



Licence

Environmental Protection Act 1986, Part V

Licence Holder: Mindarie Regional Council

Licence: L6963/1997/14

Registered office: 1700 Marmion Avenue
MINDARIE WA 6030

Premises address: Tamala Park Waste Management Facility
1700 Marmion Avenue
CLARKSON WA 6030
Being part of Lot 9020 on Plan 408820 as depicted in Schedule 1.

Issue date: Tuesday, 14 March 2023

Commencement date: Wednesday, 26 June 2013

Expiry date: Tuesday, 25 June 2030

Prescribed premises category

Schedule 1 of the Environmental Protection Regulations 1987

Category number	Category description	Category production or design capacity	Approved Premises production or design capacity
12	Screening, etc. of material: premises (other than premises within category 5 or 8) on which material extracted from the ground is screened, washed, crushed, ground, milled, sized or separated.	50,000 tonnes or more per year	1,500,000 tonnes per annual period
57	Used tyre storage (general): premises (other than premises within category 56) on which used tyres are stored.	100 tyres or more	500 tyres (at any one time)
61	Liquid waste facility: premises on which liquid waste produced on other premises (other than sewerage waste) is stored, reprocessed, treated or irrigated.	100 tonnes or more per year	500 tonnes per annual period
61A	Solid waste facility: premises (other than premises within category 67A) on which solid waste produced on other premises is stored, reprocessed, treated, or discharged onto land.	1,000 tonnes or more per year	1,500 tonnes per annual period
62	Solid waste depot: premises on which waste is stored, or sorted, pending final disposal or re-use.	500 tonnes or more per year	15,000 tonnes per annual period



Category number	Category description	Category production or design capacity	Approved Premises production or design capacity
64	Class II or III putrescible landfill site: premises on which waste (as determined by reference to the waste type set out in the document entitled "Landfill Waste Classification and Waste Definitions 1996" published by the Chief Executive Officer and as amended from time to time) is accepted for burial.	20 tonnes or more per year	350,000 tonnes per annual period
77	Concrete batching or cement products manufacturing: premises on which cement products or concrete are manufactured for use at places or premises other than those premises.	100 tonnes or more per year	30,000 tonnes per annual period

Conditions

This Licence is subject to the conditions set out in the attached pages.

MANAGER WASTE INDUSTRIES REGULATORY SERVICES

Officer delegated under section 20
of the *Environmental Protection Act 1986*



Introduction

This Introduction is not part of the Licence conditions.

DWER's industry licensing role

The Department of Environment Regulation (DWER) is a government department for the state of Western Australia in the portfolio of the Minister for Environment. DER's purpose is to advise on and implement strategies for a healthy environment for the benefit of all current and future Western Australians.

DWER has responsibilities under Part V of the *Environmental Protection Act 1986* (the Act) for the licensing of prescribed premises. Through this process DER regulates to prevent, control and abate pollution and environmental harm to conserve and protect the environment. DER also monitors and audits compliance with works approvals and licence conditions, takes enforcement action as appropriate and develops and implements licensing and industry regulation policy.

Licence requirements

This Licence is issued under Part V of the Act. Conditions contained within the Licence relate to the prevention, reduction or control of emissions and discharges to the environment and to the monitoring and reporting of them.

Where other statutory instruments impose obligations on the Premises/Licence Holder the intention is not to replicate them in the licence conditions. You should therefore ensure that you are aware of all your statutory obligations under the Act and any other statutory instrument. Legislation can be accessed through the State Law Publisher website using the following link: <https://www.legislation.wa.gov.au/>

For your Premises relevant statutory instruments include but are not limited to obligations under the:

- Environmental Protection (Unauthorised Discharges) Regulations 2004 – these Regulations make it an offence to discharge certain materials such as contaminated stormwater into the environment other than in the circumstances set out in the Regulations.
- Environmental Protection (Controlled Waste) Regulations 2004 - these Regulations place obligations on you if you produce, accept, transport or dispose of controlled waste.
- Environmental Protection (Noise) Regulations 1997 – these Regulations require noise emissions from the Premises to comply with the assigned noise levels set out in the Regulations.

You must comply with your licence. Non-compliance with your licence is an offence and strict penalties exist for those who do not comply.

Licence holders are also reminded of the requirements of section 53 of the Act which places restrictions on making certain changes to prescribed premises unless the changes are in accordance with a works approval, licence, closure notice or environmental protection notice.

Licence fees

If you have a licence that is issued for more than one year, you are required to pay an annual licence fee prior to the anniversary date of issue of your licence. Non payment of annual licence fees will result in your licence ceasing to have effect meaning that it will no longer be valid and you will need to apply for a new licence for your Premises.



Ministerial conditions

If your Premises has been assessed under Part IV of the Act you may have had conditions imposed by the Minister for Environment. You are required to comply with any conditions imposed by the Minister.

Premises description and Licence summary

The Mindarie Regional Council (MRC), Tamala Park Waste Management Facility (TPWMF) is located 30 kilometres north of the Perth central business district, 10 km from the Wanneroo town site, 3 km from Burns Beach to the south-west, and 3 km from Quinns Rocks and Mindarie Keys to the north-west. The Premises has been in operation since February 1991.

Municipal waste is accepted for burial in a series of landfill phases covering an approximate area of 37 hectares, of which 11 hectares are now closed. Stage 2 of the landfill (active) is provided with an engineered basal lining system. However, the Stage 1 cells (closed) were not lined. Landfilling occurs progressively to achieve the final design levels required for the capping of the waste profile. Once the final profile is reached, that phase of the cell is capped and rehabilitated.

Excluding the western margin directly adjacent to Stage 2, Stage 1 of the landfill was capped in 2004 and 2005 for the southern and northern phases respectively. The western margin of Stage 1 was not capped as this area is required to 'tie-in' with the Stage 2 landfill and will be last area of filling on the Premises prior to closure. The Stage 2 landfill is divided into three phases, with Phase 1 (northern portion) having already been capped in 2011. Phase 2 (central portion) and Phase 3 (southern portion) are currently active and have not been capped.

Material excavated during construction of the landfill cells that is considered suitable for use as capping is retained on the Premises. These crushing and screening activities are covered by Category 12 (Screening, etc. of material) on the licence. This reduces the need for transporting materials on and off-site or for the procurement of cover materials during closure/capping. However, the Licence Holder considers the need to source additional cover material from offsite is likely.

In addition to landfilling activities, various recycling services are provided at the facility (Category 62 – Solid waste depot).

A commercial concrete batching or cement products manufacturing plant is also operated at the premises, covered by Category 77 (concrete batching or cement products manufacturing). DWER understands that fabricated limestone blocks are produced amongst other products.

The main potential emissions from the site relate to landfill leachate impacting underlying groundwater and the potential migration off-site through groundwater flow. Fugitive emissions in the form of odour, noise and dust may occur from site operations.

The licences and works approvals issued for the Premises since 30 June 2000 are:

Instrument log		
Instrument	Issued	Description
L6963/1997/5	30/06/2000	Licence re-issue
L6963/1997/6	30/06/2001	Licence re-issue
W3396/1997/1	18/07/2001	Construction of Stage 2 cells (13-22)
L6963/1997/7	30/06/2002	Licence re-issue
L6963/1997/8	30/06/2003	Licence re-issue
W3690/1997/1	26/08/2003	Construction of Stage 2A North cells (16-17 & 21-22) and Stage 2B North Cells (26-27 & 31-32)
L6963/1997/9	30/06/2004	Licence re-issue
L6963/1997/10	29/06/2005	Licence re-issue



Instrument log		
Instrument	Issued	Description
L6963/1997/11	29/06/2006	Licence re-issue
L6963/1997/12	25/06/2007	Licence re-issue
L6963/1997/13	26/06/2008	Licence re-issue
W4502/2008/1	06/03/2009	Stage 1/2 liner tie in (lining the area of Stage 1; an area of old landfill that is currently unlined to allow waste to be placed over previously landfilled waste).
W4582/2009/1	17/12/2009	Stage 2 – Phase 3; installation of basal liner system and side slope liner above RL 9.6m and associated leachate collection infrastructure
W4658/2010/1	17/06/2010	Tarpomatic system for daily coverage of waste
W5397/2013/1	13/05/2013	Stage 2 – Phase 3; side slope liner (incremental side slope lifts)
L6963/1997/14	26/06/2013	Licence re-issue
L6963/1997/14	24/12/2015	Licence amendment to authorise acceptance and disposal of Class III coarse heavy residue waste and conversion to new licence format
L6963/1997/14	01/07/2016	DER initiated amendment to update premises address details and implement administrative changes
L6963/1997/14	20/07/2017	Amendment Notice 1 – Increasing the maximum vertical height of the active tipping face
L6963/1997/14	22/03/2018	Amendment Notice 2 – Acceptance and storage of paint and processing of green waste
L6963/1997/14	03/09/2018	Amendment Notice 3 – Acceptance, storage of CCA timber products and removal to an off-site higher class of landfill
L6963/1997/14	12/05/2022	Licence amendment for Stage 2 West capping works including the requirement to review and submit a consolidated leachate, stormwater and landfill gas management plans.
L6963/1997/14	10/03/2022	Acceptance and processing of Hazardous Household Waste (HHW), e-waste, waste mineral oil, used lead and dry cell batteries, polystyrene, scrap metal, cardboard, furniture and other recyclable materials

Severance

It is the intent of these Licence conditions that they shall operate so that, if a condition or a part of a condition is beyond the power of this Licence to impose, or is otherwise *ultra vires* or invalid, that condition or part of a condition shall be severed and the remainder of these conditions shall nevertheless be valid to the extent that they are within the power of this Licence to impose and are not otherwise *ultra vires* or invalid.

END OF INTRODUCTION



Licence conditions

1. General

1.1 Interpretation

1.1.1 In the Licence, definitions from the *Environmental Protection Act 1986* apply unless the contrary intention appears.

1.1.2 For the purposes of this Licence, unless the contrary intention appears:

‘**AACR**’ means Annual Audit Compliance Report;

‘**Act**’ means the *Environmental Protection Act 1986*;

‘**ACM**’ means asbestos containing material and has the meaning defined in the Guidelines for Assessment, Remediation and Management of Asbestos Contaminated Sites, Western Australia, (DOH, 2009);

‘**Acceptance Criteria**’ has the meaning defined in Landfill Waste Classification and Waste Definitions 1996 (As amended December 2009), published by the CEO and as amended from time to time; ‘**Act**’ means the *Environmental Protection Act 1986*;

‘**AHD**’ means the Australian height datum;

‘**Annual Audit Compliance Report**’ means a report submitted in the format approved by the CEO and published on the DWER website (<https://www.der.wa.gov.au/our-work/licences-and-works-approvals/publications>).

‘**annual period**’ means the inclusive period from 1 January to 31 December;

‘**AS 3543**’ means the Australian Standard AS 3543 *Use of standard Ringelmann and Australian Standard miniature smoke charts*;

‘**AS/NZS 5667.1**’ means the Australian Standard AS/NZS 5667.1 *Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples*;

‘**AS/NZS 5667.4**’ means the Australian Standard AS/NZS 5667.4 *Water Quality – Sampling – Guidance on sampling from lakes, natural and man-made*;

‘**AS/NZS 5667.11**’ means the Australian Standard AS/NZS 5667.11 *Water Quality – Sampling – Guidance on sampling of groundwaters*;

‘**asbestos**’ means the asbestiform variety of mineral silicates belonging to the serpentine or amphibole groups of rock-forming minerals and includes actinolite, amosite, anthophyllite, chrysotile, crocidolite, tremolite and any mixture containing two or more of those;

‘**Assessment and management of contaminated sites guidelines**’ means the document titled “Guideline: Assessment and management of contaminated sites” published by the Chief Executive Officer of the Department of Water and Environmental Regulation as amended from time to time;

‘**averaging period**’ means the time over which a limit is measured or a monitoring result is obtained;

‘**CEO**’ means Chief Executive Officer of the Department of Water and Environment Regulation;

‘**CEO**’ for the purpose of correspondence means;



Chief Executive Officer
Department Administering the *Environmental Protection Act 1986*
Locked Bag 10
JOONDALUP DC WA 6919
or
Email: info@dwer.wa.gov.au

'Clean Fill' has the meaning defined in Landfill Definitions;

'Clinical Waste' has the meaning defined in Landfill Definitions;

'coarse heavy residue waste' means the coarse heavy fraction of process residue wastes from the Mindarie Regional Council - Resource Recovery Facility (RRF) located at Lot 801 on Plan 57533 Pederick Road, Neerabup, Western Australia;

'Contaminated Solid Waste' means contaminated solid waste meeting the Acceptance Criteria for Class II/III landfills, as specified in the Landfill Definitions;

'e-waste' means electronic, electrical and battery-powered items that have been discarded or no longer in working order. Covers a range of items used in commercial, industrial and residential premises and includes, but is not limited to, televisions, computers, mobile phones, kitchen appliances and white goods.

'green waste' means biodegradable waste comprising plants and their component parts such as flower cuttings, hedge trimmings, branches, grass, leaves, plants, seeds, shrub and tree loppings, tree trunks, tree stumps and similar materials and includes any mixture of those materials;

'hardstand' means a surface with a permeability of 10^{-9} metres/second or less;

'Household Hazardous Waste' means the materials listed in Schedule 5: Hazardous Household Wastes disposed of by occupiers of private residences; that is, not produced by industrial or other sources;

'internal buffer distance' means the distance from the boundary of the premises to any area on the premises used for disposal, storage or transfer of waste;

'Inert Waste Type 1' has the meaning defined in Landfill Definitions;

'Inert Waste Type 2' has the meaning defined in Landfill Definitions;

'Landfill Definitions' means the document titled "Landfill Waste Classification and Waste Definitions 1996" published by the Chief Executive Officer of the Department of Environment as amended from time to time;

'leachate' means liquid released by or water that has percolated through waste and which contains some of its constituents;

'Leachate Management Plan' means Version 1 of the the unpublished document titled *Leachate Management Plan - Tamala Park Waste Management Facility* created by Talis Consultants on 16 March 2022;

'Licence' means this Licence numbered L6963/1997/14 and issued under the Act;

'Licence Holder' means the person or organisation named as Licence Holder on page 1 of the Licence;

'NATA' means the National Association of Testing Authorities, Australia;

'NATA accredited' means in relation to the analysis of a sample that the laboratory is NATA accredited for the specified analysis at the time of the analysis;

'Putrescible' has the meaning defined in Landfill Definitions;



‘Premises’ means the area defined in the Premises Map in Schedule 1 and listed as the Premises address on page 1 of the Licence;

‘quarantined storage area or container’ means a hardstand storage area or sealed-bottom container or an area on a lined landfill that is separate and isolated from authorised waste disposal areas and is capable of containing all non-conforming waste and its constituents; these areas must be clearly marked and their access restricted to authorised personnel;

‘Schedule 1’ means Schedule 1 of this Licence unless otherwise stated;

‘Schedule 2’ means Schedule 2 of this Licence unless otherwise stated;

‘sealed container’ means a sealed-bottom container, either lidded or unlidded, that is capable of containing deposited waste and its constituents;

‘Special Waste Type 1’ has the meaning defined in Landfill Definitions;

‘Special Waste Type 2’ has the meaning defined in Landfill Definitions;

‘spot sample’ means a discrete sample representative at the time and place at which the sample is taken;

‘Stage 2 Landfill’ means the areas labelled Stage 2 in Schedule 1 Map 2;

‘Stage 2 West Capping Works Quality Assurance Plan’ means version 1 of the unpublished document titled *Construction Quality Assurance Plan: Tamala Park Waste Management Facility – Stage 2 West Capping Works* created by Talis Consultants on 24 June 2021;

‘Stage 2 West Capping Works Technical Specifications’ means version 2 of the unpublished document titled *Technical Specification: Tamala Park Waste Management Facility – Stage 2 West Capping Works* created by Talis Consultants on 30 June 2021;

‘Suitably Qualified Engineer’ means a person who:

- (a) holds a Bachelor of Engineering recognised by Engineers Australia; and
- (b) has a minimum of five years of experience working in a supervisory area of geotechnical and/or civil engineering; and
- (c) is employed by an independent third party external to the Licence Holder's business.

‘Tamala Park Surface Water Management Strategy’ means the unpublished document titled *Tamala Park Surface Water Management Strategy* created by Talis Consultants on 21 December 2021;

‘usual working day’ means 0800 – 1700 hours, Monday to Friday excluding public holidays in Western Australia.

1.1.3 Any reference to an Australian or other standard in the Licence means the relevant parts of the standard in force from time to time during the term of this Licence.

1.1.4 Any reference to a guideline or code of practice in the Licence means the version of that guideline or code of practice in force from time to time, and shall include any amendments or replacements to that guideline or code of practice made during the term of this Licence.

1.2 Premises operation

1.2.1 The Licence Holder shall only accept waste on to the Premises if:

- (a) it is of a type listed in Table 1.2.1; and
- (b) the quantity accepted is below any quantity limit listed in Table 1.2.1 for the corresponding category; and
- (c) it meets any specification listed in Table 1.2.1; and
- (d) in the case of contaminated solid waste is supported by documentation that demonstrates compliance with the acceptance criteria for Class II/III landfills.



Table 1.2.1: Waste acceptance

Waste type	Category	Quantity limit	Specification ¹
Clean Fill	64	350,000 tonnes per annual period (cumulative)	None Specified
Inert Waste Type 1			
Inert Waste Type 2			Tyres and plastic only
Putrescible waste			None Specified
Special Waste Type 1			Asbestos and asbestos containing materials (ACM)
Special Waste Type 2			Biomedical / clinical (excluding radioactive waste ²)
Contaminated Solid Waste – Class II			Must meet the acceptance criteria for Class II landfills
Contaminated Solid Waste – Class III	61	6,500 tonnes per annual period	Limited to coarse heavy residue waste only which must meet the acceptance criteria for Class III landfills.
Hazardous Liquid Waste		500 tonnes per annual period	Limited to hazardous waste types as listed in Schedule 5: Hazardous Household Wastes (up to a maximum of 20 litres or 20 kilograms per package/item).
Waste mineral oil		Limited to a maximum of 150 tonnes per annual period	Limited to domestic quantities of waste Oils, hydrocarbons and oil and water mixtures or emulsions, up to 20 litres or 20 kilograms per package/item
Clean Fill	62	15,000 tonnes per annual period (cumulative)	None Specified
Inert Waste Type 1			
Inert Waste Type 2			Tyres and plastic only
Putrescible waste			Limited to cardboard, furniture and other recyclable materials e.g. clothes
Hazardous Waste			Limited to chromated copper arsenate (CCA) treated timber, HHW as listed in Schedule 5: Hazardous Household Wastes, used lead and dry cell batteries, polystyrene.



Table 1.2.1: Waste acceptance

e-waste		Limited to a maximum of 250 tonnes per annual period	Waste electronic items
Scrap Metal		Limited to a maximum of 2500 tonnes per annual period	Limited to Scrap metal

Note 1: Additional requirements for the acceptance of controlled waste (including asbestos and tyres) are set out in the Environmental Protection (Controlled Waste) Regulations 2004.

Note 2: Information relating to the classification of radioactive waste can be found in the *West Australian Radiation Safety Act 1975*.

1.2.2 The Licence Holder shall ensure that where waste does not meet the waste acceptance criteria set out in condition 1.2.1 it is removed from the Premises by the delivery vehicle or, where that is not possible, stored in a quarantined storage area or container and removed to an appropriately authorised facility as soon as practicable.

1.2.3 The Licence Holder shall ensure that wastes accepted onto the Premises are only subjected to the process(es) set out in Table 1.2.2 and in accordance with any process limits described in that Table.

Table 1.2.2: Waste processing

Waste type	Process(es)	Process limits ¹
All waste types corresponding to Category 64 as specified in Table 1.2.1	Disposal of waste by landfilling	<p>(a) Disposal of waste by landfilling shall only take place within the following areas of the landfill:</p> <ul style="list-style-type: none"> (i) Stage 2 Phase 2 West; (ii) Stage 2 Phase 2 East; and (iii) Stage 2 Phase 3; <p>as depicted on the Landfill Area and Site Layout Map in Schedule 1;</p> <p>(b) Shall ensure that the tipping face is no greater than 5 m in vertical height;</p> <p>(c) Shall restrict the tipping area to a maximum linear length of 50 m;</p> <p>(d) The separation distance between the base of the landfill and the highest level of the phreatic surface of groundwater shall not be less than 2 m;</p> <p>(e) Shall maintain an internal buffer distance of 50 m from the boundary of the premises; and</p> <p>(f) Shall not landfill tyres at the premises.</p>
Clean Fill	Receipt, handling and associated	None specified.
Inert Waste Type 1		



Table 1.2.2: Waste processing

Waste type	Process(es)	Process limits ¹
Inert Waste Type 2	storage prior to reuse or disposal by landfilling	<ul style="list-style-type: none"> (a) No more than 500 tyres shall be stored at the premises at any one time; (b) A 2 m separation distance shall be maintained between the tyre stack/pile and adjacent bushland; (c) Vehicle access to the tyre stack/pile shall be maintained on three sides; (d) Tyres must be collected and removed to an appropriate authorised facility as soon as practicable; and (e) Individual tyre stacks shall not exceed <ul style="list-style-type: none"> (i) 2 m in height; and (ii) 75 m² in area.
Putrescible waste		<ul style="list-style-type: none"> (a) Putrescible waste received at the transfer station shall: <ul style="list-style-type: none"> (i) Only be stored in sealed containers or on a hardstand area bunded to prevent run-off; and (ii) Shall not be stored on the site for longer than 48 hours. (b) Green waste received for processing shall: <ul style="list-style-type: none"> (i) Only be stored on a 1 m thick compacted and bunded limestone hardstand; (ii) The stockpile size will be limited to the following dimensions: 50 m (length) x 15 m (width) x 5 m (height); (iii) Unprocessed green waste is to be directly removed after chipping or only stored in the designated processing area (within the landfill area) for less than 2 weeks prior to removal; and (iv) The compacted and bunded limestone hardstand shall be located >60 m from an active tipping face of a cell.
Special Waste Type 1	Receipt, handling and disposal by landfilling	<ul style="list-style-type: none"> (a) Waste shall only be disposed of into a designated asbestos disposal area within the landfill. The disposal area(s) for any more than one cubic metre of asbestos material must be defined by grid references on a premises plan; (b) A copy of the premises plan marked with the locations used for waste disposal, as described above, shall be kept as a permanent record; (c) Not to be deposited within 2 m of the final tipping surface of the landfill; and (d) No works shall be carried out on the landfill that could lead to a release of asbestos fibres.
Special Waste Type 2		<ul style="list-style-type: none"> (a) Only to be disposed of into a designated biomedical or clinical waste disposal area within the landfill. The disposal area(s) must be defined by grid references on a premises plan; (b) A copy of the premises plan marked with the locations used



Table 1.2.2: Waste processing

Waste type	Process(es)	Process limits ¹
		<p>for waste disposal, as described above, shall be kept as a permanent record;</p> <p>(c) Not to be deposited within 2 m of the final tipping surface of the landfill; and</p> <p>(d) No works shall be carried out on the landfill that could lead to biomedical or clinical wastes being excavated or uncovered.</p>
Contaminated Solid Waste		<p>(a) Course heavy residue waste meeting acceptance criteria for Class III landfills shall only be disposed of to Stage 2 Phase 2 West, Stage 2 Phase 2 East and Stage 2 Phase 3 as depicted on the Landfill Area and Site Layout Map in Schedule 1.</p>
Hazardous Liquid Waste		<p>(a) Paint shall be stored in dedicated paint stillages; and</p> <p>(b) Paint shall not be decanted or fixated on the Premise.</p>
e-waste		<p>(a) e-waste to be stored in sea containers or self contained on bitumen prior to transport off-site</p>
Scrap Metal		<p>(a) Scrap Metal to be stored in dedicated bins or on landfill.</p> <p>(b) The license holder shall ensure that waste accepted onto the premises is transported to an approved facility for processing such waste.</p> <p>(c) No greater than 200 tonnes of material shall be stored on-site at anyone time.</p>
Hazardous Waste	Receipt, handling and associated storage prior to offsite disposal	<p>(a) CCA treated timber shall only be stored in the designated storage bin under cover at the Transfer Station;</p> <p>(b) No CCA treated timber shall be buried on site; and</p> <p>(c) CCA treated timber must be removed off-site prior to the designated bin being full.</p> <p>(d) Used lead acid batteries to be stored in fully sealed -self bundled bins within designated lead acid battery storage area.</p> <p>(e) The licence holder shall ensure that used lead acid batteries accepted onto the premises are collected and transported to an approved waste facility for storage and processing.</p> <p>(f) Used dry cell and lithium ion batteries shall be stored in a designated storage area and transported to an approved waste facility for storage or processing of such waste.</p> <p>(g) Polystyrene is stored within a self contained building and/or sea container for processing and then removal off-site.</p>
Waste mineral oil		<p>(a) Waste oil - contained within a self-bundled tank and located on a concrete hardstand; and</p> <p>(b) Waste oil - must not be processed or treated on-site</p>

Note 1: Additional requirements for the acceptance and landfilling of controlled waste (including asbestos and tyres) are set out in the Environmental Protection (Controlled Waste) Regulations 2004.



1.2.4 The Licence Holder shall manage the landfilling activities to ensure:

- (a) waste is levelled and compacted as soon as practicable after it is discharged; and
- (b) waste is placed and compacted to ensure all faces are stable and capable of retaining rehabilitation material; and
- (c) rehabilitation of a cell or phase takes place within 6 months after disposal in that cell or phase has been completed.

1.2.5 The Licence Holder shall recover and recycle leachate from the Stage 2 Landfill by irrigation over, or injecting into, the Stage 2 landfilling area.

1.2.6 The Licence Holder shall inspect and monitor the leachate management system at a minimum of weekly to monitor leachate levels in all ponds and sumps, and manage movement of leachate between sumps and ponds and the recirculation system.

1.2.7 The Licence Holder shall ensure that cover is applied and maintained on landfilled wastes in accordance with Table 1.2.3 and that sufficient stockpiles of cover are maintained on-site at all times.

Table 1.2.3: Cover requirements

Waste Type	Cover requirements
Inert Waste Type 1	No cover required
Inert Waste Type 2	To be covered by the end of the working day in which the waste was deposited with sufficient quantities (at least 150 mm) of inert waste type 1, clean fill or other appropriate cover material to prevent the spread of fire and harbouring of disease vectors.
Putrescible wastes	
Contaminated Solid Waste	
Special Waste Type 1	To be covered with a 1000 mm of inert waste type 1, clean fill, or putrescible waste as soon as practicable after deposit and before being compacted to prevent the release of asbestos fibres as a result of compaction and other landfilling activities.
Special Waste Type 2	To be covered with 1000 mm of inert waste type 1 or clean fill as soon as practicable and before compaction.

1.2.8 The Licence Holder shall submit capping information and undertake capping works in accordance with the requirements of Table 1.2.4.

Table 1.2.4: Capping requirements

Cell Number(s)	Specification	Timescales
Stage 2 Phase 2 West, Stage 2 Phase 2 East and Stage 2 Phase 3	A capping plan is to be submitted to the CEO including, but not limited to: detailed design, material specifications, proposed landfill gas collection infrastructure, current and finished surveyed levels and details on construction quality assurance.	At least 3 months prior to the completion of waste disposal in each cell.
	Complete capping works in accordance with Capping Plan submitted to the CEO.	No later than 6 months after the completion of waste disposal in each cell

1.2.9 The Licence Holder shall install, operate and maintain a system for controlling landfill gas generated on the Premises to prevent lateral migration of landfill gas outside the boundary of the Premises.



- 1.2.10** The Licence Holder shall implement the following security measures at the site:
- (a) erect and maintain suitable fencing to prevent unauthorised access to the site; and
 - (b) ensure that any entrance gates to the premises are securely locked when the premises are unattended; and
 - (c) undertake regular inspections of all security measures and repair damage as soon as practicable.
- 1.2.11** The Licence Holder shall install and maintain a sign at the entrance to the Premises which clearly displays the following information;
- (a) hours of operation;
 - (b) contact telephone number;
 - (c) warning indicating penalties for people lighting fires; and
 - (d) list of materials accepted for recycling and the location of where they can be deposited on the premises where practical.
- 1.2.12** The Licence Holder shall implement control measures to prevent infestations of pests, flies and vermin at the Premises.
- 1.2.13** The Licence Holder shall ensure that no windblown waste escapes from the Premises and that windblown waste is collected on at least a weekly basis and returned to the tipping area or appropriately contained.
- 1.2.14** The Licence Holder shall maintain a vehicle wash-down facility to avoid the potential for vehicles to track waste or matter from the landfill outside the premises boundary.
- 1.2.15** The Licence Holder shall ensure that no waste is burnt on the premises.
- 1.2.16** The Licence Holder shall ensure an adequate water supply and a means of distribution be provided at all times, to extinguish a fire at any part of the premises.
- 1.2.17** The Licence Holder shall:
- (a) divert stormwater from the landfilled areas of the site to dedicated stormwater drains; and
 - (b) remove waste from stormwater drains to allow effective draining.
- 1.2.18** The licence holder shall recover or remove and dispose of any spills or leaks of liquid hazardous waste as soon as practicable.
- 1.2.19** The licence holder shall ensure that any accumulated liquids, and residues from the recovery of spills or leaks, are stored in an impervious container prior to disposal at an appropriately authorised facility.
- 1.2.20** The licence holder shall for the Transfer Station and Recycling centre (as depicted in Schedule 1 – Map 2 and Schedule 5 – Map 7) areas:
- (a) ensure that firefighting equipment and systems are in good working order, and capable of controlling a loose material fire;
 - (b) ensure that any unauthorised fire on the premises is extinguished as soon as possible;
 - (c) collect and remove all accumulated and recoverable fire wash-water and other waste that may result from firefighting on the premises within 24-hours of a fire event; and
 - (d) ensure that any firefighting wastewater is removed without delay by a carrier licenced under the *Environmental Protection (Controlled Waste) Regulations 2004*; and
 - (e) remove all fire impacted waste for disposal to a suitably licensed premises.
- 1.2.21** The licence holder shall implement the Tamala Park Surface Water Management Strategy¹ and Leachate Management Plan².

Note 1 and 2: where construction works or new equipment and/or infrastructure is required to implement the respective plans, additional approvals under Part V, Division 3, of the EP Act may be required.



2. Specified Actions

2.1 Specified Actions

2.1.1 The Licence Holder shall submit to the CEO the Information in Table 2.1.1. in accordance with the Requirements and Timescale outlined in Table 2.1.1.

Table 2.1.1 Specified actions			
Information		Requirement(s)	Timescale
1	Landfill Gas Management Plan	A consolidated and detailed management plan including but not limited to: (a) engineering information and detailed drawings of the landfill gas system design for the existing development stage at the landfill site; (b) engineering information and detailed drawings of the landfill gas system design for Stage 2 West at the completion of the capping works; and (c) engineering information and detailed drawings of the proposed completed state of the landfill gas system design.	31 March 2024



3. Works Specifications

3.1 Works Specifications

- 3.1.1 The Licence Holder must ensure that the construction works specified in Table 3.1.1 meet or exceed the specifications in the corresponding schedule as noted in Table 3.1.1.

Table 3.1.1: Works specifications

Works Type	Works description	Timing	Specifications
Landfill capping works	Construction of the Stage 2 West landfill cap	The works must commence no later than 6 months after disposal of waste into the Stage 2 West Phase has been completed.	In accordance with Schedule 3: Table S3.1

- 3.1.2 The Licence Holder must within 45 calendar days of an item of infrastructure required by condition 3.1.1 being constructed:
- (a) undertake an audit of their compliance with the requirements of condition 3.1.1; and
 - (b) prepare and submit to the CEO an Environmental Compliance Report on that compliance.
- 3.1.3 The Environmental Compliance Report required by condition 3.1.2, must include as a minimum the following:
- (a) certification by a Suitably Qualified Engineer that the items of infrastructure or component(s) thereof, as specified in condition 3.1.1, have been constructed in accordance with the relevant requirements specified in condition 3.1.1;
 - (b) if relevant, a summary of all revisions and changes made to subsequent versions of the reference documents listed in Schedule 3 Table S3.1;
 - (c) as constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure specified in condition 3.1.1; and
 - (d) be signed by a person authorised to represent the works approval holder and contains the printed name and position of that person.

4. Monitoring

4.1 General monitoring

- 4.1.1 The Licence Holder shall ensure that:
- (a) all water samples are collected and preserved in accordance with AS/NZS 5667.1;
 - (b) all groundwater sampling is conducted in accordance with AS/NZS 5667.11; and
 - (c) all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured unless indicated otherwise in the relevant table.
- 4.1.2 The Licence Holder shall ensure that:
- (a) monitoring is undertaken in each monthly period such that there are at least 15 days in between the days on which samples are taken in successive months;
 - (b) six monthly monitoring is undertaken at least 5 months apart; and
 - (c) annual monitoring is undertaken at least 9 months apart.
- 4.1.3 The Licence Holder shall ensure that all monitoring equipment used on the Premises to comply with the conditions of this Licence is calibrated in accordance with the manufacturer's specifications.
- 4.1.4 The Licence Holder shall, where the requirements for calibration cannot be practicably met, or a discrepancy exists in the interpretation of the requirements, bring these issues to the attention of the CEO accompanied with a report comprising details of any modifications to the methods.



4.2 Monitoring of inputs and outputs

4.2.1 The Licence Holder shall undertake the monitoring in Table 4.2.1 according to the specifications in that table.

Table 4.2.1: Monitoring of inputs and outputs				
Input/Output	Parameter	Units	Averaging period	Frequency
Waste Inputs	Clean Fill, Inert Waste Type 1, Inert Waste Type 2, Putrescible waste, Special Waste Type 1, Special Waste Type 2, Contaminated Solid Waste, Liquid Hazardous Waste and Hazardous Waste	tonnes (where a weighbridge is present on the site) m ³ (where no weighbridge is present)	N/A	Each load arriving at the Premises
Waste Outputs	Waste type as defined in the Landfill Definitions			Each load leaving or rejected from the Premises

4.3 Ambient environmental quality monitoring

4.3.1 The Licence Holder shall undertake the monitoring in Table 4.3.1 according to the specifications in that table and record and investigate results that do not meet any limit specified.

Table 4.3.1: Monitoring of ambient groundwater quality				
Monitoring point reference and location	Parameter	Units	Averaging period	Frequency
TP1 TP2 TPL1 A - C TPL2 A - C TPL3 A - C TP19 A - C TP20 A - C BB21 A - C BB22 A - C BB23 A - C BB24 A - C BB25 A - C BB26 A - C BB27 A - C As depicted in the Map of monitoring locations in Schedule 1: Map 3	Standing water level	m(AHD)	Spot sample	Six monthly
	pH ¹			
	Electrical conductivity ¹	µS/cm		
	<u>Major ions</u>	mg/L		
	Calcium, Chloride, Bicarbonate, Potassium, Magnesium, Sodium, Sulfate,			
	Ammonium, Nitrate			
	Total Organic Carbon			
	Organophosphorus Pesticides	mg/L	Spot sample	Annual
	Organochlorine pesticides			
	Polychlorinated Biphenyls (PCBs)			
	Polyaromatic hydrocarbons (PAHs)			



Table 4.3.1: Monitoring of ambient groundwater quality

Monitoring point reference and location	Parameter	Units	Averaging period	Frequency
	BTEX (Benzene, Ethylbenzene, Toluene, Xylene) Total BTEX			
	Total Recoverable Hydrocarbons (TRH)			
	<u>Metals – Dissolved</u> Aluminium, Boron, Barium, Cadmium, Cobalt, Copper, Iron, Manganese, Molybdenum, Nickel, Lead, Vanadium, Zinc			
	<u>Metals – Total</u> Arsenic, Chromium			

Note 1: In-field non-NATA accredited analysis permitted.

4.4 Landfill gas monitoring

4.4.1 The Licence Holder shall undertake the monitoring of parameters specified in Table 4.4.1 according to the specifications in that table.

Table 4.4.1: Landfill gas monitoring

Monitoring point reference and location	Parameter	Units	Frequency
Each well, as depicted in Schedule 4: Map 6	Volumetric flow rate	m ³ /hr	Within four weeks of completion of construction of each well and flare and Monthly thereafter
	Methane	Volume %	
	Carbon dioxide	Volume %	
	Oxygen	Volume %	
	Nitrogen	Volume %	
	Carbon monoxide	ppm	
	Gas temperature	°C	
	Pressure	Pa	



5. Record-keeping

5.1 Records

5.1.1 All information and records required by the Licence shall:

- (a) be legible;
- (b) if amended, be amended in such a way that the original and subsequent amendments remain legible or are capable of retrieval;
- (c) except for records listed in 5.1.1(d) be retained for at least 6 years from the date the records were made or until the expiry of the Licence or any subsequent licence; and
- (d) for those following records, be retained until the expiry of the Licence and any subsequent licence:
 - (i) off-site environmental effects; or
 - (ii) matters which affect the condition of the land or waters.

5.1.2 The Licence Holder shall:

- (a) implement a complaints management system that shall record the following information (if known or provided) about complaints received at the Premises concerning any environmental impact of the activities undertaken at the Premises:
 - (i) name and address of the complainants (if consented);
 - (ii) date and time of complaint;
 - (iii) date and time of alleged incident;
 - (iv) alleged source of the incident;
 - (v) general description of the alleged incident, including any environmental or health impacts reported by the complainant;
 - (vi) wind direction, wind speed and temperature at time of alleged incident;
 - (vii) likely source of the alleged incident; and
 - (viii) actions taken by the Licence Holder to address the complaint, including the outcome of any investigation(s) and action(s) to verify any impacts.
- (b) complete an annual analysis and review of complaints recorded under 5.1.2(a) to identify any common factors and root cause of complaints and proposals to address these.

5.1.3 The Licence Holder must record the following information for all unauthorised fires at the premises:

- (a) Details of the date, time and location of the fire;
- (b) Measures used to control the fire;
- (c) The cause, or suspected cause, of the fire; and
- (d) Any residual issues related to the fire.

5.2 Reporting

5.2.1 The Licence Holder must:

- (a) undertake an audit of their compliance with the conditions of this licence during the preceding annual period; and
- (b) prepare and submit to the CEO by no later than 90 days after the end of that annual period an Annual Audit Compliance Report in the approved form.

5.2.2 The Licence Holder must submit to the CEO by no later than 90 days after the end of each annual period, an Annual Environmental Report for that annual period for the conditions listed in Table 5.2.1, and which provides information in accordance with the corresponding requirement set out in Table 5.2.1.



Table 5.2.1: Annual Environmental Report

Condition or table (if relevant)	Parameter	Format or form
-	Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken	None specified
Table 4.2.1	Summary of Inputs and Outputs	
-	Summary of materials processed under Category 12	
Table 4.3.1	Monitoring of ambient groundwater quality. Summary of the ambient groundwater quality monitoring results must be presented.	Tabulated form within the body of the annual report as well as all raw data provided in an accompanying Microsoft Excel spreadsheet digital document/file (or a compatible equivalent digital document/file)
Table 4.4.1	Landfill gas monitoring. Summary of the landfill gas monitoring results must be presented.	
5.1.2	Complaints summary	None specified
5.1.3	A summary of all fire incidents that have occurred during the annual period, including the records required by condition 5.1.3	

5.2.3 The Licence Holder must submit to the CEO by no later than six months after the end of each annual period, a detailed groundwater monitoring report in relation to condition 4.3.1 and a landfill gas monitoring report in relation to condition 4.4.1. The reports must include an assessment of monitoring results against previous results and relevant assessment levels for water and landfill gas, as published in the *Assessment and management of contaminated sites guidelines*.

5.2.4 The Licence Holder must comply with a Department Request, within 14 days from the date of the Department Request or such other period as agreed to by the Inspector or the CEO.

5.3 Notification

5.3.1 The Licence Holder shall ensure that the parameters listed in Table 5.3.1 are notified to the CEO in accordance with the notification requirements of the table.

Table 5.3.1: Notification requirements

Condition or table (if relevant)	Parameter	Notification requirement ¹	Format or form ²
-	Breach of any limit specified in the Licence	Part A: As soon as practicable but no later than 5pm of the next usual working day. Part B: As soon as practicable.	N1



Table 5.3.1: Notification requirements

Condition or table (if relevant)	Parameter	Notification requirement ¹	Format or form ²
1.2.5 and 1.2.6	Failure or malfunction of the leachate collection and management system	As soon as practicable, but no later than 1700 hrs of the next working day	None specified
4.1.4	Calibration report	As soon as practicable	None specified
4.3.1	Any groundwater monitoring bores listed in Table 4.3.1 are destroyed or otherwise made unserviceable	Within 7 days of identifying destroyed or unserviceable groundwater monitoring bores	None specified
5.1.3	Any unauthorised fire that: (a) In accordance with AS 3543, contains smoke with a smoke shade of less than or equal to shade 1; and (b) Is extinguished in less than 4 minutes.	As part of the Annual Environmental Report required by condition 5.2.3	None specified
	Any unauthorised fire that: (a) In accordance with AS 3543, contains smoke with a smoke shade greater than shade 1; and (b) Is not extinguished in less than 4 minutes.	As soon as practicable, but no later than 14 days after the fire event	

Note 1: Notification requirements in the Licence shall not negate the requirement to comply with s72 of the Act

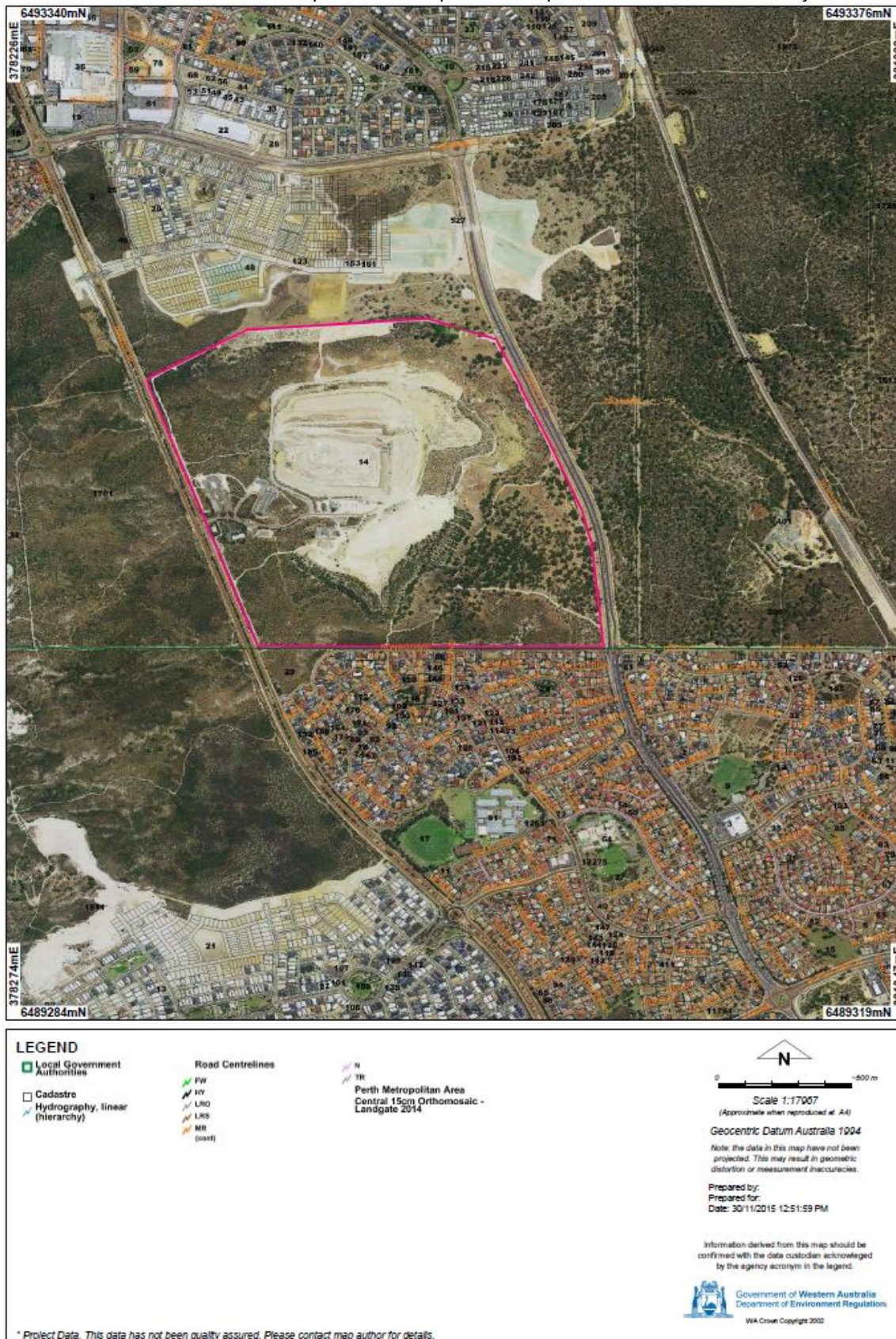
Note 2: Forms are in Schedule 2



Schedule 1: Maps

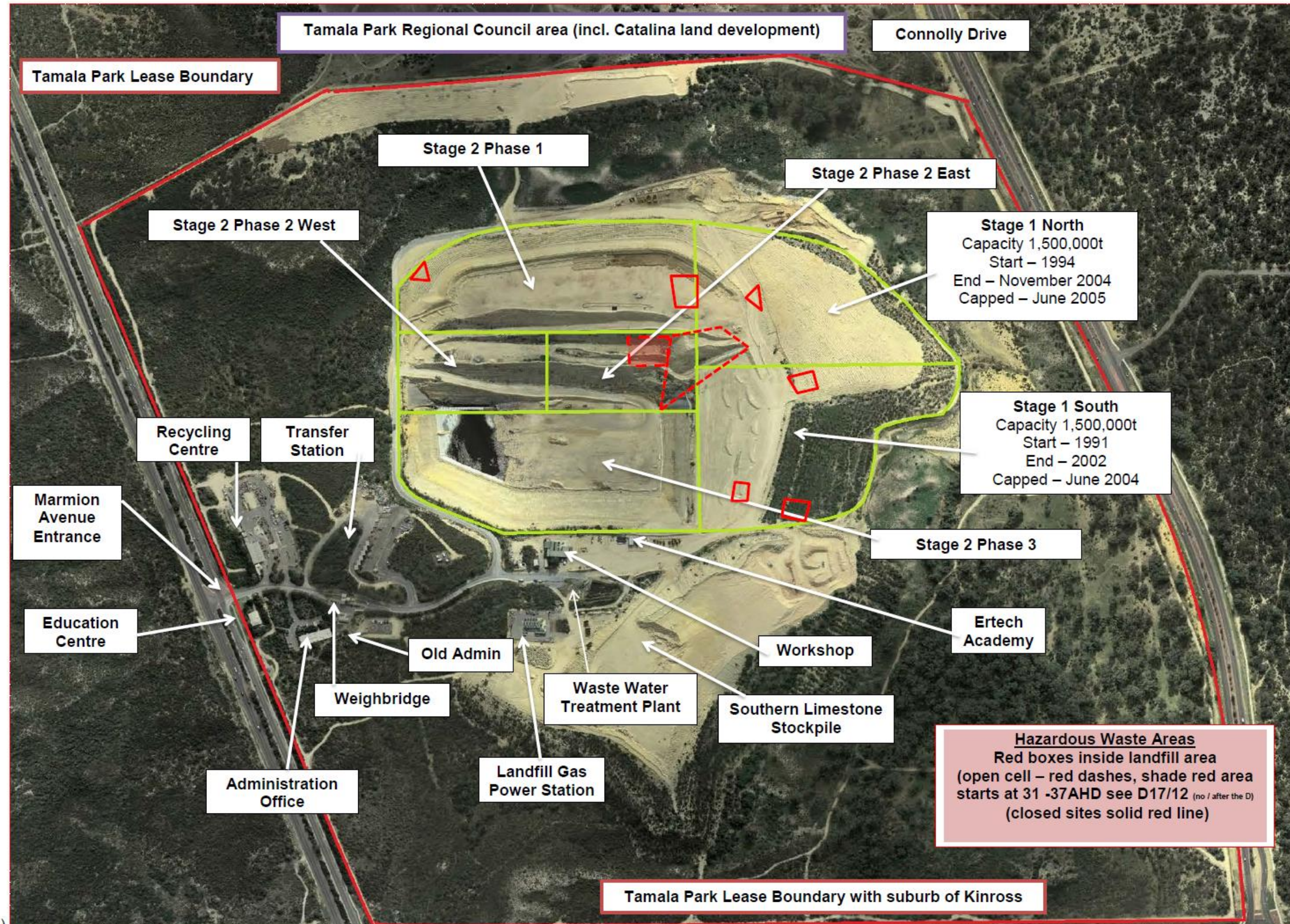
Map 1 - Premises map

The Premises is shown in the map below. The pink line depicts the Premises boundary.



Map 2 - Landfill Area and Site Layout Map

2012 Aerial of Mindarie Regional Council – site layout – D/13/1060 – Current Hazardous Waste Area as of October 2017

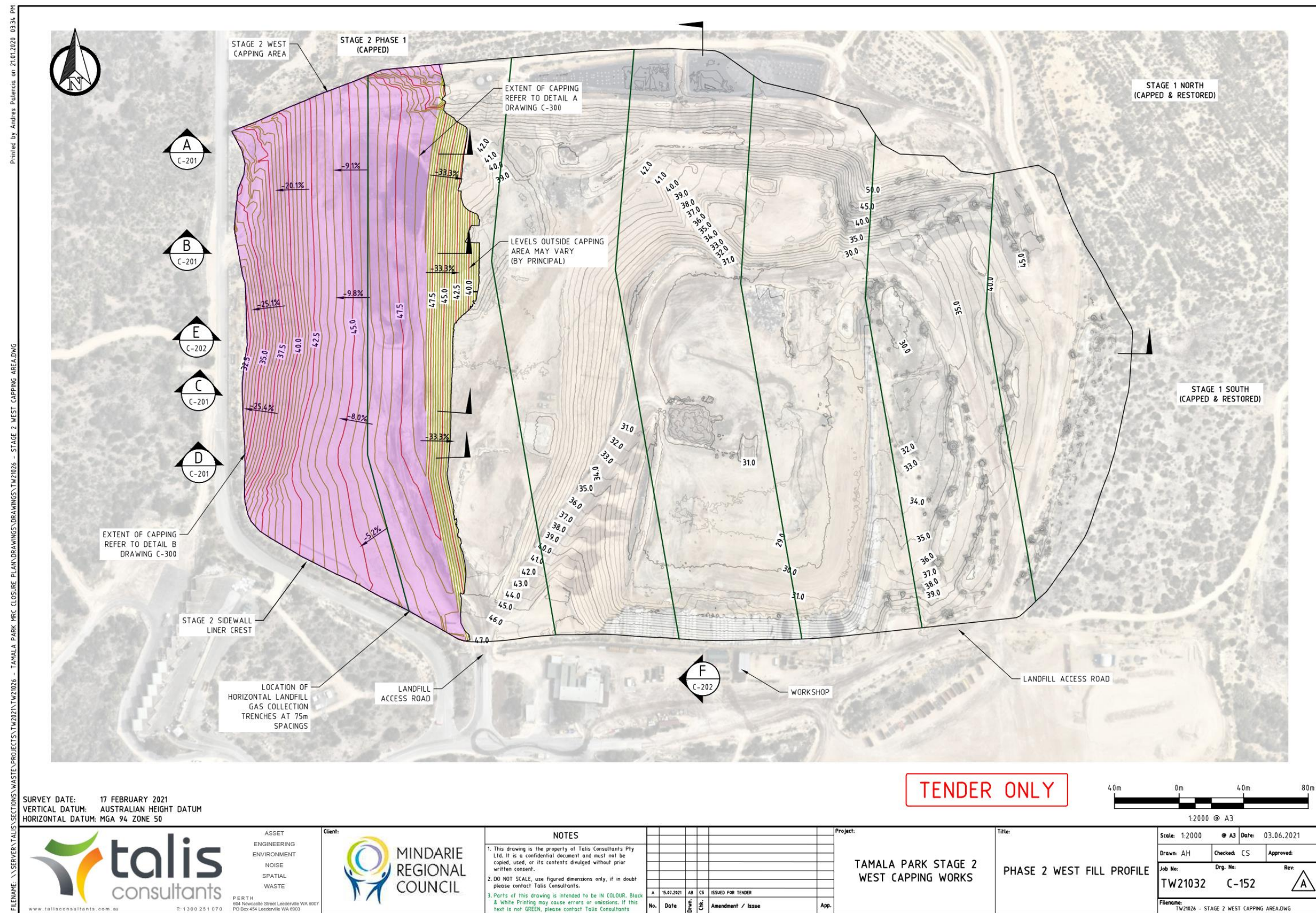


Map 3- Map of monitoring locations

The locations of the monitoring points defined in Table 4.3.1 are shown below.



Map 4- Capping location Phase 2 West





Schedule 2: Notification forms

N1 - NOTIFICATION FORM

Licence: L6963/1997/14 Licence Holder: Mindarie Regional Council

Form: N1 Date of breach:

Notification of detection of the breach of a limit.

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

Part A

Licence Number	
Name of operator	
Location of Premises	
Time and date of the detection	

Notification requirements for the breach of a limit	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	



Part B

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident.	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission.	
The dates of any previous N1 notifications for the Premises in the preceding 24 months.	

Name	
Post	
Signature on behalf of Mindarie Regional Council	
Date	



Schedule 3: Work Specifications- Landfill closure and capping works

Table S3.1: Works specifications			
Infrastructure / Equipment		Requirements (design and construction)	Reference documents
1	Final profile	(a) Final fill profile and slopes are to be between 5% and 20%	<ul style="list-style-type: none"> Schedule 1 - Map 4 – Capping Location Phase 2 West
2	Capping system Stage	<p>(a) Capping system design and construction to be undertaken in accordance with the specifications set out in the reference documents listed in column 3 of this table;</p> <p>(b) Capping system to comprised of (bottom to top):</p> <ul style="list-style-type: none"> (i) 200mm Regulating layer; (ii) Sub-cap Gas Collection Layer (geocomposite); (iii) 1.5mm thick double textured Linear Low-Density Polyethylene (LLDPE) Geomembrane Layer; (iv) Sub-surface Drainage Layer (geocomposite); (v) 1200mm of Restoration Layer, comprising: (vi) 1000mm thick layer of Site won subsoils; and (vii) 200mm thick layer of topsoil/growing medium; (viii) Vegetation Layer incorporating hydromulch / seeding to reduce erosion and advance revegetation. 	<ul style="list-style-type: none"> Schedule 1 - Map 4 – Capping Location Phase 2 West Stage 2 West Capping Works Technical Specifications Stage 2 West Capping Works Quality Assurance Plan
3	Surface water management	(a) Landfill cap side slopes must not exceed a 1:5 (V:H) gradient.	<ul style="list-style-type: none"> Schedule 1 - Map 4 – Capping Location Phase 2 West
4	Leachate management	(a) Seepage through landfill cap is to be no more than 75% of the anticipated seepage rate through the basal liner.	<ul style="list-style-type: none"> Schedule 1 - Map 4 – Capping Location Phase 2 West

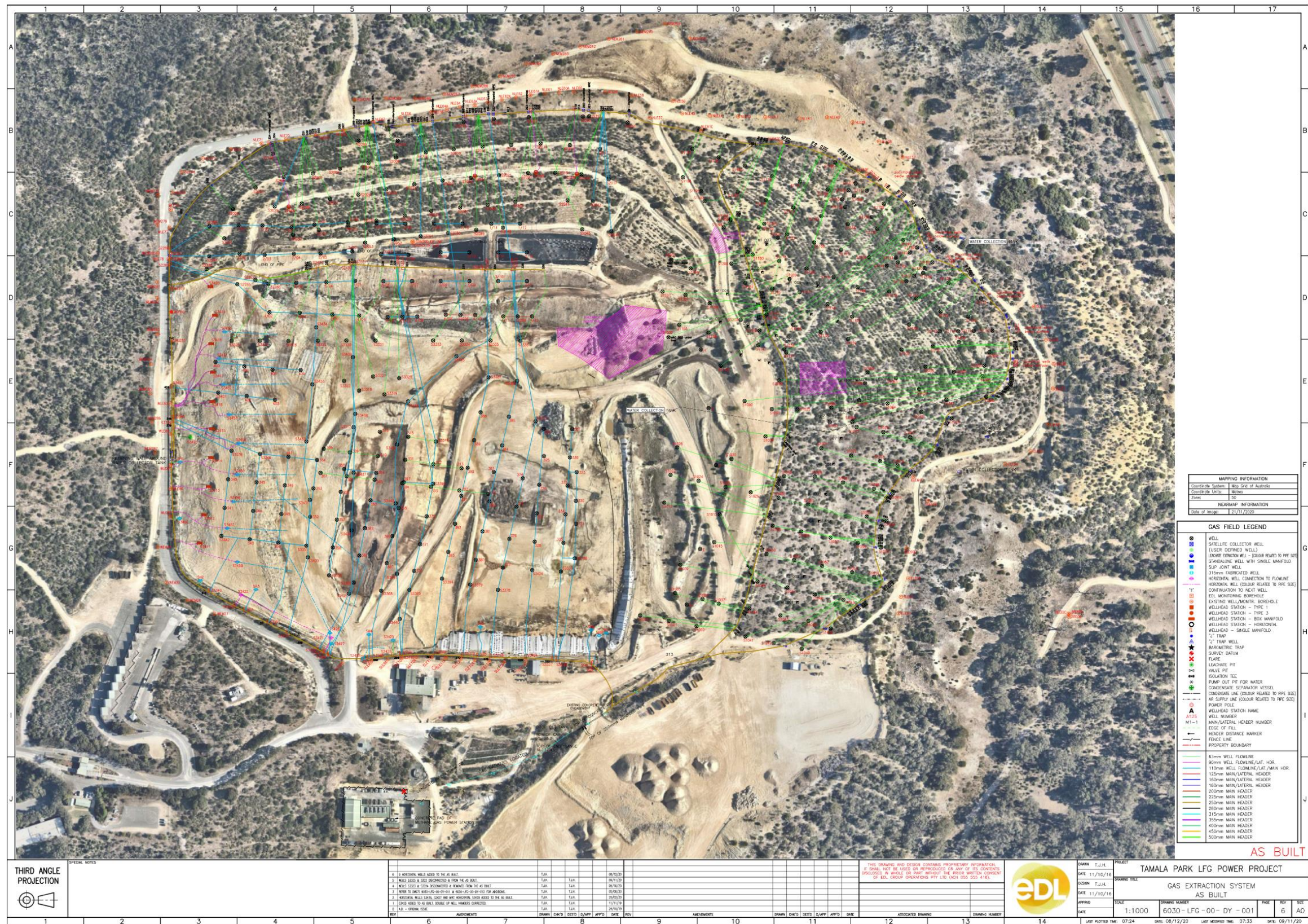


Table S3.1: Works specifications

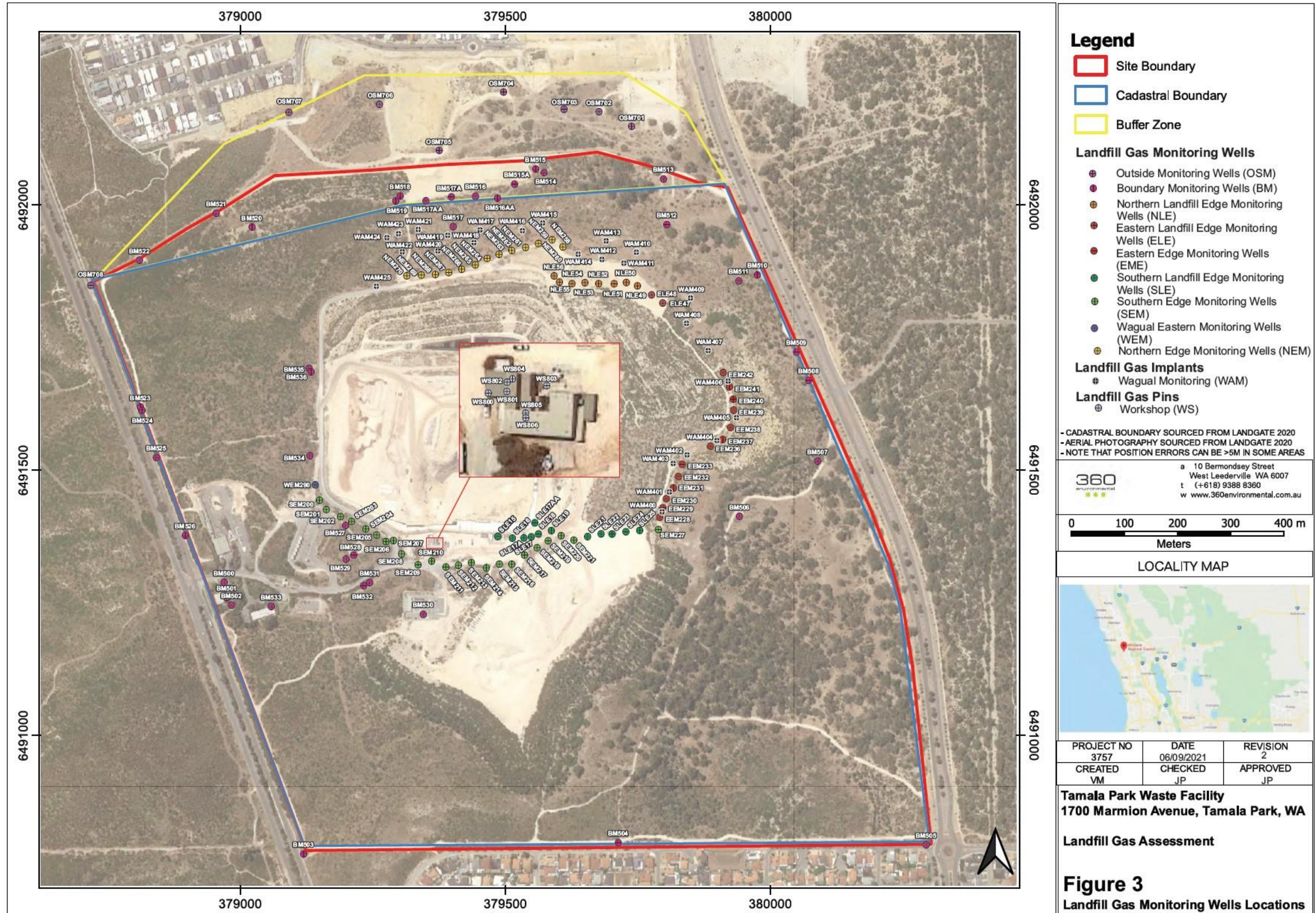
Infrastructure / Equipment		Requirements (design and construction)	Reference documents
5	Landfill Gas Management	<p>(a) All horizontal gas collection infrastructure, gas collection systems and terminating pipework to be completed in accordance with the capping technical specifications and quality assurance plan (see specification and plan reference in column 3 of this table);</p> <p>(b) Excavation of landfill gas collection trenches at the locations and to the depths shown on the capping technical specifications and quality assurance plan (see specification and plan reference in column 3 of this table);</p> <p>(i) Installation of solid and perforated HDPE horizontal pipework;</p> <p>(ii) Backfill of trenches with 20-40mm nominal gravel with separation geotextile surround;</p> <p>(iii) Construction of gravel filled condensate sumps at the toe of the slopes to return condensate into the landfill;</p> <p>(iv) Sealing of pipe penetrations through the capping system with neoprene wraps with stainless</p> <p>(v) steel banding to seal the future geomembrane pipe boot to the side of the gas well/pipework; and</p> <p>(vi) Terminating pipes with an airtight welded end cap / blanking plate for future connection to the landfill gas main.</p>	<ul style="list-style-type: none">• Schedule 4 - Landfill Gas Extraction System• Stage 2 West Capping Works Technical Specifications• Stage 2 West Capping Works Quality Assurance Plan

Schedule 4: Landfill Gas Extraction System

Map 5- Landfill gas system layout



Map 6- Landfill gas monitoring point locations





Schedule 5: Hazardous Household Wastes

Acids
Aerosols – CFC based
Aerosols, flammable – paint and lacquers
Aerosols, flammable - pesticide
Alkalies
Arsenic based products
Batteries - household, dry cell
Cyanides
Engine coolants and glycols
Fire extinguishers – non-Halon
Flammable liquids – hydrocarbons and fuels
Flammable solids
Flares
Fluorescent tubes, compact fluorescent lights and light fittings
Gas cylinders – other
Gas cylinders – propane
General household chemicals e.g., cleaners
Heavy metal compounds
Inorganic oxidising agents – e.g., pool chlorine
Low level radioactive substances e.g., smoke detectors
Mercury – elemental
Organic peroxides
Paint – metal based
Paint – other, including isocyanates and amines
Paint – recyclable
Paint – solvent based, including resins and adhesives
Paint – water based
PCB materials
Pesticides – non-Schedule X
Pesticides – Schedule X
Solvents – halogenated
Toxics



Map 7- Dangerous Goods and Recyclable Waste Site Plan

Mindarie Regional Council – Waste Management Facility

Edited Site Plan: Original Source: DGS 020256

Dangerous Goods & Recyclable Waste Site Plan

1700 Marmion Avenue, TAMALA PARK WA 6030

Rev. 1, 01 June 2019



Icon	Item	Comments
	Site Boundary	Chain wire fence. Primarily surrounds by natural bushland.
	Fire Hydrant	Site fire hydrants.
	Power isolation	Main site distribution board.
	Water Isolation x 2	Site mains water isolation.
	Fire Extinguishers	51 Dry Chem, 6 foam and 11 Co2 fire extinguishers strategically located and maintained around site.
	Fire Fighting Trucks	1 x 10k lt water truck, 1 x 10k lt water cart, 1 x 3k lt fire truck, 1 x 500lt fire ute. Principally stored at the workshop.

Notes:

1. All office buildings are of brick construction with steel roofs.
2. Workshop and House Shop are constructed from steel only.

Recyclable Waste
12 Polystyrene
13 Cardboard
14 Metal & E-waste

HOLDING AREA DETAILS

# No	Holding Area	DG Class
1	DG Compound	Class 2.1 Class 2.2 Class 3 Class 8
2	Staff Sorting Area	Minor Packages
3	Main Packaged Goods Store	Class 2.1 Class 2.2 Class 3 Class 5.1 Class 6 Class 8 Class 9 Class 9 Unknown
4	Oil Jump	CL 2000lt
5	Corrosive Services Department	Minor - Packages Class 2.1 Class 8
6	Admin/Cleaning Store	Minor Packages Class 2.1 Class 3 Class 9
7	Transfer Gas Cages	Class 2.2 - Minor
8	Transfer Temporary Storage	Minor - Packages Class 2.2 Class 2.1 Class 5.1
9	Workshop	Class 2.1, 3, 8, NDG
10	Diesel Tank - Workshop	Skl - Bulk self banded
11	Diesel Tank - Landfill	Portable store Skl, self banded

Refer to Dangerous Goods Manifest for further detail.

