the release points, quality characteristics, and at the frequency specified in Part 2 - Schedule H - Table 1.

Part 2 - Schedule H - Table 1

QUALITY CHARACTERISTIC DETERMINATION	RELEASE POINTS AND RECEIVING WATER REFERENCE POINTS	FREQUENCY
Suspended Solids.	Release point W1	At least once per quarter in the event of a release. If no release occurs in the quarterly period, no sampling is required.
pH.	Release point W1	At least once per quarter in the event of a release. If no release occurs in the quarterly period, no sampling is required.
Specific Conductance.	Release point W1	At least once per quarter in the event of a release. If no release occurs in the quarterly period, no sampling is required.
Dissolved Oxygen.	Release point W1	At least once per quarter in the event of a release. If no release occurs in the quarterly period, no sampling is required.

Sampling and In Situ Monitoring Point Details

- (H2) Determinations of the quality of contaminants released to waters to check conformity with the release quality characteristics specified in the Water Schedule of Part 2 of this environmental authority must be undertaken at the sampling and in situ monitoring point described as:

MW1 - for release point W1, a point in the discharge from the discharge structure, being either the drain from or overflow spillway of, the final element of sediment control system of release point W1 to a drain that flows to Native Dog Creek.

END OF CONDITIONS FOR PART 2 - SCHEDULE H



PART 3: Additional site specific conditions for the licensed place at 339 - 355 Browns Plains Road, Heritage Park

The conditions set out in the schedules in Part 3 are in addition to those set out in Part 1 and apply to the carrying out of environmentally relevant activities at the licensed place at 339 - 355 Browns Plains Road, Heritage Park. Part 3 contains the following schedules:

- Schedule B - Air
- Schedule C - Water
- Schedule G - Waste Management
- Schedule H - Monitoring and Reporting

Part 3 - Schedule B - Air

Noxious or Offensive Odour

- (B1) For the purpose of securing compliance with Part 1, condition B1, the holder of this environmental authority must undertake all reasonable and practicable measures, and if necessary, best practice environmental management measures to prevent and, if not practicable to prevent, to minimise release of noxious and offensive odours. Such measures may include, but not necessarily be limited to:
- (i) minimising the area of waste exposed at any one time;
 - (ii) the frequent coverage of deposited waste with suitable cover material, with adequate quality control over the type, quality and depth of cover material;
 - (iii) the efficient compaction of deposited waste, including keeping of records of estimated compaction ratios;
 - (iv) immediate cover of particularly malodorous waste such as food, poultry and fish processing waste;
 - (v) where windows are opened in the cover material of previously deposited waste, minimising the time of exposure prior to placement of waste and scheduling opening to a time less conducive to odour dispersal;
 - (vi) scheduling arrival of waste transport vehicles so as to minimise the number of waste transport vehicles disposing of waste at one time;
 - (vii) restricting the area of exposed waste to minimum practicable;
 - (viii) use and effective application of odour suppressant agents;
 - (ix) maintenance of appropriate buffer zones between the activity and odour sensitive places;
 - (x) installing and operating landfill gas interception schemes on either a passive or active basis;
 - (xi) ensuring that likelihood of odours being released due to escape of landfill gas along preferential flow paths such as gas vents, cracks and drainage pathways is minimised by checking for and sealing those pathways;
 - (xii) repair and sealing of gas leaks in any landfill gas collection system;
 - (xiii) flaring and/or reuse of any collected landfill gas;
 - (xiv) minimising the time waste is stored prior to landfilling, for example in transfer stations;
 - (xv) contingency planning for conditions/situations with potential to cause odour problems, for example wet weather and equipment breakdown;
 - (xvi) cleaning and deodorizing of emptied garbage trucks prior to leaving the site;
 - (xvii) monitoring and recording of on-site meteorological data to determine conditions conducive to odour dispersal so as to assist appropriate scheduling of disposal activities;
 - (xviii) use of alternate cover materials to soil, including bio-reactive cover materials such as woody mulches;
 - (xix) public education campaigns that assist in reducing the amount of and degree putrescible material received, for example composting and keeping bins in cool places;
 - (xx) application of compacted clayey interim cover material to a minimum thickness of 300 mm (in addition to daily cover) over areas not subject to active waste placement for over 3 months;
 - (xxi) implementing odour control in any transfer station(s);

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- (xxii) increasing height of lifts of subcells, for example to 8 metres, so as to minimise the area of the footprint of the active subcell;
- (xxiii) use of equipment and vehicles that will not break through cover material, for example in wet weather;
- (xxiv) monitoring of complaints and correlation of complaints with meteorological data and practices carried out;
- (xxv) monitoring of odour releases to determine the effectiveness of the measures employed;
- (xxvi) keeping waste as dry as practicable, for example by avoiding moisture build up, covering and not placing waste in standing water;
- (xxvii) management of leachate fungal spore odours, for example by keeping leachate drains saturated; and
- (xxviii) waste pretreatment to render it less odour, for example application of odour suppressants and shredding.

Management of Landfill Gas

- (B2) A collection system for landfill gas must, not later than prior to closure of the landfill unit, be installed and maintained to effectively:
 - (i) minimise likelihood of any subsurface migration of landfill gas from any landfill unit; and
 - (ii) prevent any uncontrolled emission of landfill gas.
- (B3) Landfill gas collected by the gas collection system must be incinerated or reused or released into the atmosphere in a proper and efficient manner to prevent any adverse effect on people living in or using the surrounding area.

Dust and Particulate Emissions - Extractive Operations

- (B4) The holder of this environmental authority must undertake all reasonable and practicable measures to minimise wind-borne dust and particulate emissions to the atmosphere from the extractive operations. Such measures may include, but are not limited to:
 - (i) minimising disturbed areas;
 - (ii) temporary revegetation of overburden and disturbed areas;
 - (iii) handling earthen materials in calm weather conditions; and
 - (iv) maintenance of any earthen material stockpiles in moist conditions.
- The reasonable and practicable measures adopted for the licensed place must be incorporated into the relevant procedure(s) implemented integrated environmental management system.
- (B5) All disturbed areas must be re-vegetated as soon as practicable on the completion of each stage of extractive operations.
 - (B6) The holder of this environmental authority must take all reasonable and practicable measures necessary to prevent spillage and/or loss of particulate matter and minimise windblown dust from trucks used for transporting extracted materials from the licensed place. Reasonable and practicable measures may include but are not limited to:
 - (i) wetting down the load prior to transport;
 - (ii) having the entire load covered with a tarpaulin or similar material for the duration of transport; and
 - (iii) clearing of any spillage from side rails, tail gates and draw bars of trucks prior to departure from the licensed place and prior to departure from the premises to which the load has been delivered.

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The reasonable and practicable measures adopted for the licensed place must be incorporated into the relevant procedure(s) implemented integrated environmental management system.

END OF CONDITIONS FOR PART 3 - SCHEDULE B

Part 3 - Schedule C - Water

Leachate Collection and Disposal

(C1) With the exception of the landfill unit referred to as Browns Plains Landfill Stage 1 in the application for this environmental authority, a liner system must be installed and maintained in each landfill unit to effectively:

- (i) minimise the likelihood of any release of contaminants to groundwater; and
- (ii) minimise likelihood of subsurface migration of landfill gas from the landfill unit.

Landfill Gas Condensate

(C2) Landfill gas condensate must be disposed of to sewer or re-circulated through wastes disposed of in a landfill unit by a method other than spray irrigation.

Prohibition on Releasing Leachate, Landfill Gas Condensate and Groundwater

(C3) Leachate and stormwater runoff that which has been in contact with waste materials in the landfill unit(s), landfill gas condensate and groundwater that has been collected to depressurise the liner system must not be released to any surface waters or the bed or banks of any such waters.

Description of Release: Browns Plains Road Licensed Place

(C4) The only contaminants permitted to be released from the licensed place at the release point W2 are settled/treated stormwater runoff waters from those areas of the licensed place that drain to the sediment control system, including any sedimentation pond.

Release Points: Browns Plains Road Licensed Place

(C5) Contaminants must not be directly or indirectly released from any source on the licensed place to any waters at any location other than the contaminants and sources at the locations listed below:

Release point W2 - settled/treated stormwater runoff waters via the discharge structure, being either the drain from or overflow spillway of, the final element of sediment control system that collects drainage and stormwater runoff contaminated by sediment at the licensed place, to waters described as described as Scrubby Creek.

Quality Characteristics Of Release to Waters: Browns Plains Road Licensed Place

(C6) The release of contaminants to waters must comply, at the sampling and in situ monitoring point(s) specified in Part 3 - Schedule H, with each of the limits specified in Part 3 - Schedule C Table 1 for each quality characteristic.

PART 3 - SCHEDULE C TABLE 1 - RELEASE QUALITY CHARACTERISTIC LIMITS

QUALITY CHARACTERISTICS	RELEASE POINT NUMBER	RELEASE LIMIT	LIMIT TYPE
pH. (pH Units)	W2	6.5 - 9.0	Range
Specific Conductance. ($\mu\text{S}/\text{cm}$)	W2	1500	Maximum
Dissolved Oxygen. (mg/L)	W2	4.0	Minimum
Suspended Solids (mg/L)	W2	50	Maximum

(C7) Notwithstanding the requirements specified in condition number C6, any release of contaminants to waters must comply with the following qualitative characteristics:

- (i) the release must not produce any slick or other visible evidence of oil or grease, nor contain visible floating oil, grease, scum, litter or other objectionable matter.

(C8) In addition to the requirements specified in condition number C6, the holder of this environmental authority must take all reasonable and practicable measures to ensure that the release does not have any other properties nor contain any organisms or other contaminants in concentrations that are capable of causing environmental harm.

END OF CONDITIONS FOR PART 3 - SCHEDULE C

Part 3 - Schedule G - Waste management

(G1) Regulated waste disposed of at the licensed place must be restricted to:

- (i) asbestos (all chemical forms);
- (ii) food processing waste (solid only);
- (iii) poultry processing waste (solid only);
- (iv) fish processing waste (solid only);
- (v) contaminated soils subject to that waste meeting the contaminated soil maximum contaminant levels, the allowable leaching contaminant levels and all other relevant waste acceptance criteria for lined municipal landfills as specified in the document titled "Liquid Industrial Waste Policy and Management Plans", produced by Brisbane City Council and dated November 1994; and
- (vi) shredded tyres.

(G2) Notwithstanding condition G1, minor amounts of the regulated waste not specifically permitted to be accepted may be deposited at the landfill facility provided:

- (i) the regulated waste is incidental to and commingled with the general waste stream;
- (ii) the quantity and concentration of the regulated waste (both individually and in aggregate) is insignificant;
- (iii) it is impracticable to segregate the regulated waste from other waste that is permitted to be deposited;
- (iv) If the source of the regulated waste is known, the person who deposited the regulated waste is advised that such waste must not be included in the waste stream sent to this facility and practicable steps are taken to prevent any recurrence of such deposition; and
- (v) the deposition of the regulated waste is not likely to cause any risk of fire, explosion, public health danger, nuisance, or environmental harm; and
- (vi) all practicable steps are taken to inform persons using the facility that such wastes must not be included in the waste stream sent to this facility.

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- (G3) All chemical forms of asbestos wastes must be contained within the landfill unit at a minimum distance of two (2) metres from the surface and flanks of the landfill unit, excluding any final cover system required as a condition of this environmental authority.
- (G4) The following waste must be handled and disposed of as a special burial of waste:
 - (i) asbestos all chemical forms.
- (G5) The working face of the landfill unit must be kept to the smallest size practicable and must not at any time exceed 50 metres in width.

Design and Operating Criteria - Waste Transfer Station

- (G6) The only waste to be accepted at the waste transfer station must be a waste transported to the facility by any of the following persons or classes of persons:
 - (i) the holder of this environmental authority;
 - (ii) contractors acting on behalf of the holder of this environmental authority;
 - (iii) another person or class of person specifically authorised by the holder of this environmental authority to dispose of the type of waste carried by that person.
- (G7) The holder of this environmental authority must prevent deposition of any regulated waste into any waste container used at the waste transfer station.
- (G8) Notwithstanding condition G7, minor amounts of the regulated waste may be deposited in any waste containers used at the waste transfer station provided:
 - (i) the regulated waste is incidental to and commingled with the general waste stream;
 - (ii) the quantity and concentration of the regulated waste (both individually and in aggregate) is insignificant;
 - (iii) it is impracticable to segregate the regulated waste from other waste which is permitted to be deposited;
 - (iv) if the source of the regulated waste is known, the person who disposed of the regulated waste is advised that such waste must not be included in the waste stream sent to the facility and practicable steps are taken to prevent any recurrence of such deposition; and
 - (v) the deposition of the regulated waste is not likely to cause any risk of fire, explosion, public health danger, nuisance, or environmental harm;
 - (vi) all practicable steps are taken to inform persons using the facility that such wastes must not be included in the waste stream sent to the facility; and
 - (vii) facilities are provided at the waste transfer station to appropriately contain (excluding containment in waste containers used at the waste transfer station) recyclable regulated waste such as car batteries and waste oil which may be inadvertently brought to the waste transfer station.
- (G9) The waste containers must be:
 - (i) maintained in a proper and efficient state of repair to effectively contain the deposited wastes; and
 - (ii) cleaned regularly.
- (G10) The cleaning of waste containers must be carried out in a proper and efficient manner such that all waste water resulting from such activities is collected and disposed of to sewer or re-circulated through waste disposal in the landfill unit.

- (G11) All putrescible waste that, if disposed of at a waste disposal facility under this environmental authority would be subject to special burial requirements, must not be placed or disposed in any waste containers of the waste transfer station.
- (G12) Where litter is blown or washed from the waste transfer station in amounts which are not insignificant in scale or extent, the holder of this environmental authority must take all reasonable and practicable actions to retrieve the litter and ensure that it is disposed of in an appropriate manner.

Waste Disposal

- (G13) The following waste must be handled and disposed of as a special burial of waste:

- (i) all putrescible waste (other than putrescible waste from domestic premises) where that putrescible waste comprises the total waste load;
- (ii) waste loads containing putrescible waste (other than putrescible waste from domestic premises) commingled with other waste where the quantity that other waste (both individually and in aggregate) is insignificant; and
- (iii) waste, which if not buried as soon as practicable, would be likely to cause environmental harm when placed in an exposed position.

For the purposes of this condition, an "insignificant" quantity is a quantity, estimated upon visual inspection, to comprise not more than five percent (5%) of that load of waste.

- (G14) The holder of the environmental authority must record at least the following information in relation to the special burial of wastes:
- (i) type of waste;
 - (ii) quantity of waste;
 - (iii) date of deposition;
 - (iv) source of waste; and
 - (v) if the waste is fibrous asbestos and/or mixed asbestos waste, the accurate location of each deposit and the depth of each deposit.
- (G15) Exposed wastes (excepting waste collected and stored for recycling and waste stored in transfer station bins) must be limited to the working face of the landfill unit and the area of exposure must be minimised to the greatest extent practicable.
- (G16) Waste (excepting waste collected and stored for recycling and waste stored in transfer station bins) must not be deposited beyond the boundaries of the landfill unit.
- (G17) All wastes must be deposited in lifts not exceeding a vertical height of 2.5 metres provided that for every one metre in height the horizontal length of the working face is at least 4 metres.
- (G18) Every lift of waste deposited within the landfill facility must be evenly and properly consolidated by mechanical plant to the greatest extent practicable.
- (G19) Large metal articles intended to be buried at the landfill facility must be compacted to the greatest extent practicable prior to being deposited in the landfill unit.
- (G20) Deposited waste must be covered:
- (i) with earthen material to a thickness of at least 0.2 metres; or
 - (ii) other dense and incombustible alternative material of sufficient thickness and nature to ensure that there is no exposure of waste.

- (G21) Coverage of deposited waste (excluding waste collected and stored for recycling and green waste deposited for mulching or other reuse) must take place:
- (i) if compliance with conditions G22 to G27 inclusive is not achieved, at least at the end of every operating day; or
 - (ii) if compliance with condition G22 to G27 inclusive is achieved, at least at the end of every second operating day; and
 - (iii) notwithstanding sub-clauses (i) and (ii) of this condition, at more frequent intervals if putrescible waste is deposited at that frequency necessary to ensure that such waste is not left in an exposed state.
- (G22) The minimum frequency of coverage of deposited waste (excluding waste collected and stored for recycling and green waste deposited for mulching or other reuse) may be extended from "at least at the end of every operating day" until "at least at the end of every second operating day" subject to compliance with and demonstration of achievement of the following environmental performance measures.
- (i) compliance with other conditions of this environmental authority that relate to release of noxious and offensive odour are complied with; and
 - (ii) an alternate means of minimising any dispersal of litter from active waste deposition areas to other parts of the licensed premises, in particular the stormwater drainage system, such as litter screens is implemented and maintained such that the likelihood of litter being released beyond the boundaries of the licensed place is minimised; and
 - (iii) there are no fires in the waste nor likelihood of fires; and
 - (iv) there are no rats (excepting any dead rats killed by compactor or other waste carrying vehicles) detected in the deposited waste nor other areas of the licensed place; and
 - (v) the deposited waste are compacted to an average rate of compaction of waste of not less than 800 kilograms of waste per cubic metre; and
 - (vi) if on any afternoon, rainfall (excluding excessive rainfall that has made it impractical for machinery to work at the active tipping area) is falling at the licensed place or is forecast for the area within the next 24 hour period, the deposited waste must be covered to minimise ingress of rainfall and stormwater into waste; and
 - (vii) compliance with other conditions of this environmental authority that relate to the public health risks, as estimated by presence and numbers of vermin, flies, mosquitoes and birds that are vectors of disease, associated with operating the facility; and
 - (viii) the carrying out of the waste disposal activity does not cause any complaint that may be reasonably related to the fact that deposited waste is not covered; and
 - (ix) the waste deposited each day for the last 2 hours of daily landfill operations:
 - (a) contains less than 2 percent of the putrescible fraction; or
 - (b) has been shredded or bailed.
- (G23) For the purposes of checking and demonstrating compliance with condition G22, the holder of this environmental authority must develop and implement an environmental performance monitoring program to ensure that the environmental performance measures specified in condition G22 are being complied with. The environmental performance monitoring program must provide for the monitoring and keeping of records of:
- (i) the dates when daily cover is applied and the dates when it is not applied; and
 - (ii) the results of a quality assurance program implemented to ensure that the appropriate minimum depth and quality of daily cover material is maintained; and
 - (iii) regular self assessments, made as often as is necessary having regard to any history of any odour complaints and any hot and/or wet weather conditions likely to increase risk of odour releases, of odour control performance in conjunction with recording of on-site meteorological data to assist in evaluating whether any odour complaint received is caused by the waste disposal activity; and



- (iv) the results of at least quarterly consultations with a community reference group providing feedback on the environmental performance of the holder of this environmental authority as it relates to carrying out of the environmentally relevant activities;
 - (v) the effectiveness of the measures implemented to minimise litter dispersal from the active tipping areas;
 - (vi) a rat trapping program comprising at least 10 traps carried out in the vicinity of the waste disposal area monthly during April through to September and fortnightly during October through to March;
 - (vii) at least monthly, mass of waste received and estimated landfill head space occupied in disposing that waste to calculate average waste compaction rate in kilograms of waste per cubic metre; and
 - (viii) a monitoring program carried out monthly during the April through to September and fortnightly during October through to March at the licensed place in the vicinity of the active tipping area to estimate for each month:
 - (a) the average number of flies collected in at least 6 recognised fly traps, such as a proprietary trap or one utilised in agricultural research; and
 - (b) the average number of mosquitoes collected in at least 6 recognised mosquito traps, such as a light trap; and
 - (c) the numbers of rats trapped in at least 6 recognised rat traps, such as a proprietary rat trap; and
 - (ix) of complaints required to be kept under the conditions of this environmental authority; and
 - (x) any fire at the licensed place.
- (G24) All monitoring required under condition G23 must be performed by a person or body possessing appropriate experience and qualifications to perform the required monitoring.
- (G25) All monitoring required under condition G23 must be performed in accordance with a standardised protocol that is documented and includes details of
- (i) the type of measurement(s) being made, for example estimated total number of birds; and
 - (ii) the time period and type of location during and from which measurements are made; and
 - (iii) the methodology to be followed in making and recording the measurements; and
 - (iv) the quality assurance measures that apply to the monitoring, for example any records of calibration of monitoring equipment and checks of effectiveness of equipment.
- (G26) The holder of this environmental authority must provide to the administering authority the following information:
- (i) the make and model of compaction machinery utilised in carrying out the waste disposal activity; and
 - (ii) the manufacturer's recommendations on the number of passes necessary and thickness of waste layer to be compacted that will be expected to achieve a compaction rate of 800 kilograms of waste per cubic metre; and
 - (iii) a copy of the protocols mentioned in condition G25 intended to be used in by the holder of this environmental authority in carrying the required monitoring.
- and must incorporate those recommendations into the relevant procedures documented under the integrated environmental management system.
- (G27) For the purpose of implementing the integrated environmental management system, the holder of this environmental authority must keep itself informed of relevant guidelines, research findings and best practice environmental management measures for the minimisation of public health risks from carrying out the waste disposal activities.
- (G28) Material necessary for coverage of disposed waste must be stored and be readily available at the licensed place in a quantity sufficient for not less than two weeks operation of the landfill facility.

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(G29) Notwithstanding condition G28, where:

- (i) the material to be used as cover material is soil; and
- (ii) the holder of this environmental authority carries out an extractive industry either at the licensed place or within 5 kilometres of the licensed place that provides soil suitable for covering the waste; and
- (iii) the holder of this environmental authority has use of sufficient trucks or other vehicles capable of transporting the soil to the working face of the licensed place; and
- (iv) access and transport is available to the source of the cover material and the working face under wet weather conditions;

then the quantity of that cover material required to be stored and readily available at the licensed place must be not less than a quantity sufficient for not less than three days operation of the landfill facility.

(G30) Relocatable screens must be maintained around the working face so as to minimise litter being blown from the landfill facility.

(G31) A suitable access road must be provided and maintained to the working face of the landfill unit.

END OF CONDITIONS FOR PART 3 - SCHEDULE G

Part 3 - Schedule H - Monitoring and reporting

Monitoring of Contaminant Releases to Waters

(H1) Commencing on 1 December 1997, the holder of this environmental authority is responsible for the making of determinations and keeping of records of the quality of the contaminants released for the release points, quality characteristics, and at the frequency specified in Part 2 - Schedule H - Table 1.

Part 2 - Schedule H - Table 1

QUALITY CHARACTERISTIC DETERMINATION	RELEASE POINTS AND RECEIVING WATER REFERENCE POINTS	FREQUENCY
Suspended Solids.	Release point W2	At least once per quarter in the event of a release. If no release occurs in the quarterly period, no sampling is required.
pH.	Release point W2	At least once per quarter in the event of a release. If no release occurs in the quarterly period, no sampling is required.
Specific Conductance.	Release point W2	At least once per quarter in the event of a release. If no release occurs in the quarterly period, no sampling is required.
Dissolved Oxygen.	Release point W2	At least once per quarter in the event of a release. If no release occurs in the quarterly period, no sampling is required.

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Sampling and In Situ Monitoring Point Details

- (H2) Determinations of the quality of contaminants released to waters to check conformity with the release quality characteristics specified in the Water Schedule of Part 3 of this environmental authority must be undertaken at the sampling and in situ monitoring point described as:

MW2 - for release point W2, a point in the discharge from the discharge structure, being either the drain from or overflow spillway of, the final element of sediment control system of release point W2 to Scrubby Creek.

- (H3) Baseline groundwater water quality monitoring for at least water quality characteristics required in the Detection Groundwater Monitoring Program must be undertaken prior to use of any landfill unit. The baseline groundwater quality must be determined at those locations and those depths which comprise the groundwater monitoring system established for that landfill unit.

Ambient Particulate Monitoring

- (H4) For the purposes of checking compliance with condition B5 of Part 1, the holder of this environmental authority must develop and implement a particulate monitoring program. The particulate monitoring program must provide for:
- (i) monitoring of ambient particulate matter (insoluble analysis) at not less than, eight (8) locations sited at approximate even spacing around the licensed place within 20 metres of the boundaries of the licensed place; and
 - (ii) monitoring of the 24 average concentration of particulate matter with an aerodynamic diameter less than 10 micrometre (μm) (PM_{10}) suspended in the atmosphere downwind and beyond the boundary of the licensed place to investigate any complaint of dust nuisance caused by dust that is reasonably likely to have emanated from the landfill facility upon receipt of request from the administering authority to carry out such monitoring. The average concentration must be calculated from a minimum of 14 samples obtained over a one month period.

For the purposes of this condition "downwind" means the in the downwind direction taking account of the wind direction that predominates for the area at that particular time of year, for example as shown by wind data obtained from the Commonwealth Bureau of Meteorology.

- (H5) The samples must be collected and analysed in accordance with the requirements the Department of Environment "Air Quality Sampling Manual", first edition, November 1997, or more recent editions or supplements to that document as such become available.
- (H6) All determinations of particulate monitoring must be performed by a person or body possessing appropriate experience and qualifications to perform the required determinations.

END OF CONDITIONS FOR PART 3 - SCHEDULE H

END OF INTEGRATED AUTHORITY

sch4p4(6) f

Registration certificate

Environmental Protection Act 1994

Registration certificate

No: ENRE00999209

This registration certificate is issued by the administering authority and takes effect from: 16 JANUARY 2013

The anniversary day for the purposes of the Annual Return remains 18 December

This registration certificate is a requirement of section 73F of the *Environmental Protection Act 1994* and authorises the registered operator to undertake the activities listed below at the following places subject to the conditions set out in a development approval attached to the premises, or the relevant code of environmental compliance.

Registered Operator: Logan City Council
Administration Centre
150 Wembley Road, LOGAN CENTRAL QLD 4114

Development Approval: SR779 (now described as SPDE00542310)

Place: Lot 357 Plan SL11256

Located at: 1801-1927 Mount Cotton Road, CORNUBIA QLD 4130

Registered Activities: ERA 56 Regulated waste storage Threshold 1 - operating a facility for receiving and storing 5t or more or 500 or more equivalent passenger units, of tyres or parts of tyres
ERA 56 Regulated waste storage Threshold 2 - operating a facility for receiving and storing regulated waste other than tyres

Development Approval: SR779 (now described as SPDE00542410)

Place: Lot 903 Plan SP100915

Located at: 339-355 Browns Plains Rd, HERITAGE PARK QLD 4118

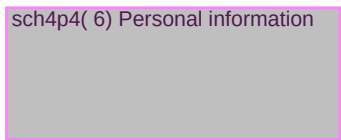
Registered Activities: ERA 16 Extractive and screening activities Threshold 2(c) - extracting, other than by dredging, in a year, more than 100000t to 1000000t of material
ERA 56 Regulated waste storage Threshold 2 - operating a facility for receiving and storing regulated waste other than tyres
ERA 60 Waste disposal Threshold 2(g) - operating a facility for disposing of, in a year, more than 100000t to 200000t of only general waste or general waste and any or any combination of limited regulated waste that is no more than 10% of the total amount of waste received at the facility or - if the facility is in a scheduled area - no more than 5t of untreated clinical waste

Relea



ERA 62 Waste transfer station operation - operating, on a commercial basis or in the course of carrying on a commercial enterprise, a waste transfer station that receives a total quantity of at least 30t or 30m3 of waste on any day

sch4p4(6) Personal information

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Delegate
Department of Environment and Heritage Protection
Environmental Protection Act 1994

16-JAN-2013



Integrated Authority No. SR779

Section 311 Environmental Protection Act 1994

This integrated authority, issued in accordance with section 311 of the Environmental Protection Act 1994 (the EP Act), provides for the carrying out of different Environmentally Relevant Activities or Environmentally Relevant Activities at different places managed in an integrated way. This integrated authority comprises of one or more types of environmental authority(ies) in accordance with sections 86, 93, 95, 104, 113 and 311, of the EP Act, and this integrated authority details the conditions that are relevant to each stated type of environmental authority.

**Under the provisions of the
 Environmental Protection Act 1994 this integrated authority is issued to:**

Logan City Council
 Administration Centre
 Wembley Road
 LOGAN CENTRAL QLD 4111

**in respect of carrying out the Environmentally Relevant Activities (ERAs) at the
 different places and under the type of environmental authority
 described in Table 1.**

This integrated authority is subject to the conditions set out in the attached schedules.

The anniversary date of this licence is 18 December.

This amended integrated authority takes effect from 21 December 2001.

sch4p4(6) Personal Inform

Signed

Date

Dr Stephen Skull
Acting Manager (Licensing)
 Delegate of Administering Authority
Environmental Protection Act 1994

Note: This integrated authority document is not proof of the current status of the integrated authority. The current status of the integrated authority may be ascertained by contacting the Environmental Protection Agency.



Table 1: This integrated authority consists of the following part(s):

Licence/s (without development approval) (Section 93)

Applicable Part & Schedule(s)	ERA No.	ERA name	Lot	Plan	Location
Parts 1 and 2 All schedules	84(a)	Regulated waste storage-operating a facility for receiving and storing more than 500 tyres in whole or equivalent parts (other than tyres stored for recycling or reprocessing under item 80.)	357	SL11256	1801-1927 Mount Cotton Road CORNUBIA QLD 4130
Parts 1 and 2 All schedules	84(b)	Regulated waste storage-operating a facility for receiving and storing other regulated wastes, other than waste stored- (i) on a farm for use as a soil conditioner or fertiliser in carrying out an agricultural activity; or (ii) for use in manufacturing a saleable product under another item of this schedule; or (iii) for incineration under item 76; or (iv) recycling, reprocessing or reconditioning under items 77 to 79 or 81	357	SL11256	1801-1927 Mount Cotton Road CORNUBIA QLD 4130
Parts 1 and 3 All schedules	20(c)	Extracting rock or other material - extracting rock (other than rock mined in block or slab form for building purposes), sand (other than foundry sand), clay (other than clay used for its ceramic properties, kaolin or bentonite), gravel, loam or other material (other than under a mining authority) from a pit or quarry using plant or equipment having a design capacity of 100 000 tonnes or more per year	903	SP100915	339-355 Browns Plains Road HERITAGE PARK QLD 4118
Parts 1 and 3 All schedules	75(a)(viii)	Waste disposal - operating a facility for disposing of only general waste or limited regulated waste, if the facility is designed to receive waste at the rate of 100 000 tonnes or more, but less than 200 000 tonnes per year	903	SP100915	339-355 Browns Plains Road HERITAGE PARK QLD 4118
Parts 1 and 3 All schedules	82	Waste transfer station - operating a waste transfer station designed to receive waste at the rate of 20 000 tonnes or more of waste per year	903	SP100915	339-355 Browns Plains Road HERITAGE PARK QLD 4118
Parts 1 and 3 All schedules	84(b)	Regulated waste storage-operating a facility for receiving and storing other regulated wastes, other than waste stored- (i) on a farm for use as a soil conditioner or fertiliser in carrying out an agricultural activity; or (ii) for use in manufacturing a saleable product under another item of this schedule; or (iii) for incineration under item 76; or (iv) recycling, reprocessing or reconditioning under items 77 to 79 or 81	903	SP100915	339-355 Browns Plains Road HERITAGE PARK QLD 4118

LICENCE(S) (WITHOUT DEVELOPMENT APPROVAL) (Section 93)

This part is for the carrying out of a level 1 environmentally relevant activity without a development approval, under chapter 4, part 3, division 2, subdivision 1 of the Environmental Protection Act 1994.

PART 1 Common conditions

The conditions set out in the schedules in Part 1 apply to the carrying out of all environmentally relevant activities unless otherwise stated. Part 1 contains the following schedules:

- Schedule A - General Conditions
- Schedule B - Air
- Schedule C - Water
- Schedule D - Stormwater Management
- Schedule F - Noise
- Schedule G - Waste Management
- Schedule H - Self Monitoring and Reporting
- Schedule I - Definitions

Part 1 - Schedule A - General conditions

Maintenance of Plant and Equipment

(A1) The holder of this environmental authority must:

- (i) install all plant and equipment necessary to ensure compliance with the conditions; and
- (ii) maintain such plant and equipment in a proper and efficient condition; and
- (iii) operate such plant and equipment in a proper and efficient manner.

In this condition, "plant and equipment" includes:

- (i) plant and equipment used to prevent and/or minimise the likelihood of environmental harm being caused;
- (ii) devices and structures to contain reasonably foreseeable escapes of contaminants and waste;
- (iii) fuel burning equipment;
- (iv) devices and structures used to store, handle, treat and dispose of waste;
- (v) monitoring equipment and associated alarms; and
- (vi) backup systems that act in the event of failure of a primary system.

Records

(A2) Any record or document required to be kept by a condition of this environmental authority must be kept at the Logan City Council Administration Centre, and where practicable to do so, at the licensed place at which the activities are carried out for a period of, except as otherwise provided, at least five (5) years and be available for examination by an authorised person. The record retention requirements of this condition will be satisfied if any daily and weekly records are kept for a period of at least three (3) years and these records are then kept in the form of annual summaries after that period.

Alterations

(A3) No change, replacement or operation of any plant or equipment is permitted if the change, replacement or operation of the plant or equipment increases, or is likely to substantially increase, the risk of environmental harm above that expressly provided by this environmental authority.

An example of a substantial increase in the risk of environmental harm is an increase of 10% or more in the quantity of the contaminant to be released into the environment.

Integrated Environmental Management System (IEMS)

- (A4) The holder of this environmental authority must develop and implement an Integrated Environmental Management System (IEMS) in accordance with the conditions of this environmental authority that provides for the effective and appropriate management by the holder of this environmental authority of the actual and potential environmental impacts resulting from the carrying out of the environmentally relevant activities.
- (A5) The Integrated Environmental Management System must provide for at least the following functions:
- (i) The monitoring of releases of contaminants into the environment, for example measurement of the quantities and concentrations of releases of contaminants to the environment as required under this environmental authority;
 - (ii) The assessment of the environmental impacts of any releases of contaminants into the environment, for example any ambient environmental quality monitoring, noise monitoring or complaints monitoring required under this environmental authority; and
 - (iii) The training of all relevant staff, agents and contractors ("staff") to competent levels in at least the following:
 - (a) the environmental policy of the holder of this environmental authority so that staff are aware of any relevant commitments to environmental management; and
 - (b) any relevant environmental objectives and targets so that all staff are aware of the relevant performance objectives and can work towards these; and
 - (c) control procedures for routine operations for day to day operational activities to prevent or minimise environmental harm, however occasioned or caused; and
 - (d) contingency plans and emergency procedures for non-routine situations to deal with foreseeable risks and hazards including corrective responses to prevent and mitigate environmental harm (including any necessary site rehabilitation); and
 - (e) organisational structure and responsibility to ensure that roles, responsibilities and authorities are appropriately defined to manage environmental issues effectively; and
 - (f) effective communication to ensure two-way communication on environmental matters between operational staff and management, as well as communications with the administering authority; and
 - (g) documentation systems so that appropriate records of environmental matters are kept to satisfy the holder of this environmental authority, the administering authority, and the community that the applicant is meeting environmental commitments; and
 - (h) responsibilities of the holder of this environmental authority and staff under the Environmental Protection Act 1994 so that these can be met.
 - (iv) The conduct of environmental and energy audits to review periodically:
 - (a) the level of environmental performance; and
 - (b) the effectiveness of environmental management procedures adopted; and
 - (c) efficiency in using energy and resources and opportunities for more efficient usage.
 - (v) The implementation of effective and appropriate practices and procedures for waste prevention, treatment and disposal.
 - (vi) development and implementation of Site-Based Environmental Management Plans that address the management of the actual and potential environmental impacts resulting from the carrying out of the environmentally relevant activity/activities at the following sites:

ERA Site	Address
Mount Cotton Road Licensed Place	Mount Cotton Road, Cornubia
Browns Plains Road Licensed Place	Browns Plains Road, Heritage Park

- (A6) The conduct of environmental and energy audits required by licence condition A5(iv) must be carried out as often as necessary but not less frequently than the frequency specified below:
- (i) the level of environmental performance: annually;
 - (ii) the effectiveness of environmental management procedures adopted: once every two (2) years;
 - (iii) efficiency in using energy and resources and opportunities for more efficient usage: within two (2) years of the granting of this environmental authority and then not less than once every five (5) years.
- (A7) The holder of this environmental authority must prepare a report summarising the outcomes of the environmental and energy audits required by licence condition number A5(iv) and submit the report with the annual return that follows the conduct of the audits.
- (A8) An up to date copy of the Integrated Environmental Management System must be kept at the Logan City Council Administration Centre and, where practicable to do so, at the licensed place at which the activities are carried out so as to be readily accessible to personnel that are carrying out the environmentally relevant activity, and be available for examination by an authorised person on request.
- (A9) The holder of this environmental authority must submit details of any amendment to the Integrated Environmental Management System annually to the administering authority with the annual return which immediately follows the making any such amendment.

Rehabilitation

- (A10) The holder of this environmental authority must rehabilitate the licensed place in a manner such that:
- (i) suitable native species of vegetation are planted and established;
 - (ii) potential for erosion of the site is minimised;
 - (iii) the quality of stormwater released from the site is such that releases of suspended solids, turbidity and total dissolved salts are not likely to cause environmental harm;
 - (iv) the likelihood of environmental nuisance being caused by release of dust is minimised; and
 - (v) the final landform is stable and not subject to slumping.
- (A11) Rehabilitation of disturbed areas must take place progressively as works are staged and new areas of waste disposal and/or extraction are commenced within the licensed place, with revegetation of filled areas carried out as soon as reasonably practicable upon the completion of the final cover system.
- (A12) Access to areas awaiting or being rehabilitated must be restricted by suitable barriers to prevent disturbance of these areas.

END OF CONDITIONS FOR PART 1 - SCHEDULE A

PART 1 - SCHEDULE B - AIR

Noxious or Offensive Odour

- (B1) Notwithstanding any other condition of this environmental authority no release of contaminants from the licensed place is to cause a noxious or offensive odour beyond the boundaries of the licensed place at any odour sensitive place.

Management of Landfill Gas

- (B2) The release of landfill gas from the facility must be such that the concentration of landfill gas must not exceed:
- (i) 25 percent of the lower explosive limit for methane when measured in facility structures (but excluding facility structures used for landfill gas control and landfill gas recovery system components); and
 - (ii) the lower explosive limit for methane at the landfill facility boundary.

Dust and Particulate Emissions

- (B3) The following materials must not be used for dust suppression purposes:
- (i) leachate; and
 - (ii) stormwater that has become contaminated following contact with waste.
- (B4) The holder of this environmental authority must undertake all reasonable and practicable measures to minimise wind-borne and traffic generated dust and particulate emissions to the atmosphere from the licensed place. Such measures may include, but not necessarily be limited to:
- (i) minimising the area of land disturbed at any one (1) time;
 - (ii) use of dust suppressants such as water or proprietary chemical products adjusted to account for variations in evaporation rates and soil moisture conditions such that dust emissions are suppressed to the greatest practicable extent;
 - (iii) revegetation of disturbed areas;
 - (iv) handling dusty waste and earthen materials in calm weather conditions; and
 - (v) maintaining wind breaks.
 - (vi) for stockpiles, use of water sprays as required during winds likely to generate such release, use of dust-suppressant and shielding; and storage of stockpiled materials in storage in bunkers.
 - (vii) for trafficable areas, keeping surfaces clean, using of water sprays, adopting and adhering to speed limits and using dust suppressants and wind breaks.

The reasonable and practicable measures adopted for the licensed place must be incorporated into the relevant procedure(s) implemented under the integrated environmental management system.

- (B5) There must be no release of dust and/or particulate matter:
- (i) that causes dust deposition, monitored in accordance with Australian Standard AS 3580.10.1 of 1991, to exceed 130 milligrams per square metre per day beyond the boundary of the licensed place; nor
 - (ii) that causes the concentration of particulate matter with an aerodynamic diameter less than 10 micrometre (μm) (PM_{10}) suspended in the atmosphere downwind and beyond the boundary of the licensed place to exceed 150 micrograms per cubic metre over a 24 hour averaging time, when monitored in accordance with Australian Standard AS 3580.9.6 'Ambient air - Particulate matter - Determination of suspended particulate PM_{10} .high -volume sampler with size-selective inlet - Gravimetric method' or an alternate method for PM_{10} . permitted in the "Air Quality Sampling Manual" published by the administering authority".

- (B6) Rehabilitation must be carried out in such a manner as to minimise releases of wind-blown dust and erosion.

END OF CONDITIONS FOR PART 1 - SCHEDULE B

Part 1- Schedule C - Water

- (C1) Contaminants must not be directly or indirectly released from the licensed place to any waters or the bed and banks of any waters except:
- (i) as permitted under a water schedule of this environmental authority; or
 - (ii) as permitted under a stormwater management schedule of this environmental authority; or
 - (iii) to a sewer as permitted or otherwise agreed from time to time by the relevant Local Government.

Leachate Collection and Disposal

- (C2) A leachate collection system must be installed and maintained to effectively and efficiently:
- (i) collect leachate generated in the landfill unit;
 - (ii) convey the collected leachate to an appropriate leachate storage facility; and
 - (iii) minimise the height of the leachate above the liner system.

Prohibition on Releasing Leachate

- (C3) Leachate and stormwater runoff which has been in contact with waste materials in the landfill unit must only be collected in leachate storage facility and be re-circulated through waste disposed in the landfill unit or released to sewer in accordance with the requirements of the relevant Local Government. Such leachate and stormwater runoff must not be released to any sedimentation pond or any other element of the sediment control system that releases contaminants to such waters.

END OF CONDITIONS FOR PART 1 - SCHEDULE C

Part 1 - Schedule D - Stormwater management

Contaminant Releases Caused by Rainfall

- (D1) Except as otherwise provided by the conditions of the stormwater management schedule and the water schedule of this environmental authority, the environmentally relevant activity must be carried out by such reasonable and practicable means necessary to prevent and/or minimise the release or likelihood of release of contaminated runoff from the licensed place to any stormwater drain or waters or the bed or banks of any such waters. "Contaminated runoff" for the purposes of this condition means stormwater and/or stormwater runoff that contains contaminants that may cause environmental harm.

Erosion Protection Measures and Sediment Controls

- (D2) Erosion protection measures and sediment controls must be provided and maintained to effectively minimise any likelihood of erosion and release of sediments from the licensed place and be maintained during site clearing, construction and rehabilitation. Such measures may include but necessarily be limited to:
- (i) diversion drainage works to divert uncontaminated stormwater runoff away from disturbed areas;
 - (ii) sedimentation traps;
 - (iii) diversion drainage works installed to ensure surface waters from disturbed areas, including operational and any uncovered trafficable areas, are diverted to the sediment control system;
 - (iv) designing drainage to minimise surface flow velocities.
- (D3) Erosion protection measures and the sediment control structures must be installed before any construction, site disturbance and/or rehabilitation take place.
- (D4) Erosion control and sediment control structures must be maintained at all times during the periods of the environmentally relevant activities are carried out and during rehabilitation. Procedures must be implemented to check and, if necessary, repair or replace the erosion control and sediment control structures after each rain event likely to adversely affect the efficiency of those structures.

Minimisation of leachate generation

- (D5) A system of diversion drains and or embankments must be constructed and maintained to divert surface waters away from any area of the licensed place where contact with waste may occur, excluding any unprocessed green waste that is not likely contaminate such surface waters.

Sediment Control System

- (D6) A sediment control system must be installed and maintained to collect and treat stormwater runoff from those parts of the licensed place from which stormwater runoff is likely to be contaminated by sediment, for example, disturbed areas and areas in which any earthen material is stored.

The sediment control system:

- (i) may include but not necessarily be limited to waste prevention measures such as minimising, re-vegetating or mulching disturbed areas and control and treatment measures such as sediment traps, sedimentation ponds, silt fences, and hay bale barriers; and
 - (ii) must provide for any release of treated stormwater runoff from the sediment control system to any surface waters to be via a drain or overflow structure that is accessible for monitoring purposes and identified on a plan submitted to the administering authority.
- (D7) Excepting any release of contaminants to sewer in accordance with the requirements of the relevant Local Government, release of contaminants from any sedimentation pond to waters must only occur as a result of rainfall at the licensed place. The contents of the sedimentation pond must not be pumped or otherwise siphoned or drained into any waters.
- (D8) All ponds used for the storage or treatment of contaminants or wastes must be installed and maintained to prevent any release of the stored contaminants or wastes through the bed or banks of the pond(s) such that the likelihood of environmental harm being caused to any waters (including groundwater) is minimised.
- (D9) All ponds used for the storage or treatment of contaminants or wastes must be installed and maintained so that a freeboard of not less than 0.5 metre is maintained at all times except in emergencies or adverse weather conditions. The sedimentation pond must be constructed and maintained to ensure that the relevant release limits are complied with.

Bunding

- (D10) All underground waste storage tanks must be fitted with cathodic protection.
- (D11) The available capacity of the underground waste storage tank(s) must be checked prior to placement of waste in the tank(s), for example by measurement with a dip stick at the commencement of the days operations to record available capacity of the tank(s) for that day, so as to ensure that sufficient capacity is available in the tank(s) to accept the volume of waste placed in the tank(s).
- (D12) All chemical tank storages (including any liquid waste tank storages) must be bunded so as to effectively contain a volume equivalent to at least that of 100% of the largest storage tank plus 10% of the second largest tank within the bund.
- (D13) All chemical drum storages, fuel drum storages and waste drum storages must be bunded so that the capacity of the bund is sufficient to contain at least 25% of the maximum design drum storage volume within the bund.
- (D14) All bunding must be constructed of materials which are impervious to the materials contained.
- (D15) All bunding must be roofed where practicable.
- (D16) Where it is impractical to completely roof a bunded area the holder of this environmental authority must ensure that any stormwater captured within the bund is free from contaminants or wastes prior to any release.
- (D17) All pipework required from the bunded areas must be directed over the bund wall and not through it.
- (D18) All empty drums (excepting empty drums disposed of in the landfill unit) must be stored with their closures in place on a concrete hardstand area or on an alternate surface impervious to the materials originally contained in the drums stored.
- (D19) Any spillage of wastes, contaminants or other materials must be cleaned up as quickly as practicable. Unless authorised by an emergency direction under section 157 of the Environmental Protection Act 1994, such spillage must not be cleaned up by hosing, sweeping or otherwise releasing such wastes, contaminants or material to any stormwater drainage system, roadside gutter or waters.

END OF CONDITIONS FOR PART 1 - SCHEDULE D

Part 1 - Schedule F - Noise

Release of Noise

- (F1) The environmentally relevant activity must be carried out by such reasonable and practicable means necessary to prevent the emission or likelihood of emission of noise that constitutes an unreasonable intrusive noise. The reasonable and practicable measures adopted for the licensed place must be incorporated into the relevant procedure(s) implemented under the integrated environmental management system.
- (F2) In the event of a complaint about noise that constitutes an unreasonable intrusive noise being made to the administering authority, that the administering authority considers is not frivolous or vexatious, then the emission of noise from the licensed place must not result in levels greater than those specified in Table 1 of the Noise Schedule.

TABLE 1

NOISE LIMITS AT A NOISE SENSITIVE PLACE	
Period	Noise Level at a Noise Sensitive Place Measured as the Adjusted Maximum Sound Pressure Level <i>L_{Amax, adj T}</i>
7 am - 6 p.m.	Background noise level plus 5 dB(A)
6 p.m. - 10 p.m.	Background noise level plus 5 dB(A)
10 p.m. - 7 am	Background noise level plus 3 dB(A)
NOISE LIMITS AT A COMMERCIAL PLACE	
Period	Noise Level at a Commercial Place measured as the Adjusted Maximum Sound Pressure Level <i>L_{Amax, adj T}</i>
7 am - 6 p.m.	Background noise level plus 10 dB(A)
6 p.m. - 10 p.m.	Background noise level plus 10 dB(A)
10 p.m. - 7 am	Background noise level plus 8 dB(A)

END OF CONDITIONS FOR PART 1 - SCHEDULE F

Part 1 - Schedule G - Waste management

General

- (G1) Excepting any incineration or use of landfill gas collected at the licensed place, the holder of this environmental authority must not:
- (i) allow waste to burn or be burnt at or on the licensed place; nor
 - (ii) remove waste from the licensed place and burn such waste elsewhere.
- (G2) The integrated environmental management system must cause reasonable and practicable steps to be taken to ensure recyclable waste is not deposited in the general waste stream.

Waste Disposal

- (G3) The only waste to be accepted at the landfill facility must be a waste transported to the facility by any of the following persons or classes of persons:
- (i) the holder of this environmental authority;
 - (ii) contractors acting on behalf of the holder of this environmental authority;
 - (iii) another person or class of persons specifically authorised by the holder of this environmental authority to dispose of the type of waste carried by that person.

- (G4) In the event of the holder of this environmental authority becoming aware of prohibited wastes being commingled in the waste stream the holder of this environmental authority must:
- (i) cease the depositing of such waste if depositing of such waste is occurring;
 - (ii) remove the prohibited waste and store it in a proper and efficient manner;
 - (iii) notify the person who sent the prohibited waste to the licensed place of the detection of prohibited waste in the waste received;
 - (iv) as soon as practicable arrange for a person who can lawfully transport such waste to collect such waste;
 - (v) arrange for the person transporting the prohibited waste to transport such waste to a facility that can lawfully accept such waste;
 - (vi) produce the following records:
 - (a) type of prohibited waste;
 - (b) quantity of prohibited waste;
 - (c) date of disposal;
 - (d) name and address of the person(s) transporting the prohibited waste to the facility;
 - (e) name and address of the person(s) who generated the prohibited waste (if such person(s) can be reasonably identified).

For the purpose of this condition, "prohibited waste" means a waste that, by a condition of this environmental authority, is not permitted to be accepted at that landfill facility, and, for a waste transfer station, a waste that is not permitted to be deposited in any waste container used at the waste transfer station.

- (G5) The holder of this environmental authority must use all practicable means to exclude access of birds, dogs and other pest species to that extent necessary to ensure that such birds, dogs and other pest species do not cause any:
- (i) nuisance to occupiers of neighbouring premises; or
 - (ii) any nuisance or danger to aircraft; or
 - (iii) any danger or risk to the health of any persons; or
 - (iv) environmental harm.
- (G6) Where litter is blown or washed from the facility in amounts which are not insignificant in scale or extent, the holder of this environmental authority must take all reasonable and practicable actions to retrieve the litter and ensure that it is disposed of in an appropriate manner.

Site Security

- (G7) The licensed place must be enclosed by a security fence with lockable gates provided and maintained to a standard that will prevent as far as practicable unauthorised access to the licensed place.
- (G8) The holder of this environmental authority must ensure that, at all times while the facility is open, at least one person must be present who is responsible for the control and operation of the facility and whose duties must include but are not limited to:
- (a) controlling the reception, storage and removal of waste;
 - (b) maintaining the facility at the an appropriate environmental standard;
 - (c) controlling all employees working in the facility; and
 - (d) supervising all persons entering the facility.
- (G9) The holder of this environmental authority must ensure that all access gates are locked when the licensed activity is unattended.

Signage

- (G10) The holder of this environmental authority must prominently display at the licensed place appropriate signs specifying:
- (i) that unlawful entry and unauthorised scavenging is prohibited;
 - (ii) the appropriate locations at which specified waste may be deposited and any requirements as to the deposition of such waste;
 - (iii) the waste that is permitted to be deposited at the facility and advising that other waste must not be deposited at the facility; and
 - (iv) that lighting of fires is prohibited.

Fire Prevention

- (G11) Clear access for fire fighting vehicles to a water supply such as the sedimentation dam or any reticulated supply must be provided at all times.
- (G12) An effective fire break must be provided and maintained. The fire break must comply with any requirements of the Regional Fire Commander.

Public Health Issues

- (G13) The holder of this environmental authority must:
- (a) install and operate all works and control equipment, and
 - (b) take all measures, perform all acts and do all things,
- necessary to ensure that the carrying out of the environmentally relevant activity does not cause any adverse effect on public health or any nuisance, particularly in relation to propagation of diseases, fly breeding, mosquito breeding, and harbourage and/or breeding of rats and other pest organisms and/or vectors.
- (G14) In the event of any adverse effect upon public health and/or any nuisance arising from the conduct of the environmentally relevant activity, the holder of the environmental authority must do all such acts and things and carry out any such works as may be necessary to:
- (i) abate such adverse effects and such nuisance; and
 - (ii) prevent the likelihood of any recurrence of the circumstances which gave rise to such adverse effects and/or such nuisance.

Closure and Post-Closure Care

- (G15) When the deposition of waste to the landfill unit ceases, the holder of this environmental authority must install a final cover system to the landfill unit that effectively minimises:
- (i) infiltration of water into the landfill unit; and
 - (ii) the likelihood of any erosion occurring to either the final cover system or the landfilled materials.
- (G16) The final cover system (excluding any cover system that sealed the landfill unit with bitumen or concrete) covered by must include at least:
- (i) at the Mount Cotton Road waste disposal facility, a 600 mm layer of material of sufficiently low permeability to minimise infiltration; and
 - (ii) at the Browns Plains Road waste disposal facility, a 900 mm layer of material of sufficiently low permeability to minimise infiltration; and
 - (iii) an upper layer of earthen material that is capable of sustaining native plant growth.

- (G17) The final cover system must be terraced and/or graded to a sufficiently gradual slope and re-vegetated as soon as practicable with suitable species so as to prevent erosion from this source.
- (G18) The final cover system must be graded to such an extent that water does not pond on the final cover system.
- (G19) For the purposes of preventing and/or minimising the likelihood of environmental harm being caused as a result of deposition of waste in the facility, the holder of this environmental authority must, following cessation of deposition of waste in the landfill unit, conduct post closure care of the landfill unit for:
- (i) a period of 30 years; or
 - (ii) such shorter period until it is demonstrated to the administering authority in a competent manner using factually correct information that the landfill unit and surrounding site are geotechnically stable and that no release of waste materials, leachate, landfill gas or other contaminants to the environment is likely.
- (G20) The program of post closure care implemented must be effective in preventing and/or minimising the likelihood of environmental harm being caused or allowed. The program must include measures to:
- (i) maintain the structural integrity and effectiveness of the final cover system;
 - (ii) maintain and operate the leachate collection system;
 - (iii) maintain the groundwater monitoring system and monitor quality of groundwater at a frequency sufficient to detect any release of contaminants to groundwater;
 - (iv) maintain and operate the landfill gas monitoring system; and
 - (v) maintain and operate any landfill gas collection system installed.
- (G21) The holder of this environmental authority must develop and provide to the administering authority a landfill unit rehabilitation plan at least 12 months before the expected final disposal of wastes in the landfill unit. The rehabilitation plan must detail the actions the holder of this environmental authority intends to take to implement the requirements of this environmental authority in respect of the final cover system and the program of post-closure care.
- (G22) The holder of this environmental authority must have due regard to any comments made by the administering authority on the landfill rehabilitation plan.
- (G23) The holder of this environmental authority must begin closure activities of the landfill unit no later than 28 days after the date on which the landfill unit receives the known final receipt of wastes.

Off Site Movement

- (G24) Where regulated waste is removed from the licensed place (other than by a release as permitted under another schedule of this environmental authority), the holder of this environmental authority must monitor and record the following:
- (a) the date, quantity and type of waste removed; and
 - (b) name of the waste transporter and/or disposal operator that removed the waste; and
 - (c) the intended treatment/disposal destination of the waste.

Regulated Waste Receival and Storage

- (G25) The only regulated waste to be received and stored at the licensed place is regulated waste listed below subject to the conditions of this environmental authority:
- (i) oils;
 - (ii) batteries;
 - (iii) tyres; and
 - (iv) vegetable oils.

- (G26) Batteries must be stored under cover on spill trays impervious to and resistant to corrosion by materials held within the batteries.
- (G27) Tyres must be stored under cover in a manner that minimises risk of fire and spread of any fire.

END OF CONDITIONS FOR PART 1 - SCHEDULE G

Part 1 - Schedule H - Monitoring and reporting

Complaint Recording

- (H1) All complaints received by the holder of this environmental authority relating to carrying out of the environmentally relevant activities at the licensed place must be recorded and kept with the following details:
- (i) time, date and nature of complaint;
 - (ii) type of communication (telephone, letter, personal etc.);
 - (iii) name, contact address and contact telephone number of complainant (Note: if the complainant does not wish to be identified then "Not identified" is to be recorded);
 - (iv) response and investigation undertaken as a result of the complaint (Note: if the complaint is considered frivolous or vexatious, the reasons for considering the complaint frivolous or vexatious must be recorded);
 - (v) name of person responsible for investigating complaint; and
 - (vi) action taken as a result of the complaint investigation and signature of responsible person.
 - (vii) if the complaint is about dust and/or odour, on-site meteorological data relevant to the time from a representative site including wind speed and direction, temperature, barometric pressure, daily rainfall and relative humidity.

Incident Recording

- (H2) A record must be maintained of events including but not limited to:
- (i) any fire at the licensed place;
 - (ii) any known release of leachate or stormwater runoff which has been in contact with any wastes and contaminants not likely to be in accordance with the conditions of this environmental authority to the receiving waters;
 - (iii) detection by the environmental monitoring program of any release of contaminants not likely to be in accordance with the conditions of this environmental authority; and
 - (iv) incidents which have adverse public health consequences and/or cause nuisance including time, date, duration and nature of the incident.

Exception Reporting

- (H3) The holder of this environmental authority must notify the administering authority in writing of any monitoring result which indicates an exceedance of any licence limit within 28 days of completion of analysis.
- (H4) The written notification required by condition number H3 above must include:
- (i) the full analysis results, and
 - (ii) details of investigation or corrective actions taken, and
 - (iii) any subsequent analysis.

(NOTE: Any relevant notification given under section 320 or section 350 of the Act that contains the information specified in condition H4 is also notification under condition H3.)

Notification of Emergencies and Incidents

- (H5) As soon as practicable after becoming aware of any emergency or incident that results in the release of contaminants not in accordance, or reasonably expected to be not in accordance with the conditions of this environmental authority, the holder of this environmental authority must notify the administering authority of the release by telephone or facsimile.
- (H6) The notification of emergencies or incidents as required by condition H5 must include but not be limited to the following:
- (i) the name (or identification) of the holder of the environmental authority;
 - (ii) the location of the emergency or incident;
 - (iii) the number of the environmental authority;
 - (iv) the name and telephone number of the designated contact person;
 - (v) the time of the release;
 - (vi) the time the holder of the environmental authority became aware of the release;
 - (vii) the suspected cause of the release;
 - (viii) the environmental harm and or environmental nuisance caused, threatened, or suspected to be caused by the release; and
 - (ix) actions taken to prevent any further release and mitigate any environmental harm caused by the release.

(NOTE: Any relevant notification given under section 320 or section 350 of the Act that contains the information specified in condition H6 is also notification under condition H5.)

- (H7) Not more than 14 days following the initial notification of an emergency or incident, the holder of the environmental authority must provide written advice of the information supplied in accordance with condition H6 in addition to:
- (i) proposed actions to prevent a recurrence of the emergency or incident;
 - (ii) outcomes of actions taken at the time to prevent or minimise environmental harm; and
 - (iii) the results of any environmental monitoring performed.

Noise Monitoring

- (H8) For the purposes of checking compliance with condition number F2 of the noise schedule, monitoring and recording the noise levels from the environmentally relevant activity must be undertaken for at least the following descriptors, characteristics and conditions:
- (i) $L_{Amax, adj T}$;
 - (ii) $L_{A90, T}$ (or $L_{A90, T}$);
 - (iii) $L_{AN, T}$ (where N equals statistical levels of 1, 10, 50, 90 and 99);
 - (iv) the level and frequency of occurrence of impulsive or tonal noise;
 - (v) atmospheric conditions including temperature, relative humidity and wind speed and direction; and
 - (vi) effects due to extraneous factors such as traffic noise.
- (H9) In conjunction with the measurement and recording of the noise, the following parameters and conditions must be recorded:
- (a) location of sampling point(s);
 - (b) date sample(s) taken; and
 - (c) time sample(s) taken.

- (H10) In the event of a complaint about noise that constitutes an unreasonable intrusive noise being made to the administering authority that the administering authority considers is not frivolous or vexatious, the holder of this environmental authority must undertake monitoring to investigate such a complaint upon written request from the administering authority.
- (H11) The method of measurement and reporting of noise levels must comply with the Department of Environment and Heritage Noise Measurement Manual, second edition, March 1995, or more recent additions or supplements to that document as become available.
- (H12) All measurement and reporting of noise levels must be performed by a person of body possessing appropriate experience and qualifications to perform the required measurements.

Monitoring of Contaminant Releases to Waters

- (H13) All determinations of the quality of contaminants must be performed by a person or body possessing appropriate experience and qualifications to perform the required determinations.
- (H14) All determinations of the quality of contaminants released to waters must be made in accordance with methods prescribed in the Department of Environment and Heritage Water Quality Sampling Manual, 2nd Edition, February 1995, or more recent additions or supplements to that document as such become available.

Groundwater Monitoring

- (H15) A groundwater monitoring system must be installed for the landfill unit. The system must include a sufficient number of wells installed at locations and depths which yield representative groundwater samples from the uppermost aquifer and that establish:
- (i) background groundwater quality in hydraulically up-gradient or background well(s) that have not been affected by any potential leakage of contaminants to groundwater from the licensed place; and
 - (ii) quality of groundwater down-gradient of any potential leakage of contaminants to groundwater from the licensed place including groundwater passing the relevant point(s) of compliance referred to in condition H18.
- (H16) The groundwater monitoring system must be developed by a person possessing appropriate qualifications and experience in the fields of hydrogeology and groundwater monitoring program design to be able to competently make recommendations about these matters.
- (H17) Locations referred to in condition H15 for groundwater monitoring facilities must be given with reference to horizontal coordinates of such facilities accurate to 1.0 metre.
- (H18) The point(s) of compliance for the groundwater monitoring system must be situated not more than 150 metres from the landfill unit or the boundary of the landfill facility whichever is the closest.
- (H19) The holder of this environmental authority must monitor and record quality of groundwater to detect any possible release(s) of contaminants in accordance with the Detection Groundwater Monitoring Program. The Detection Groundwater Monitoring Program must be undertaken for, at least, the following water quality characteristics:
- (1) Ammonia (as N)
 - (2) Bicarbonate (HCO_3)
 - (3) Calcium
 - (4) Chloride
 - (5) Iron (total)
 - (6) Manganese (dissolved)
 - (7) Nitrate (as N)

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- (8) pH (field measured)
- (9) Potassium
- (10) Sodium
- (11) Sulphate
- (12) Specific Conductance
- (13) Total Organic Carbon (TOC)
- (14) Zinc.

- (H20) The holder of this environmental authority must determine whether or not there has been any statistically significant increase over background values at locations hydraulically down-gradient of the landfill unit for any water quality characteristic required to be monitored under the Detection Groundwater Monitoring Program referred to in condition H19.
- (H21) The holder of this environmental authority must monitor and record groundwater quality and groundwater levels as often as is necessary but not less frequently than every three (3) months.
- (H22) On any occasion that samples are obtained in accordance with condition H19, the holder of this environmental authority must measure and record standing groundwater levels in metres, accurate to 0.01 metre. The elevation of the reference point, relative to Australian Height Datum, for use in any groundwater level measurement must be determined to an accuracy of 0.005 metre.
- (H23) Measurement of groundwater levels must be undertaken prior to any disturbance by sampling, and must be reported as the depth in metres from the established reference point to the water surface within the bore.
- (H24) All determinations of the quality of groundwater must be performed by a person or body possessing appropriate experience and qualifications to perform the required determinations.
- (H25) All determinations of the quality of groundwater must be made in accordance with methods prescribed in the Department of Environment and Heritage Water Quality Sampling Manual, 2nd Edition, February 1995, or more recent editions or supplements to that document as such become available.
- (H26) Any monitoring facility must be maintained in an operative condition and be reasonably accessible at all times to any authorised person.
- (H27) Each groundwater monitoring bore must be fitted with a locked cap at all times other than at the time of sampling.

Receiving Surface Water Monitoring

- (H28) The holder of this environmental authority must monitor and record quality of surface water at monitoring positions upstream and downstream of the landfill facility to detect any potential release(s) of contaminants to receiving surface waters in accordance with the Receiving Surface Water Monitoring Program. The Receiving Surface Water Monitoring Program must be undertaken for, at least, the following water quality characteristics:

- (1) Ammonia (as N)
- (2) Bicarbonate (HCO_3)
- (3) Calcium
- (4) Chloride
- (5) Iron (total)
- (6) Manganese (dissolved)
- (7) Nitrate (as N)
- (8) pH (field measured)
- (9) Phosphorus (total)
- (10) Potassium
- (11) Sodium

- (12) Specific Conductance
- (13) Sulphate
- (14) Suspended Solids
- (15) Total Organic Carbon (TOC)
- (16) Zinc.

- (H29) The holder of this environmental authority must monitor and record receiving surface water quality, as often as is necessary, but not less frequently than once every three (3) months in the event that there is water present in the receiving surface waters.
- (H30) All determinations of the quality of the receiving surface waters must be performed by a person or body possessing appropriate experience and qualifications to perform the required determinations.
- (H31) All determinations of the quality of receiving surface waters must be made in accordance with methods prescribed in the Department of Environment and Heritage Water Quality Sampling Manual, 2nd Edition, February 1995, or more recent editions or supplements to that document as such become available.

Landfill Gas Monitoring

- (H32) The holder of the environmental authority must develop and implement a landfill gas monitoring program to ensure that the landfill facility complies with methane standards referred to in condition B2.
- (H33) Determination of all the methane gas levels must be performed as often as necessary to ensure protection of human health, having regard to:
- (i) the likely landfill gas generation rate;
 - (ii) any previous levels of methane gas detected by the monitoring program;
 - (iii) proximity of the landfill facility to any premises or persons likely to be adversely affected by landfill gas; and
 - (iv) the effectiveness of measures implemented to minimise any lateral migration of landfill gas.
- (H34) All determinations of the methane gas levels must be performed by a person or body possessing appropriate qualifications to perform the required determinations.
- (H35) If methane gas levels exceeding methane standards referred to in condition B2 are detected, the holder of the environmental authority must immediately take all necessary steps to ensure protection of human health.

Environmental Monitoring Program/Record Keeping and Report Submission

- (H36) In developing and implementing the integrated environmental management system required by this environmental authority, the holder of this environmental authority must develop and implement an effective environmental monitoring program as required by this environmental authority for monitoring of contaminant releases to waters, groundwater monitoring, receiving surface water monitoring and landfill gas monitoring.
- (H37) The environmental monitoring program required by condition H36 must address at least:
- (i) the type and location of all environmental monitoring facilities;
 - (ii) monitoring frequencies;
 - (iii) sampling and monitoring procedures;
 - (iv) a clear and understandable explanation of the methodology to be used in the assessment of the monitoring results (including statistical tests to be used in the interpretation of data collected in the groundwater quality monitoring program); and

- (v) the proposed responses in the event of detection by the environmental monitoring program of any release of contaminants not likely to be in accordance with the conditions of this environmental authority.
- (H38) Records must be kept of the results of the environmental monitoring and other information required to be recorded in conjunction with such monitoring for a period of at least five (5) years. Records of baseline monitoring for the landfill unit must be kept over the life of the landfill unit and during the post closure care period.

Annual Return

- (H39) The holder of this environmental authority must ensure that the results of all monitoring performed in accordance with this environmental authority for the period covered by the return are submitted with the annual return.
- (H40) The holder of this environmental authority must submit with each annual return for the period covered by the return a report of the results of the Receiving Environment Monitoring Program including an assessment of the impact of the carrying out of the activities upon the receiving environment. The assessment must address whether environmental values are being protected with reference relevant standards such as water quality data, background sampling data and any other monitoring data obtained and state the basis on which the conclusions are drawn.

END OF CONDITIONS FOR PART 1 - SCHEDULE H

Part 1 - Schedule I - Definitions

For the purposes of this environmental authority the following definitions apply:

- (11) "Act" means the Environmental Protection Act 1994.
- (12) "administering authority" means the Environmental Protection Agency or its successor.
- (13) "authorised person" means a person holding office as an authorised person under an appointment under the Environmental Protection Act 1994 by the chief executive.
- (14) "mg/L" means milligrams per litre.
- (15) "µS/cm" means microsiemens per centimetre.
- (16) "maximum" means that the measured value of the quality characteristic or contaminant must not be greater than the release limit stated.
- (17) "minimum" means that the measured value of the quality characteristic or contaminant must not be less than the release limit stated.
- (18) "range" means that the measured value of the quality characteristic or contaminant must not be greater than the higher release limit stated nor less than the lower release limit stated.
- (19) "intrusive noise" means noise that, because of its frequency, duration, level, tonal characteristics, impulsiveness or vibration -
 - (a) is clearly audible to, or can be felt by, an individual; and
 - (b) annoys the individual.

In determining whether a noise annoys an individual and is unreasonably intrusive, regard must be had to Australian Standard 1055.2 - 1997 Acoustics - Description and Measurement of Environmental Noise Part 2 Application to Specific Situations or supplements to that document as they become available.

(110) " $L_{Amax, T}$ " means the average maximum A-weighted sound pressure level, adjusted for noise character and measured over a time period of not less than 15 minutes, using Fast response.

(111) "background noise level" means either:

$L_{A90, T}$ being the A-weighted sound pressure level exceeded for 90 percent of the time period not less than 15 minutes, using Fast response, or

$L_{Avg, T}$ being the arithmetic average of the minimum readings measured in the absence of the noise under investigation during a representative time period of not less than 15 minutes, using Fast response.

(112) "commercial place" means a place used as an office or for business or commercial purposes.

(113) "noise sensitive place" means -

- (i) a dwelling, mobile home or caravan park, residential marina or other residential premises; or
- (ii) a motel, hotel or hostel; or
- (iii) a kindergarten, school, university or other educational institution; or
- (iv) a medical centre or hospital; or
- (v) a protected area; or
- (vi) a park or gardens.

(114) "protected area" means -

- (a) a protected area under the Nature Conservation Act 1992; or
- (b) a marine park under the Marine Parks Act 1992; or
- (c) a World Heritage Area.

(115) "noxious" means harmful or injurious to health or physical well-being.

(116) "offensive" means causing unreasonable offense; is unreasonably disagreeable to the sense; is disgusting, nauseous or repulsive.

(117) "odour sensitive place" means -

- (a) a dwelling, mobile home or caravan park, residential marina or other residential premises; or
- (b) a motel, hotel or hostel; or
- (c) a kindergarten, school, university or other educational institution; or
- (d) a medical centre or hospital; or
- (e) a protected area; or
- (f) a public park or gardens; or
- (g) a place used as an office or for business or commercial purposes.

and includes a place within the curtilage of such a place reasonably used by persons at that place.

(118) "geotechnical stability of a landfill unit" means a situation where instability related to the excessive settlement and subsidence caused by decomposition and consolidation of the wastes deposited in the landfill unit, and sliding instability of the unit slope has ceased.

(119) "groundwater monitoring system" means a system of groundwater monitoring devices, such as monitoring bores, used to provide data in respect to the level and quality of groundwater in the uppermost aquifer where the location of the groundwater monitoring devices is such that comparisons

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of groundwater quality and groundwater level can be made between groundwater flowing from beneath the site (down-gradient flow) of the activity and groundwater flowing towards the site of the activity (up-gradient flow).

- (I20) "regulated waste" means non-domestic waste mentioned in schedule 7 of the Environmental Protection Regulation 1998 (whether or not it been treated or immobilised), and includes-
- (i) for an element - any chemical containing the element; and
 - (ii) anything that has contained a regulated waste; and
 - (iii) regulated waste that has been treated or immobilised.
- (I21) "landfill unit" means a discrete area of land or an excavation that receives solid waste.
- (I22) "landfill facility" means all contiguous land and structures, other appurtenances, and improvements on the land used for the disposal of solid waste.
- (I23) "leachate" means a liquid that has passed through or emerged from, or is likely to have passed through or emerged from, a material stored, processed or disposed of at the licensed place which contains soluble, suspended or miscible contaminants likely to have been derived from the said material.
- (I24) "lower explosive limit" means the lowest percent by volume of a mixture of explosive gases in air that will propagate a flame at 25°C and atmospheric pressure.
- (I25) "public health problem" means an adverse effect or likely adverse effect on the health of any person(s) which results from the carrying out of the environmentally relevant activity and includes transmission of disease(s), and breeding and/or harbourage of flies, mosquitoes, rodents and other pests.
- (I26) "putrescible waste" means waste food or waste animal matter (including dead animals and animal parts), and includes any mixtures of such wastes.
- (I27) "special burial of waste" means a disposal method where earth moving equipment pushes the wastes to the bottom of the working face or into an excavated hole, and immediately covers it with earth or other waste material.
- (I28) "uppermost aquifer" means the geologic formation nearest to the natural ground surface that is an aquifer. The term includes any aquifers that are likely to be hydraulically interconnected with this aquifer within the landfill facility property boundary.
- (I29) "contractors" means contractors engaged by the holder of this environmental authority to carry out an environmentally relevant activity or activities authorised to be carried out by this environmental authority.
- (I30) "baseline monitoring" means environmental monitoring carried out before carrying out environmentally relevant activity or a stage of an environmentally relevant activity, for example groundwater monitoring representative of environmental condition prior to use of a landfill unit.
- (I31) "bund" and "bundling" includes a spill containment tray or similar containment structure.
- (I32) "receiving surface waters" means:
- (i) for the licensed place at Mount Cotton Road, Cornubia: the drain that flows from the licensed place to Native Dog Creek; and
 - (ii) for the licensed place at Browns Plains Road, Heritage Park: Scrubby Creek.
- (I33) "Sedimentation pond" means a void or depression in the ground that receives stormwater runoff from those parts of the licensed place from which stormwater runoff is likely to be contaminated by sediment.

END OF CONDITIONS FOR PART 1 - SCHEDULE I

PART 2: Additional site specific conditions for the licensed place at 1801 - 1927 Mount Cotton Road, Cornubia

The conditions set out in the schedules in Part 3 are in addition to those set out in Part 1 and apply to the carrying out of environmentally relevant activities at the licensed place at 1801 - 1927 Mount Cotton Road, Cornubia. Part 2 contains the following schedules:

Schedule C - Water
Schedule H - Monitoring and Reporting

Part 2 - Schedule C - Water

Description of Release: Mount Cotton Road Licensed Place

- (C1) The only contaminants permitted to be released from the licensed place at the release point W1 are settled/treated stormwater runoff waters from those areas of the licensed place that drain to the sediment control system, including any sedimentation pond.

Release Points: Mount Cotton Road Licensed Place

- (C2) Contaminants must not be directly or indirectly released from any source on the licensed place to any waters at any location other than the contaminants and sources at the locations listed below:

Release point W1 - settled/treated stormwater runoff waters via the discharge structure, being either the drain from or overflow spillway of the final element of sediment control system that collects drainage and stormwater runoff contaminated by sediment at the licensed place, to waters described as drain that flows to Native Dog Creek.

Quality Characteristics Of Release to Waters: Mount Cotton Road Licensed Place

- (C3) The release of contaminants to waters must comply, at the sampling and in situ monitoring point(s) specified in Part 2 - Schedule H, with each of the limits specified in Part 2 -Schedule C Table 1 for each quality characteristic.

PART 2 - SCHEDULE C TABLE 1 - RELEASE QUALITY CHARACTERISTIC LIMITS

QUALITY CHARACTERISTICS	RELEASE POINT NUMBER	RELEASE LIMIT	LIMIT TYPE
pH. (pH Units)	W1	6.5 - 9.0	Range
Specific Conductance. (µS/cm)	W1	1500	Maximum
Dissolved Oxygen. (mg/L)	W1	4.0	Minimum
Suspended Solids (mg/L)	W1	50	Maximum

- (C4) Notwithstanding the requirements specified in condition number C3, any release of contaminants to waters must comply with the following qualitative characteristics:
- (i) the release must not produce any slick or other visible evidence of oil or grease, nor contain visible floating oil, grease, scum, litter or other objectionable matter.
- (C5) In addition to the requirements specified in condition number C3, the holder of this environmental authority must take all reasonable and practicable measures to ensure that the release does not have any other properties nor contain any organisms or other contaminants in concentrations that are capable of causing environmental harm.

END OF CONDITIONS FOR PART 2 - SCHEDULE C

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Part 2 - Schedule H - Monitoring and reporting

Monitoring of Contaminant Releases to Waters

- (H1) The holder of this environmental authority is responsible for the making of determinations and keeping of records of the quality of the contaminants released for the release points, quality characteristics, and at the frequency specified in Part 2 - Schedule H - Table 1.

Part 2 - Schedule H - Table 1

QUALITY CHARACTERISTIC DETERMINATION	RELEASE POINTS AND RECEIVING WATER REFERENCE POINTS	FREQUENCY
Suspended Solids.	Release point W1	At least once per quarter in the event of a release. If no release occurs in the quarterly period, no sampling is required.
pH.	Release point W1	At least once per quarter in the event of a release. If no release occurs in the quarterly period, no sampling is required.
Specific Conductance.	Release point W1	At least once per quarter in the event of a release. If no release occurs in the quarterly period, no sampling is required.
Dissolved Oxygen.	Release point W1	At least once per quarter in the event of a release. If no release occurs in the quarterly period, no sampling is required.

Sampling and In Situ Monitoring Point Details

- (H2) Determinations of the quality of contaminants released to waters to check conformity with the release quality characteristics specified in the Water Schedule of Part 2 of this environmental authority must be undertaken at the sampling and in situ monitoring point described as:

MW1 - for release point W1, a point in the discharge from the discharge structure, being either the drain from or overflow spillway of, the final element of sediment control system of release point W1 to a drain that flows to Native Dog Creek.

END OF CONDITIONS FOR PART 2 - SCHEDULE H

PART 3: Additional site specific conditions for the licensed place at 339 - 355 Browns Plains Road, Heritage Park

The conditions set out in the schedules in Part 3 are in addition to those set out in Part 1 and apply to the carrying out of environmentally relevant activities at the licensed place at 339 - 355 Browns Plains Road, Heritage Park.

Part 3 contains the following schedules:

- Schedule B - Air
- Schedule C - Water
- Schedule G - Waste Management
- Schedule H - Monitoring and Reporting

Part 3 - Schedule B - Air

Noxious or Offensive Odour

- (B1) For the purpose of securing compliance with Part 1, condition B1, the holder of this environmental authority must undertake all reasonable and practicable measures, and if necessary, best practice environmental management measures to prevent and, if not practicable to prevent, to minimise release of noxious and offensive odours. Such measures may include, but not necessarily be limited to:
- (i) minimising the area of waste exposed at any one time;
 - (ii) the frequent coverage of deposited waste with suitable cover material, with adequate quality control over the type, quality and depth of cover material;
 - (iii) the efficient compaction of deposited waste, including keeping of records of estimated compaction ratios;
 - (iv) immediate cover of particularly malodorous waste such as food, poultry and fish processing waste;
 - (v) where windows are opened in the cover material of previously deposited waste, minimising the time of exposure prior to placement of waste and scheduling opening to a time less conducive to odour dispersal;
 - (vi) scheduling arrival of waste transport vehicles so as to minimise the number of waste transport vehicles disposing of waste at one time;
 - (vii) restricting the area of exposed waste to minimum practicable;
 - (viii) use and effective application of odour suppressant agents;
 - (ix) maintenance of appropriate buffer zones between the activity and odour sensitive places;
 - (x) installing and operating landfill gas interception schemes on either a passive or active basis;
 - (xi) ensuring that likelihood of odours being released due to escape of landfill gas along preferential flow paths such as gas vents, cracks and drainage pathways is minimised by checking for and sealing those pathways;
 - (xii) repair and sealing of gas leaks in any landfill gas collection system;
 - (xiii) flaring and/or reuse of any collected landfill gas;
 - (xiv) minimising the time waste is stored prior to landfilling, for example in transfer stations;
 - (xv) contingency planning for conditions/situations with potential to cause odour problems, for example wet weather and equipment breakdown;
 - (xvi) cleaning and deodorizing of emptied garbage trucks prior to leaving the site;
 - (xvii) monitoring and recording of on-site meteorological data to determine conditions conducive to odour dispersal so as to assist appropriate scheduling of disposal activities;
 - (xviii) use of alternate cover materials to soil, including bio-reactive cover materials such as woody mulches;
 - (xix) public education campaigns that assist in reducing the amount of and degree putrescible material received, for example composting and keeping bins in cool places;
 - (xx) application of compacted clayey interim cover material to a minimum thickness of 300 mm (in addition to daily cover) over areas not subject to active waste placement for over 3 months;
 - (xxi) implementing odour control in any transfer station(s);

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- (xxii) increasing height of lifts of subcells, for example to 8 metres, so as to minimise the area of the footprint of the active subcell;
- (xxiii) use of equipment and vehicles that will not break through cover material, for example in wet weather;
- (xxiv) monitoring of complaints and correlation of complaints with meteorological data and practices carried out;
- (xxv) monitoring of odour releases to determine the effectiveness of the measures employed;
- (xxvi) keeping waste as dry as practicable, for example by avoiding moisture build up, covering and not placing waste in standing water;
- (xxvii) management of leachate fungal spore odours, for example by keeping leachate drains saturated; and
- (xxviii) waste pretreatment to render it less odour, for example application of odour suppressants and shredding.

Management of Landfill Gas

- (B2) A collection system for landfill gas must, not later than prior to closure of the landfill unit, be installed and maintained to effectively:
 - (i) minimise likelihood of any subsurface migration of landfill gas from any landfill unit; and
 - (ii) prevent any uncontrolled emission of landfill gas.
- (B3) Landfill gas collected by the gas collection system must be incinerated or reused or released into the atmosphere in a proper and efficient manner to prevent any adverse effect on people living in or using the surrounding area.

Dust and Particulate Emissions - Extractive Operations

- (B4) The holder of this environmental authority must undertake all reasonable and practicable measures to minimise wind-borne dust and particulate emissions to the atmosphere from the extractive operations. Such measures may include, but are not limited to:
 - (i) minimising disturbed areas;
 - (ii) temporary revegetation of overburden and disturbed areas;
 - (iii) handling earthen materials in calm weather conditions; and
 - (iv) maintenance of any earthen material stockpiles in moist conditions.

The reasonable and practicable measures adopted for the licensed place must be incorporated into the relevant procedure(s) implemented integrated environmental management system.
- (B5) All disturbed areas must be re-vegetated as soon as practicable on the completion of each stage of extractive operations.
- (B6) The holder of this environmental authority must take all reasonable and practicable measures necessary to prevent spillage and/or loss of particulate matter and minimise windblown dust from trucks used for transporting extracted materials from the licensed place. Reasonable and practicable measures may include but are not limited to:
 - (i) wetting down the load prior to transport;
 - (ii) having the entire load covered with a tarpaulin or similar material for the duration of transport; and
 - (iii) clearing of any spillage from side rails, tail gates and draw bars of trucks prior to departure from the licensed place and prior to departure from the premises to which the load has been delivered.

The reasonable and practicable measures adopted for the licensed place must be incorporated into the relevant procedure(s) implemented integrated environmental management system.

END OF CONDITIONS FOR PART 3 - SCHEDULE B

Part 3 - Schedule C - Water

Leachate Collection and Disposal

- (C1) With the exception of the landfill unit referred to as Browns Plains Landfill Stage 1 in the application for this environmental authority, a liner system must be installed and maintained in each landfill unit to effectively:
- (i) minimise the likelihood of any release of contaminants to groundwater; and
 - (ii) minimise likelihood of subsurface migration of landfill gas from the landfill unit.

Landfill Gas Condensate

- (C2) Landfill gas condensate must be disposed of to sewer or re-circulated through wastes disposed of in a landfill unit by a method other than spray irrigation.

Prohibition on Releasing Leachate, Landfill Gas Condensate and Groundwater

- (C3) Leachate and stormwater runoff that which has been in contact with waste materials in the landfill unit(s), landfill gas condensate and groundwater that has been collected to depressurise the liner system must not be released to any surface waters or the bed or banks of any such waters.

Description of Release: Browns Plains Road Licensed Place

- (C4) The only contaminants permitted to be released from the licensed place at the release point W2 are settled/treated stormwater runoff waters from those areas of the licensed place that drain to the sediment control system, including any sedimentation pond.

Release Points: Browns Plains Road Licensed Place

- (C5) Contaminants must not be directly or indirectly released from any source on the licensed place to any waters at any location other than the contaminants and sources at the locations listed below:

Release point W2 - settled/treated stormwater runoff waters via the discharge structure, being either the drain from or overflow spillway of ,the final element of sediment control system that collects drainage and stormwater runoff contaminated by sediment at the licensed place, to waters described as described as Scrubby Creek.

Quality Characteristics Of Release to Waters: Browns Plains Road Licensed Place

- (C6) The release of contaminants to waters must comply, at the sampling and in situ monitoring point(s) specified in Part 3 - Schedule H, with each of the limits specified in Part 3 - Schedule C Table 1 for each quality characteristic.

PART 3 - SCHEDULE C TABLE 1 - RELEASE QUALITY CHARACTERISTIC LIMITS

QUALITY CHARACTERISTICS	RELEASE POINT NUMBER	RELEASE LIMIT	LIMIT TYPE
pH. (pH Units)	W2	6.5 - 9.0	Range
Specific Conductance. (µS/cm)	W2	1500	Maximum
Dissolved Oxygen. (mg/L)	W2	4.0	Minimum
Suspended Solids (mg/L)	W2	50	Maximum

(C7) Notwithstanding the requirements specified in condition number C6, any release of contaminants to waters must comply with the following qualitative characteristics:

- (i) the release must not produce any slick or other visible evidence of oil or grease, nor contain visible floating oil, grease, scum, litter or other objectionable matter.

(C8) In addition to the requirements specified in condition number C6, the holder of this environmental authority must take all reasonable and practicable measures to ensure that the release does not have any other properties nor contain any organisms or other contaminants in concentrations that are capable of causing environmental harm.

END OF CONDITIONS FOR PART 3 - SCHEDULE C

Part 3 - Schedule G - Waste management

(G1) Regulated waste disposed of at the licensed place must be restricted to:

- (i) asbestos (all chemical forms);
- (ii) food processing waste (solid only);
- (iii) poultry processing waste (solid only);
- (iv) fish processing waste (solid only);
- (v) contaminated soils subject to that waste meeting the contaminated soil maximum contaminant levels, the allowable leaching contaminant levels and all other relevant waste acceptance criteria for lined municipal landfills as specified in the document titled "Liquid Industrial Waste Policy and Management Plans", produced by Brisbane City Council and dated November 1994; and
- (vi) shredded tyres.

(G2) Notwithstanding condition G1, minor amounts of the regulated waste not specifically permitted to be accepted may be deposited at the landfill facility provided:

- (i) the regulated waste is incidental to and commingled with the general waste stream;
- (ii) the quantity and concentration of the regulated waste (both individually and in aggregate) is insignificant;
- (iii) it is impracticable to segregate the regulated waste from other waste that is permitted to be deposited;
- (iv) if the source of the regulated waste is known, the person who deposited the regulated waste is advised that such waste must not be included in the waste stream sent to this facility and practicable steps are taken to prevent any recurrence of such deposition; and
- (v) the deposition of the regulated waste is not likely to cause any risk of fire, explosion, public health danger, nuisance, or environmental harm; and
- (vi) all practicable steps are taken to inform persons using the facility that such wastes must not be included in the waste stream sent to this facility.

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- (G3) All chemical forms of asbestos wastes must be contained within the landfill unit at a minimum distance of two (2) metres from the surface and flanks of the landfill unit, excluding any final cover system required as a condition of this environmental authority.
- (G4) The following waste must be handled and disposed of as a special burial of waste:
 - (i) asbestos all chemical forms.
- (G5) The working face of the landfill unit must be kept to the smallest size practicable and must not at any time exceed 50 metres in width.

Design and Operating Criteria - Waste Transfer Station

- (G6) The only waste to be accepted at the waste transfer station must be a waste transported to the facility by any of the following persons or classes of persons:
 - (i) the holder of this environmental authority;
 - (ii) contractors acting on behalf of the holder of this environmental authority;
 - (iii) another person or class of person specifically authorised by the holder of this environmental authority to dispose of the type of waste carried by that person.
- (G7) The holder of this environmental authority must prevent deposition of any regulated waste into any waste container used at the waste transfer station.
- (G8) Notwithstanding condition G7, minor amounts of the regulated waste may be deposited in any waste containers used at the waste transfer station provided:
 - (i) the regulated waste is incidental to and commingled with the general waste stream;
 - (ii) the quantity and concentration of the regulated waste (both individually and in aggregate) is insignificant;
 - (iii) it is impracticable to segregate the regulated waste from other waste which is permitted to be deposited;
 - (iv) if the source of the regulated waste is known, the person who disposed of the regulated waste is advised that such waste must not be included in the waste stream sent to the facility and practicable steps are taken to prevent any recurrence of such deposition; and
 - (v) the deposition of the regulated waste is not likely to cause any risk of fire, explosion, public health danger, nuisance, or environmental harm;
 - (vi) all practicable steps are taken to inform persons using the facility that such wastes must not be included in the waste stream sent to the facility; and
 - (vii) facilities are provided at the waste transfer station to appropriately contain (excluding containment in waste containers used at the waste transfer station) recyclable regulated waste such as car batteries and waste oil which may be inadvertently brought to the waste transfer station.
- (G9) The waste containers must be:
 - (i) maintained in a proper and efficient state of repair to effectively contain the deposited wastes; and
 - (ii) cleaned regularly.
- (G10) The cleaning of waste containers must be carried out in a proper and efficient manner such that all waste water resulting from such activities is collected and disposed of to sewer or re-circulated through waste disposal in the landfill unit.

- (G11) All putrescible waste that, if disposed of at a waste disposal facility under this environmental authority would be subject to special burial requirements, must not be placed or disposed in any waste containers of the waste transfer station.
- (G12) Where litter is blown or washed from the waste transfer station in amounts which are not insignificant in scale or extent, the holder of this environmental authority must take all reasonable and practicable actions to retrieve the litter and ensure that it is disposed of in an appropriate manner.

Waste Disposal

- (G13) The following waste must be handled and disposed of as a special burial of waste:
- (i) all putrescible waste (other than putrescible waste from domestic premises) where that putrescible waste comprises the total waste load;
 - (ii) waste loads containing putrescible waste (other than putrescible waste from domestic premises) commingled with other waste where the quantity that other waste (both individually and in aggregate) is insignificant; and
 - (iii) waste, which if not buried as soon as practicable, would be likely to cause environmental harm when placed in an exposed position.

For the purposes of this condition, an "insignificant" quantity is a quantity, estimated upon visual inspection, to comprise not more than five percent (5%) of that load of waste.

- (G14) The holder of the environmental authority must record at least the following information in relation to the special burial of wastes:
- (i) type of waste;
 - (ii) quantity of waste;
 - (iii) date of deposition;
 - (iv) source of waste; and
 - (v) if the waste is fibrous asbestos and/or mixed asbestos waste, the accurate location of each deposit and the depth of each deposit.
- (G15) Exposed wastes (excepting waste collected and stored for recycling and waste stored in transfer station bins) must be limited to the working face of the landfill unit and the area of exposure must be minimised to the greatest extent practicable.
- (G16) Waste (excepting waste collected and stored for recycling and waste stored in transfer station bins) must not be deposited beyond the boundaries of the landfill unit.
- (G17) All wastes must be deposited in lifts not exceeding a vertical height of 2.5 metres provided that for every one metre in height the horizontal length of the working face is at least 4 metres.
- (G18) Every lift of waste deposited within the landfill facility must be evenly and properly consolidated by mechanical plant to the greatest extent practicable.
- (G19) Large metal articles intended to be buried at the landfill facility must be compacted to the greatest extent practicable prior to being deposited in the landfill unit.
- (G20) Deposited waste must be covered:
- (i) with earthen material to a thickness of at least 0.2 metres; or
 - (ii) other dense and incombustible alternative material of sufficient thickness and nature to ensure that there is no exposure of waste.

- (G21) Coverage of deposited waste (excluding waste collected and stored for recycling and green waste deposited for mulching or other reuse) must take place:
- (i) if compliance with conditions G22 to G27 inclusive is not achieved, at least at the end of every operating day; or
 - (ii) if compliance with condition G22 to G27 inclusive is achieved, at least at the end of every second operating day; and
 - (iii) notwithstanding sub-clauses (i) and (ii) of this condition, at more frequent intervals if putrescible waste is deposited at that frequency necessary to ensure that such waste is not left in an exposed state.
- (G22) The minimum frequency of coverage of deposited waste (excluding waste collected and stored for recycling and green waste deposited for mulching or other reuse) may be extended from "at least at the end of every operating day" until "at least at the end of every second operating day" subject to compliance with and demonstration of achievement of the following environmental performance measures.
- (i) compliance with other conditions of this environmental authority that relate to release of noxious and offensive odour are complied with; and
 - (ii) an alternate means of minimising any dispersal of litter from active waste deposition areas to other parts of the licensed premises, in particular the stormwater drainage system, such as litter screens is implemented and maintained such that the likelihood of litter being released beyond the boundaries of the licensed place is minimised; and
 - (iii) there are no fires in the waste nor likelihood of fires; and
 - (iv) there are no rats (excepting any dead rats killed by compactor or other waste carrying vehicles) detected in the deposited waste nor other areas of the licensed place; and
 - (v) the deposited waste are compacted to an average rate of compaction of waste of not less than 800 kilograms of waste per cubic metre; and
 - (vi) if on any afternoon, rainfall (excluding excessive rainfall that has made it impractical for machinery to work at the active tipping area) is falling at the licensed place or is forecast for the area within the next 24 hour period, the deposited waste must be covered to minimise ingress of rainfall and stormwater into waste; and
 - (vii) compliance with other conditions of this environmental authority that relate to the public health risks, as estimated by presence and numbers of vermin, flies, mosquitoes and birds that are vectors of disease, associated with operating the facility; and
 - (viii) the carrying out of the waste disposal activity does not cause any complaint that may be reasonably related to the fact that deposited waste is not covered; and
 - (ix) the waste deposited each day for the last 2 hours of daily landfill operations:
 - (a) contains less than 2 percent of the putrescible fraction; or
 - (b) has been shredded or bailed.
- (G23) For the purposes of checking and demonstrating compliance with condition G22, the holder of this environmental authority must develop and implement a environmental performance monitoring program to ensure that the environmental performance measures specified in condition G22 are being complied with. The environmental performance monitoring program must provide for the monitoring and keeping of records of:
- (i) the dates when daily cover is applied and the dates when it is not applied; and
 - (ii) the results of a quality assurance program implemented to ensure that the appropriate minimum depth and quality of daily cover material is maintained; and
 - (iii) regular self assessments, made as often as is necessary having regard to any history of any odour complaints and any hot and/or wet weather conditions likely to increase risk of odour releases, of odour control performance in conjunction with recording of on-site meteorological data to assist in evaluating whether any odour complaint received is caused by the waste disposal activity; and

- (iv) the results of at least quarterly consultations with a community reference group providing feedback on the environmental performance of the holder of this environmental authority as it relates to carrying out of the environmentally relevant activities;
 - (v) the effectiveness of the measures implemented to minimise litter dispersal from the active tipping areas;
 - (vi) a rat trapping program comprising at least 10 traps carried out in the vicinity of the waste disposal area monthly during April through to September and fortnightly during October through to March;
 - (vii) at least monthly, mass of waste received and estimated landfill head space occupied in disposing that waste to calculate average waste compaction rate in kilograms of waste per cubic metre; and
 - (viii) a monitoring program carried out monthly during the April through to September and fortnightly during October through to March at the licensed place in the vicinity of the active tipping area to estimate for each month:
 - (a) the average number of flies collected in at least 6 recognised fly traps, such as a proprietary trap or one utilised in agricultural research; and
 - (b) the average number of mosquitoes collected in at least 6 recognised mosquito traps, such as a light trap; and
 - (c) the numbers of rats trapped in at least 6 recognised rat traps, such as a proprietary rat trap; and
 - (ix) of complaints required to be kept under the conditions of this environmental authority; and
 - (x) any fire at the licensed place.
- (G24) All monitoring required under condition G23 must be performed by a person or body possessing appropriate experience and qualifications to perform the required monitoring.
- (G25) All monitoring required under condition G23 must be performed in accordance with a standardised protocol that is documented and includes details of
- (i) the type of measurement(s) being made, for example estimated total number of birds; and
 - (ii) the time period and type of location during and from which measurements are made; and
 - (iii) the methodology to be followed in making and recording the measurements; and
 - (iv) the quality assurance measures that apply to the monitoring, for example any records of calibration of monitoring equipment and checks of effectiveness of equipment.
- (G26) The holder of this environmental authority must provide to the administering authority the following information:
- (i) the make and model of compaction machinery utilised in carrying out the waste disposal activity; and
 - (ii) the manufacturer's recommendations on the number of passes necessary and thickness of waste layer to be compacted that will be expected to achieve a compaction rate of 800 kilograms of waste per cubic metre; and
 - (iii) a copy of the protocols mentioned in condition G25 intended to be used in by the holder of this environmental authority in carrying the required monitoring.
- and must incorporate those recommendations into the relevant procedures documented under the integrated environmental management system.
- (G27) For the purpose of implementing the integrated environmental management system, the holder of this environmental authority must keep itself informed of relevant guidelines, research findings and best practice environmental management measures for the minimisation of public health risks from carrying out the waste disposal activities.
- (G28) Material necessary for coverage of disposed waste must be stored and be readily available at the licensed place in a quantity sufficient for not less than two weeks operation of the landfill facility.

(G29) Notwithstanding condition G28, where:

- (i) the material to be used as cover material is soil; and
- (ii) the holder of this environmental authority carries out an extractive industry either at the licensed place or within 5 kilometres of the licensed place that provides soil suitable for covering the waste; and
- (iii) the holder of this environmental authority has use of sufficient trucks or other vehicles capable of transporting the soil to the working face of the licensed place; and
- (iv) access and transport is available to the source of the cover material and the working face under wet weather conditions;

then the quantity of that cover material required to be stored and readily available at the licensed place must be not less than a quantity sufficient for not less than three days operation of the landfill facility.

(G30) Relocatable screens must be maintained around the working face so as to minimise litter being blown from the landfill facility.

(G31) A suitable access road must be provided and maintained to the working face of the landfill unit.

END OF CONDITIONS FOR PART 3 - SCHEDULE G

Part 3 - Schedule H - Monitoring and reporting

Monitoring of Contaminant Releases to Waters

(H1) Commencing on 1 December 1997, the holder of this environmental authority is responsible for the making of determinations and keeping of records of the quality of the contaminants released for the release points, quality characteristics, and at the frequency specified in Part 2 - Schedule H - Table 1.

Part 2 - Schedule H - Table 1

QUALITY CHARACTERISTIC DETERMINATION	RELEASE POINTS AND RECEIVING WATER REFERENCE POINTS	FREQUENCY
Suspended Solids.	Release point W2	At least once per quarter in the event of a release. If no release occurs in the quarterly period, no sampling is required.
pH.	Release point W2	At least once per quarter in the event of a release. If no release occurs in the quarterly period, no sampling is required.
Specific Conductance.	Release point W2	At least once per quarter in the event of a release. If no release occurs in the quarterly period, no sampling is required.
Dissolved Oxygen.	Release point W2	At least once per quarter in the event of a release. If no release occurs in the quarterly period, no sampling is required.

Sampling and In Situ Monitoring Point Details

- (H2) Determinations of the quality of contaminants released to waters to check conformity with the release quality characteristics specified in the Water Schedule of Part 3 of this environmental authority must be undertaken at the sampling and in situ monitoring point described as:

MW2 - for release point W2, a point in the discharge from the discharge structure, being either the drain from or overflow spillway of, the final element of sediment control system of release point W2 to Scrubby Creek.

- (H3) Baseline groundwater water quality monitoring for at least water quality characteristics required in the Detection Groundwater Monitoring Program must be undertaken prior to use of any landfill unit. The baseline groundwater quality must be determined at those locations and those depths which comprise the groundwater monitoring system established for that landfill unit.

Ambient Particulate Monitoring

- (H4) For the purposes of checking compliance with condition B5 of Part 1, the holder of this environmental authority must develop and implement a particulate monitoring program. The particulate monitoring program must provide for:
- (i) monitoring of ambient particulate matter (insoluble analysis) at not less than, eight (8) locations sited at approximate even spacing around the licensed place within 20 metres of the boundaries of the licensed place; and
 - (ii) monitoring of the 24 average concentration of particulate matter with an aerodynamic diameter less than 10 micrometre (μm) (PM_{10}) suspended in the atmosphere downwind and beyond the boundary of the licensed place to investigate any complaint of dust nuisance caused by dust that is reasonably likely to have emanated from the landfill facility upon receipt of request from the administering authority to carry out such monitoring. The average concentration must be calculated from a minimum of 14 samples obtained over a one month period.

For the purposes of this condition "downwind" means the in the downwind direction taking account of the wind direction that predominates for the area at that particular time of year, for example as shown by wind data obtained from the Commonwealth Bureau of Meteorology.

- (H5) The samples must be collected and analysed in accordance with the requirements the Department of Environment "Air Quality Sampling Manual", first edition, November 1997, or more recent editions or supplements to that document as such become available.
- (H6) All determinations of particulate monitoring must be performed by a person or body possessing appropriate experience and qualifications to perform the required determinations.

END OF CONDITIONS FOR PART 3 - SCHEDULE H

END OF INTEGRATED AUTHORITY