



<b>Licence Number</b>	L9089/2017/1
<b>Licence Holder</b>	Opalvale Pty Ltd
<b>ACN</b>	106 512 896
<b>Registered business address</b>	Opal Vale Pty Ltd Level 3, 12 St Georges Terrace PERTH WA 6000
<b>File Number</b>	DER2017/001530
<b>Duration</b>	5 February 2019 to 4 February 2031
<b>Date of issue</b>	5 February 2019
<b>Prescribed Premises</b>	Category 64 – Class II putrescible landfill
<b>Premises</b>	Salt Valley Road Class II Landfill Chitty Road, HODDYS WELL WA 6566  Part of Lot 11 on Deposited Plan 34937 Certificate of Title Volume 2535 Folio 391 As defined by the coordinates in Schedule 1 of the Licence

This Licence is granted to the Licence Holder, subject to the following conditions, on 5 February 2019, by:

**Ed Schuller**  
**A/Director Industry Regulation**  
**REGULATORY SERVICES**

an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

## Explanatory notes

These explanatory notes do not form part of this Licence.

### Defined terms

---

Definition of terms used in this Licence can be found at the start of this Licence. Terms which are defined have the first letter of each word capitalised throughout this Licence.

### Department of Water and Environmental Regulation

---

The Department of Water and Environmental Regulation (DWER) is established under section 35 of the *Public Sector Management Act 1994* and designated as responsible for the administration of Part V, Division 3 of the *Environmental Protection Act 1986* (WA) (EP Act). The Department also monitors and audits compliance with licences, takes enforcement action and develops and implements licensing and industry regulation policy.

### Licence

---

Section 56 of the EP Act provides that an occupier of Prescribed Premises commits an offence if Emissions are caused or increased, or permitted to be caused or increased, or Waste, noise, odour or electromagnetic radiation is altered, or permitted to be altered, from Prescribed Premises, except in accordance with a works approval or licence.

Categories of Prescribed Premises are defined in Schedule 1 of the *Environment Protection Regulations 1987* (WA) (EP Regulations).

This Licence does not authorise any activity which may be a breach of the requirements of another statutory authority including, but not limited to the following:

- conditions imposed by the Minister for Environment under Part IV of the EP Act;
- conditions imposed by DWER for the clearing of native vegetation under Part V, Division 2 of the EP Act;
- any requirements under the *Waste Avoidance and Resource Recovery Act 2007*;
- any requirements under the *Environmental Protection (Controlled Waste) Regulations 2004*; and
- any other requirements specified through State legislation.

It is the responsibility of the Licence Holder to ensure that any action or activity referred to in this Licence is permitted by, and is carried out in compliance with, other statutory requirements.

The Licence Holder must comply with the Licence. Contravening a Licence Condition is an offence under s.58 of the EP Act.

### Responsibilities of a Licence Holder

---

Separate to the requirements of this Licence, general obligations of Licence Holders are set out in the EP Act and the regulations made under the EP Act. For example, the Licence Holder must comply with the following provisions of the EP Act:

- the duties of an occupier under section 61; and
- 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 (s.53).

Strict penalties apply for offences under the EP Act.

## Reporting of incidents

---

The Licence Holder has a duty to report to DWER all discharges of waste that have caused or are likely to cause Pollution, Material Environmental Harm or Serious Environmental Harm, in accordance with s.72 of the EP Act.

## Offences and defences

---

The EP Act and its regulations set out a number of offences, including:

- Offence of emitting an Unreasonable Emission from any Premises under s.49.
- Offence of causing Pollution under s.49.
- Offence of dumping Waste under s.49A.
- Offence of discharging Waste in circumstances likely to cause Pollution under s.50.
- Offence of causing Serious Environmental Harm (s.50A) or Material Environmental Harm (s.50B).
- Offence of causing Emissions which do not comply with prescribed standards (s.51).
- Offences relating to Emissions or Discharges under regulations prescribed under the EP Act, including materials discharged under the *Environmental Protection (Unauthorised Discharges) Regulations 2004 (WA)*.
- Offences relating to noise under the *Environmental Protection (Noise) Regulations 1997 (WA)*.

Section 53 of the EP Act provides that a Licence Holder commits an offence if Emissions are caused, or altered from a Prescribed Premises unless done in accordance with a Works Approval, Licence or the requirements of a Closure Notice or an Environmental Protection Notice.

Defences to certain offences may be available to a Licence Holder and these are set out in the EP Act. Section 74A(b)(iv) provides that it is a defence to an offence for causing Pollution, in respect of an Emission, or for causing Serious Environmental Harm or Material Environmental Harm, or for discharging or abandoning Waste in water to which the public has access, if the Licence Holder can prove that an Emission or Discharge occurred in accordance with a Licence.

This Licence specifies the Emissions and Discharges, and the limits and Conditions which must be satisfied in respect of Specified Emissions and Discharges, in order for the defence to offence provision to be available.

## Authorised Emissions and Discharges

---

The Specified and General Emissions and Discharges from Primary Activities conducted on the Prescribed Premises are authorised to be conducted in accordance with the Conditions of this Licence.

Emissions and Discharges caused from other activities not related to the Primary Activities at the Premises have not been Conditioned in this Licence. Emissions and Discharges from other activities at the Premises are subject to the general provisions of the EP Act.

## Amendment of licence

---

The Licence Holder can apply to amend the Conditions of this Licence under s.59 of the EP Act. An application form for this purpose is available from DWER.

The CEO may also amend the Conditions of this Licence at any time on the initiative of the CEO without an application being made.

Amendment Notices constitute written notice of the amendment in accordance with s.59B(9) of the EP Act.

### Duration of Licence

---

The Licence will remain in force for the duration set out on the first page of this Licence or until it is surrendered, suspended or revoked in accordance with s.59A of the EP Act.

### Suspension or revocation

---

The CEO may suspend or revoke this Licence in accordance with s.59A of the EP Act.

### Fees

---

The Licence Holder must pay an annual licence fee. Late payment of annual licence fees may result in the licence ceasing to have effect.

Late fees are a component of annual licence fees and should a Licence Holder fail to pay late fees within the time specified the licence will similarly cease to have effect.

# Definitions and interpretation

## Definitions

In this Licence, the terms in Table 1 have the meanings defined.

**Table 1: Definitions**

Term	Definition
ACN	Australian Company Number
Annual Period	means a 12 month period commencing from 1 January until 31 December.
Condition	means a condition to which this Licence is subject under s.62 of the EP Act.
Books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer. CEO for the purposes of notification means: Director General Department Administering the <i>Environmental Protection Act 1986</i> Locked Bag 33 Cloisters Square PERTH WA 6850 <a href="mailto:info-der@dwer.wa.gov.au">info-der@dwer.wa.gov.au</a>
Compliance Report	means a report in a format approved by the CEO as presented by the Licence Holder or as specified by the CEO (guidelines and templates may be available on the Department's website).
Contaminated Solid Waste	Means contaminated soil as defined by the Landfill Definitions
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> and designated as responsible for the administration of Part V, Division 3 of the EP Act.
Department Request	means a request for Books or other sources of information to be produced, made by an Inspector or the CEO to the Licence Holder in writing and sent to the Licence Holder's address for notifications, as described at the front of this Licence, in relation to: <ul style="list-style-type: none"><li>(a) compliance with the EP Act or this Licence;</li><li>(b) the Books or other sources of information maintained in accordance with this Licence; or</li><li>(c) the Books or other sources of information relating to Emissions from the Premises.</li></ul>

Term	Definition
Discharge	has the same meaning given to that term under the EP Act.
DWER	Department of Water and Environmental Regulation.
Emission	has the same meaning given to that term under the EP Act.
Environmental Harm	has the same meaning given to that term under the EP Act.
EP Act	means the <i>Environmental Protection Act 1986</i> (WA).
EP Regulations	means the <i>Environmental Protection Regulations 1987</i> (WA).
Implementation Agreement or Decision	has the same meaning given to that term under the EP Act.
Inspector	means an inspector appointed by the CEO in accordance with s.88 of the EP Act.
Landfill Definitions	means the document titled "Landfill Waste Classification and waste Definitions 1996" published by the CEO as amended from time to time.
Landfill Management Plan	means the document titled Opalvale Salt Valley Road Class II Landfill. Lot 11 Chitty Road, Toodyay. Landfill Management Plan. Prepared for Opalvale Pty Ltd, by IW Projects Pty Ltd. Rev 4. Dated 9 January 2019.
Licence	refers to this document, which evidences the grant of a Licence by the CEO under s.57 of the EP Act, subject to the Conditions.
Licence Holder	refers to the occupier of the premises being the person to whom this Licence has been granted, as specified at the front of this Licence.
Material Change	means a change to the activities carried out on the Premises as described by the Primary Activities set out in Schedule 2 and: <ul style="list-style-type: none"> <li>(a) that may result in an increased risk to public health, amenity or the environment; and</li> <li>(b) includes the types of changes specified in Schedule 2; and</li> <li>(c) does not include the excluded changes specified in Schedule 2.</li> </ul>
Material Environmental Harm	has the same meaning given to that term under the EP Act.

Term	Definition
NATA	National Association of Testing Authorities
NEPM	National Environment Protection (Assessment of Site Contamination) Measure
Pollution	has the same meaning given to that term under the EP Act.
Premises	refers to the premises to which this Licence applies, as specified at the front of this Licence and as shown on the map in Schedule 1 to this Licence.
Prescribed Premises	has the same meaning given to that term under the EP Act.
Primary Activities	refers to the Prescribed Premises activities listed on the front of this Licence as described in Schedule 2, at the locations shown in Schedule 1.
Reportable Event	means an event referenced in Condition 33.
Serious Environmental Harm	has the same meaning given to that term under the EP Act.
Unreasonable Emission	has the same meaning given to that term under the EP Act.
Waste	has the same meaning given to that term under the EP Act.

## Interpretation

In this Licence:

- (a) the words 'including', 'includes' and 'include' will be read as if followed by the words 'without limitation';
- (b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;
- (c) where tables are used in a Condition, each row in a table constitutes a separate Condition;
- (d) any reference to an Australian or other standard, guideline or code of practice in this Licence means the version of the standard, guideline or code of practice in force at the time of granting of this Licence and includes any amendments to the standard, guideline or code of practice which may occur from time to time during the course of the Licence; and
- (e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act.

# Conditions

## Emissions

1. The Licence Holder must not cause any Emissions from the Primary Activities on the Premises except for the Emission types (including specified Emissions and general Emissions) described in Table 2 subject to the exclusions, limitations or requirements specified in Table 2.

**Table 2: Authorised Emissions table**

Emission type	Exclusions/Limitations/Requirements
<b>Specified Emissions</b>	
None	None
<b>General Emissions (excluding Specified Emissions)</b>	
Emissions which: <ul style="list-style-type: none"><li>• arise from the Primary Activities set out in Schedule 2; or</li><li>• arise from a Material Change.</li></ul>	Emissions excluded from General Emissions are: <ul style="list-style-type: none"><li>• Unreasonable Emissions; or</li><li>• Emissions that result in, or are likely to result in, Pollution, Material Environmental Harm or Serious Environmental Harm; or</li><li>• Discharges of Waste in circumstances likely to cause Pollution; or</li><li>• Emissions that result, or are likely to result in, the Discharge or abandonment of Waste in water to which the public has access; or</li><li>• Emissions or Discharges which do not comply with an Approved Policy; or</li><li>• Emissions or Discharges which do not comply with a prescribed standard; or</li><li>• Emissions or Discharges which do not comply with the conditions in an Implementation Agreement or Decision; or</li><li>• Emissions or Discharges the subject of offences under regulations prescribed under the EP Act, including materials discharged under the Environmental <i>Protection</i></li></ul>

Emission type	Exclusions/Limitations/Requirements
	<i>(Unauthorised Discharges) Regulations 2004.</i>

## Acceptance and throughput restrictions

2. The Licence Holder must only accept waste at the Premises if:
- (a) It is of a type specified in in Table 3;
  - (b) It meets the acceptance specification and is below the quantity limit specified in Table 3; and
  - (c) Meets the waste acceptance criteria specified for Class II landfills as detailed in the Landfill Definitions.

**Table 3: Waste types and acceptance specifications**

Waste type	Acceptance specification <sup>1</sup>	Quantity limit per annual period
Clean fill and Uncontaminated fill	None specified	Combined total of 150,000 tonnes per annual period
Inert Waste Type 1	Waste containing visible asbestos or ACM shall not be accepted as Inert Waste Type 1	
Inert Waste Type 2	Tyres <sup>2</sup> and plastic only	
Special Waste Type 1	Waste must only be accepted only if labelled, double wrapped in heavy duty polyethylene (0.2mm thick) or otherwise contained to prevent generation of airborne fibres and labelled appropriately.	
Special Waste Type 2	Clinical waste may only be received that are contained and labelled appropriately.  Radioactive wastes shall not be accepted.	
Putrescible Waste	Must meet the acceptance criteria for Class II landfills	
Contaminated solid waste		

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 storage and burial of tyres can be found in the *Environmental Protection Regulations 1987*.

3. The Licence Holder shall ensure that where waste does not meet the waste acceptance criteria set out in Condition 2 it is removed from the Premises by the delivery vehicle or, where that is not possible, stored in a quarantined storage area or container within the Cell 1 footprint and removed to an appropriately authorised facility as soon as practicable.

## Infrastructure and equipment

4. The Licence Holder must ensure that the infrastructure and equipment specified in Table 4 is maintained in good working order and operated and maintained in accordance with the requirements specified in Table 4.
5. The Licence Holder shall ensure that waste material described in in Table 4 is only disposed and stored within infrastructure and equipment with the corresponding infrastructure requirement(s) as detailed in Table 4.

**Table 4: Containment Infrastructure**

Infrastructure and equipment	Material	Infrastructure requirement(s)
Class II Landfill Cells	Clean Fill Class I and Class II Putrescible and Contaminated Solid Waste Inert Waste Type 1 Inert Waste Type 2 Special Waste Type 1	<ul style="list-style-type: none"><li>• Composite lining system to achieve a permeability of less than <math>5 \times 10^{-11}</math> metres per second or equivalent; and</li><li>• Leachate collection system that extends across the base and sides of each cell to intercept all vertical and lateral seepage occurring through the waste.</li><li>• A separation distance of at least two (2) metres shall be maintained between the maximum groundwater table elevation and the base of the lining system for Cell 1, with the exception of the leachate sump (6 m x 6 m area below the sump)</li></ul>
Leachate Ponds 1 and 2	Landfill leachate from Cell 1	<ul style="list-style-type: none"><li>• Composite lining system to achieve a permeability of less than <math>5 \times 10^{-11}</math> metres per second or equivalent;</li><li>• Maintenance of a freeboard of no less than 500 mm; and</li><li>• Maintained free of vegetation.</li></ul>

6. The Licence Holder must ensure that the infrastructure and equipment specified in Table 5 is maintained in good working order and operated and maintained in accordance with the requirements specified in Table 5.

**Table 5: General operational infrastructure**

Infrastructure and equipment	Infrastructure requirement(s)
Plant and Machinery	<ul style="list-style-type: none"><li>• Maintained according to manufacturer's instructions</li><li>• Be regularly maintained to limit unnecessary noise</li></ul>
Leachate management system (including pumps, pipework, sensors, monitoring devices and operational controls)	<ul style="list-style-type: none"><li>• Inspected and maintained (monthly) to ensure system is free of blockage, and sensors and monitoring devices are operating correctly and in accordance with the requirements of the Landfill Management Plan.</li></ul>
Firefighting equipment	<ul style="list-style-type: none"><li>• Comprises a water tanker or fire truck that is filled with water at all times; and</li><li>• Fire water storage tank contains a minimum of 50 kL of water at all times.</li></ul>
Surface water diversion structure and bunds	<ul style="list-style-type: none"><li>• Inspected prior to onset of winter rainfall, and following significant storm events to ensure efficient conveyance of water;</li><li>• Maintained to prevent sediment loads within the silt traps within 0.5 m of the top of the silt trap.</li></ul>
Groundwater monitoring bores	<ul style="list-style-type: none"><li>• Maintained to ensure accessibility for quarterly groundwater monitoring in accordance with the requirements of Conditions 24, 29 and 30.</li></ul>
Reticulation infrastructure	<ul style="list-style-type: none"><li>• Inspected and maintained (monthly) to ensure correct operation in the conveyance of leachate to active landfill cells for recirculation.</li></ul>

## Operational requirements

7. The Licence Holder shall ensure that wastes accepted onto the Premises are only subjected to the process(es) set out in Table 6 and in accordance with any process limits or specifications described in that Table.

**Table 6: Waste processes**

Waste type	Process(es)	Process limits or specifications <sup>1,2,3</sup>
All waste types received on the Premises	Disposal of waste by landfilling	Shall only take place within Cells 1 as shown in Schedule 1.  No waste shall be temporarily stored or landfilled within 35 m from the boundary of the premises.
Contaminated Solid Waste	Receipt, handling and disposal by landfilling	Shall only be received with accompanying documentation verifying that it meets the Waste acceptance requirements of Condition 2.
Clean Fill or uncontaminated fill	Receipt, handling, Storage prior to removal offsite or disposal by landfilling	None specified
Inert Waste Type 1		Crushing and screening of Inert Waste Type 1 is not permitted.
Inert Waste Type 2		None specified
Special Waste Type 1	Receipt, handling and disposal by landfilling	Only to be disposed of into a designated asbestos disposal area within landfill cells as defined on a site map to be available onsite at all times.  Not to be disposed within 2 m of the final tipping surface of the landfill.  No works shall be carried out on the landfill that could lead to a release of asbestos fibres.
Special Waste Type 2	Receipt, handling and disposal by landfilling	Only to be disposed of into a designated biomedical waste disposal area within landfill cells as defined on a site map to be available onsite at all times.  Not to be disposed within 2 m of the final tipping surface of the landfill.  No works shall be carried out on the landfill that could lead to disturbance of biomedical wastes.

Note 1: Requirements for landfilling tyres are set out in Part 6 of the *Environmental Protection Regulations 1987*.

Note 2: 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*.

Note 3: Additional requirements for the acceptance, handling and landfilling of biomedical wastes are set out in the *Environmental Protection (Rural landfill) regulations 2002*, and the *Biohazard Waste Industry Code of Practice for the Management of clinical and Related Waste (6<sup>th</sup> Ed)*, Waste Management Association of Australia, June 2010.

8. The Licence Holder shall manage the landfilling activities to ensure:
- The size of the tipping face is kept to a minimum and not larger than 30 m in width and 2 m in height;
  - The active tipping area is wet down as required to minimise dust generation associated with vehicle movement and during waste and cover placement;
  - Waste is levelled and compacted as soon as practicable after it is discharged and at a minimum of the end of the day;
  - Waste is placed and compacted to ensure all faces are stable and capable of retaining further waste placement or placement of cover or rehabilitation material; and
  - Rehabilitation of a cell or phase commences within 6 months after disposal in that cell or phase has been completed.
9. The Licence Holder shall ensure that daily cover is applied and maintained on landfilled waste types in accordance with Table 7 and that sufficient stockpiles of appropriate cover materials, as specified in the Landfill Management Plan, are maintained on site at all times.

**Table 7: Minimum daily cover requirements**

Waste type	Cover requirement(s) <sup>1</sup>
Inert Waste Type 1	<ul style="list-style-type: none"> <li>No cover required.</li> </ul>
Inert Waste Type 2	<ul style="list-style-type: none"> <li>To be covered by the end of the working day in which the waste was disposed with 150 mm of Inert Waste Type 1 or soil or other material as outlined in the Landfill Management Plan.</li> </ul>
Special Waste Type 1	<ul style="list-style-type: none"> <li>To be covered with 300 mm of soil as soon as practicable and not later than the end of the working day after being disposed, and before being compacted to prevent the release of asbestos fibres as a result of compaction and other landfilling activities.</li> </ul>
Special Waste Type 2	<ul style="list-style-type: none"> <li>To be covered with 300 mm of soil as soon as practicable and not later than the end of the working day after being disposed, and before being compacted to prevent further disturbance as a result of compaction and other landfilling activities.</li> </ul>
All other Class I and Class II waste and Contaminated Solid Waste	<ul style="list-style-type: none"> <li>To be covered by the end of the working day in which the waste was disposed with 150 mm of Inert Waste Type 1 or soil or other material as outlined in the Landfill Management Plan.</li> </ul>

Note 1: Additional requirements for final cover of tyres are set out in Part 6 of the *Environmental Protection Regulations 1987*.

10. The Licence Holder must manage the landfilling activities by:
- With the exception of Special Waste Type 1, covering surfaces which have not received active waste for more than 90 days with an intermediate cover of

at least 300 mm with a graded slope of at least 2% to promote run-off away from the active tipping face;

- (b) For Special Waste Type 1, covering surfaces which have not received active waste for more than 90 days with an intermediate cover of at least 1,000 mm with a graded slope of at least 2% to promote run-off away from the active tipping face;
  - (c) Removing the intermediate cover when landfilling recommences to prevent perched water accumulating in the landfill; and
  - (d) Covering waste with a final cover of at least one metre, or in the instance of Special Waste Type 1, two metres.
- 11.** The Licence Holder shall implement the following security measures at the site:
- (a) Erect and maintain suitable perimeter fencing to prevent unauthorised access to the operational areas of the Premises;
  - (b) Ensure that any entrance gates to the Premises are securely locked when the Premises is unattended;
  - (c) Undertake regular inspections of all security measures and repair damage as soon as practicable; and
  - (d) Erect and maintain a 2 m high fence around the active landfill and the perimeter of the leachate ponds.
- 12.** The Licence Holder shall take all reasonable and practical measures to ensure that no wind-blown waste escapes from the Premises including:
- (a) Ensuring wind-blown waste is collected from the landfill area on a daily basis and from the greater Premises area on at least a weekly basis and returned to the tipping area or appropriately contained; and
  - (b) Installation of a 4 m high temporary or mobile litter panels near the active landfill area.
- 13.** The Licence Holder shall undertake, at least monthly, an inspection of the Premises and record and instances of:
- (a) Identification of vermin, pests or weeds.
- 14.** The Licence Holder shall take all practical measures to ensure that the process control parameters in Table 8 comply with the trigger level specified in that Table.

**Table 8: Process controls for leachate management**

Reference	Parameter	Operational level
PC1	Leachate head within the leachate sump (location PM1 as depicted in the Figure in Schedule 3)	Less than or equivalent to 800 mm within the sump <sup>1</sup>
PC2	Leachate Pond 1 freeboard	Greater than or equivalent to 500 mm
PC3	Leachate Pond 2 freeboard	Greater than or equivalent to 500 mm

Note 1: An 800 mm leachate head within the sump is equivalent to approximately 300 mm of leachate over the composite liner in the vicinity of the sump.

15. In case of the occurrence of an Event at a corresponding reference point as specified in Table 9, the Licence Holder shall take the relevant Management action as specified in Table 9.

**Table 9: Management actions**

Event/ action reference	Event	Process control parameter reference in Table 8	Management action
EA1	Any time the leachate head exceeds the operational level in Table 8.	PC1	<p>The Licence Holder shall undertake leachate management measures as defined the Landfill Management Plan within 24 hours of observing the exceedance.</p> <p>Where inspection and monitoring indicate failure or blockage of the leachate collection system, the Licence Holder shall remove leachate from the system via liquid waste transport to a licensed liquid waste facility within 48 hours of observing the exceedance.</p> <p>Where inspection and monitoring indicate failure or blockage of the leachate collection system, the Licence Holder shall notify the CEO in accordance with Condition 38.</p>
EA2	Any time the freeboard in Leachate Ponds 1, or 2 is less than the operational level prescribed in Table 8.	PC2 PC3	<p>The Licence Holder shall undertake management measures as defined in Landfill Management Plan within 24 hours of observing the exceedance.</p> <p>Where inspection and monitoring indicate failure or blockage of the leachate collection system, the Licence Holder shall remove leachate from the system via liquid waste transport to a licensed liquid waste facility within 48 hours of observing the exceedance.</p> <p>Where inspection and monitoring indicate failure or blockage of the leachate collection system, the Licence Holder shall notify the CEO in accordance with Condition 38.</p>

16. The Licence Holder must divert stormwater from areas of the Premises where waste is stored, and any stormwater which has come into contact with waste storage areas is to be retained within Cell 1 or associated leachate management infrastructure.

- 17.** The Licence Holder must immediately clean any spills of waste or leachate outside of a vessel/container or infrastructure specified by Table 4.
- 18.** The Licence Holder must manage asbestos by:
- (a) Only disposing of asbestos and ACM within the designated areas of the landfill (as identified on a site map to be available at all times on the Premises, and by signage within Cell 1), under the supervision of a person nominated by the Licence Holder;
  - (b) Covering asbestos and ACM by the end of the working day with a dense, inert and incombustible material to a depth of at least 300 mm;
  - (c) Maintaining a register of burials of asbestos and ACM stating as a minimum, the date, the person's name, that the waste has been covered in accordance with the licence conditions, and where more than one square metre of waste was covered, grid coordinates with reference to the plan of the landfill site so that the position of the waste can be easily and accurately ascertained; and
  - (d) Operating the landfill in such a way that asbestos and ACM is not buried within two metres of the final waste landform surface and ensuring that asbestos and ACM which has been buried remains undisturbed.
- 19.** The Licence Holder must manage Biomedical wastes by:
- (a) Only disposing of clinical and related wastes within the designated areas of the landfill (as identified on a site map to be available at all times on the Premises, and by signage within Cell 1), under the supervision of a person nominated by the Licence Holder;
  - (b) Covering Clinical and related wastes by the end of the working day with a dense, inert and incombustible material to a depth of at least 300 mm;
  - (c) Maintaining a register of burials of clinical and related wastes stating as a minimum, the date, the disposer's details, the origin of the waste, that the waste has been covered in accordance with the licence conditions, and where more than one square metre of waste was covered, grid coordinates with reference to the plan of the landfill site so that the position of the waste can be easily and accurately ascertained; and
  - (d) Operating the landfill in such a way that clinical and related waste is not buried within two metres of the final waste landform surface and ensuring that waste which has been buried remains undisturbed.
- 20.** The Licence Holder must ensure that waste is not burnt at the Premises.
- 21.** The Licence Holder is not permitted to clear any native vegetation on the Premises under this licence.
- 22.** The Licence Holder must restrict vehicle speeds on the premises to below 40 km per hour.

## Specified Actions

- 23.** The Licence Holder shall submit to the CEO the Information in Table 10 in accordance with the Requirements and Timescale outlined in Table 10.

**Table 10: Specified actions**

	Information	Requirement(s)	Timescale
1	Assessment of liner integrity of unconfined liner in Cell 1	<p>Report on the assessment of integrity of the liner system in accordance with recommendations made in Golder Associates (2018) Desktop liner integrity assessment (Add note). Report shall include testing and conformance to testing required in the Construction Quality Assurance Plan approved under works approval (W5800/2015/1) and Associated Amendments.</p> <p>Should liner integrity be found to be insufficient for operation of the Cell, remediation works are required to be undertaken to ensure the unconfined Cell 1 liner meets the specification of Landfill Cells described in Table 4 and as required by the works approval (W5800/2015/1) and Associated Amendments.</p>	6 months prior to waste placement reaching the unconfined liner level
2	Final Capping Plan – as part of the Capping and Rehabilitation design	Report including the final detailed design with associated stability and technical assessments, material specifications, landfill gas collection infrastructure details, current and finished surveyed levels, and construction quality assurance reporting requirements.	3 months prior to; completion of waste disposal over an area of approximately 2 ha or completion of Cell 1, whichever is sooner
3	Completion report for Cap Installation	Report on the completed capping works in accordance with the Capping Plan previously submitted to the CEO.	Within 6 months of the completion of Capping works

	Information	Requirement(s)	Timescale
4	Landfill Gas Management Contractor engagement	<p>Engagement of a landfill gas management contractor is required to produce the following in accordance with works approval W5800/2015/1:</p> <ul style="list-style-type: none"> <li>• Final landfill gas management plan; and</li> <li>• Final design for landfill gas management infrastructure and activities for closure of Cell 1.</li> </ul>	Within two years of commencement of waste placement in Cell 1.

Note 1: Golder, 2018. Opal Vale Landfill – DWER Liner query dated 8 November 2018. Letter report prepared for Opalvale Pty Ltd. Ref 1895317-002-L-Rev1. 6 December 2018.

## Monitoring requirements

- 24.** The Licence Holder shall ensure that:
- Monthly monitoring is undertaken at least 15 days apart;
  - Six (6) monthly monitoring is undertaken at least five (5) months apart; and
  - Annual monitoring is undertaken at least nine (9) months apart.
- 25.** The Licence Holder shall undertake the monitoring of parameters specified in Table 11 according to the specifications on that table.

**Table 11: Monitoring of inputs and outputs**

Input/Output	Parameter	Units	Frequency
Waste Inputs	Clean Fill, Uncontaminated Fill, Inert Waste Type 1, Inert Waste Type 2, Special Waste Type 1, Putrescible waste and Contaminated Solid Waste.	tonnes	Each load arriving at the Premises
Waste Outputs	Waste types as defined in the Landfill Definitions		Each load leaving or rejected from the Premises

- 26.** The Licence Holder shall ensure that:
- All liquid samples are collected and preserved in accordance with AS/NZS 5667.1;
  - All wastewater sampling is conducted in accordance with AS/NZS 5667.10;

- (c) All surface water sampling is conducted in accordance with AS/NZS 5667.4;
- (d) All groundwater sampling is conducted in accordance with AS/NZS 5667.11;
- (e) All laboratory samples are submitted to and tested by a laboratory with NATA accreditation for the parameters being measured unless indicated otherwise within the relevant table.

- 27.** 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. The Licence Holder shall monitor and record, at a minimum, the Parameters specified in Table 12 at the locations, levels and recording frequency specified in the Table.

**Table 12: Leachate Management System monitoring requirements**

Parameter	Location	Operational levels	Recording period
Depth of leachate	Leachate Sump 1 (Cell 1)	300 mm over landfill liner	Minimum of once a week
	Leachate Ponds 1 and 2	Less than minimum freeboard as specified in Table 8	Weekly
Volume of leachate	Pumped from sump to ponds	N/A	Weekly
	Pumped out of leachate ponds	N/A	Weekly

- 28.** The Licence Holder shall undertake the process monitoring at the monitoring point reference locations specified in Table 13, and shown on the map in Schedule 3, according to the specifications in that Table.

**Table 13: Process monitoring**

Monitoring point reference	Process description	Parameter	Units	Frequency	Method
PM1	Leachate head within leachate sumps 1 (Cell 1)	Depth	mm	Daily	Depth to be measured prior to commencement of pumping of leachate from the sump
PM1	Leachate extracted from leachate sump 1 (Cell 1)	pH <sup>1</sup>	pH units	Quarterly	In accordance with Condition 26
		Electrical conductivity <sup>1</sup>	µS/cm		
		Total soluble solids	mg/L		
		Cations and anions – Potassium, chloride and sulfate			
		Total metals – arsenic (total) cadmium, chromium, copper, iron (total), lead manganese, mercury, molybdenum, nickel, selenium, zinc			
		Nutrients – Ammoniacal nitrogen, nitrate-nitrogen, total nitrogen, total phosphorus, total organic carbon, chemical oxygen demand			
		Total recoverable hydrocarbons Monocyclic aromatic hydrocarbons – benzene, toluene, methylbenzene, xylene (total) Polycyclic aromatic hydrocarbons – acenaphthene, anthracene, ben(a)pyrene, fluoroanthene, naphthalene, pyrene Organochlorine pesticides – Aldrin, chlordane (and	µg/L	6 monthly	

Monitoring point reference	Process description	Parameter	Units	Frequency	Method
		metabolites), DDT (and metabolites), dieldrin, chlorpyrifos, HCB, heptachlor (and its epoxide), lindane  Organophosphates – parathion, demeton-S-methyl, malathion, diazinon, demthoate, fenamiphos, fenthion  Other – atrazine, TCE, PCE and polychlorinated biphenyls (total)			

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

- 29.** The Licence Holder shall undertake the monitoring at the monitoring point reference locations specified in Table 14 and Table 15, and shown on the map in Schedule 3 according to the specifications in those tables.

**Table 14: Monitoring of ambient surface water quality**

Monitoring point reference and location	Parameter	Units	Averaging period	Frequency	Method
SW3	pH <sup>1</sup>	pH units	Spot sample	6 monthly, when runoff water is being released to the farm dam.	In accordance with Condition 26
	Electrical conductivity <sup>1</sup>	µS/cm			
	Cations and anions – Potassium, chloride and sulfate	mg/L or ug/L	Spot sample		
	Total metals – arsenic (total) cadmium, chromium, copper, iron (total), lead manganese, mercury, molybdenum, nickel, selenium, zinc				
	Nutrients – Ammoniacal nitrogen, nitrate-nitrogen, total nitrogen, total phosphorus, total organic carbon, chemical oxygen demand  Total recoverable hydrocarbons				

Monitoring point reference and location	Parameter	Units	Averaging period	Frequency	Method
SW1 and SW2	pH <sup>1</sup>	pH units	Spot sample	Two sampling events between the months of May and September, separated by at least 30 days (when water is flowing)	In accordance with Condition 26
	Electrical conductivity <sup>1</sup>	µS/cm			
	Total suspended solids	mg/L or ug/L	Spot sample		
	Total soluble solids				
	Cations and anions – Potassium, chloride and sulfate				
	Total metals – arsenic (total) cadmium, chromium, copper, iron (total), lead manganese, mercury, molybdenum, nickel, selenium, zinc				
	Nutrients – Ammoniacal nitrogen, nitrate-nitrogen, total nitrogen, total phosphorus, total organic carbon, chemical oxygen demand				
Total recoverable hydrocabons					

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

**Table 15: Monitoring of ambient groundwater quality**

Monitoring point reference and location	Parameter	Units	Averaging period	Frequency	Method
SE1, SE2, SE3, SE4, SE5, SE6, SE7, SE8, SE9, C1, C2, C3, C4, C5, C6	Standing water level <sup>1</sup>	mAHD	Instantaneous	Quarterly	In accordance with Condition 26
	pH <sup>1</sup>	pH units	Spot sample		
	Electrical conductivity <sup>1</sup>	µS/cm			
	Total soluble solids	mg/L	Spot sample		
	Cations and anions – Potassium, chloride and sulfate				

Monitoring point reference and location	Parameter	Units	Averaging period	Frequency	Method
	Dissolved metals – arsenic (total) cadmium, chromium, copper, iron (total), lead manganese, mercury, molybdenum, nickel, selenium, zinc				
	Nutrients – Ammoniacal nitrogen, nitrate-nitrogen, total nitrogen, total phosphorus				
	Total recoverable hydrocarbons  Monocyclic aromatic hydrocarbons – benzene, toluene, methylbenzene, xylene (total)  Polycyclic aromatic hydrocarbons – acenaphthene, anthracene, ben(a)pyrene, fluoroanthene, naphthalene, pyrene  Organochlorine pesticides – Aldrin, chlordane (and metabolites), DDT (and metabolites), dieldrin, chlorpyrifos, HCB, heptachlor (and its epoxide), lindane  Organophosphates – parathion, demeton-S-methyl, malathion, diazinon, demeton, fenamiphos, fenthion  Other – atrazine, TCE, PCE and polychlorinated biphenyls (total)	µg/L		6 monthly	

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

**30.** Field records should be kept for sampling undertaken in accordance with Conditions 27, 28 and 29 should be and must include as a minimum:

(a) Date, location and time of sampling;

- (b) Sampling equipment and methodology of sample collection;
  - (c) Depth sample was collected from;
  - (d) Sample collection point description and information (height of water depth, height of casing, total depth of water, etc.);
  - (e) SWL before and after sampling (where relevant);
  - (f) Purge volume (where relevant); and
  - (g) Observations of sample (e.g. colour, turbidity, odour, presence of sheen, effervescence etc.)
- 31.** The Licence Holder must adhere to the following field quality assurance and quality control procedures as specified in Schedule B2 of the Assessment of Site Contamination NEPM and must include as a minimum:
- (a) Decontamination procedures for the cleaning of tools and sampling equipment before sampling and between samples;
  - (b) Field instruction calibration for instruments used on site;
  - (c) Blind replicate samples and rinsate blanks must be collected in the field and sent to the relevant laboratory to determine the precision of the field sampling and laboratory analytical program;
  - (d) Completed field monitoring sheets/sampling logs for each sample collected, time, location, initials of sampler, sampling method, field analysis results, duplicate type/location (if relevant) and site observations and weather conditions; and
  - (e) Chain-of-custody documentation must be completed which details the following information: site identification; the sampler; nature of the sample; collection time and date; analyses to be performed; sample preservation method; departure time from site; dispatch courier(s); and arrival time at laboratory.
- 32.** All monitoring must be undertaken by laboratories with current NATA accreditation for the analysis specified unless otherwise specified in Conditions 27, 28 and 29.

## Record-keeping

- 33.** The Licence Holder must maintain accurate and auditable Books including the following records, information, reports and data required by this Licence:
- (a) The calculation of fees payable in respect of this Licence;
  - (b) The specific actions required by Condition 23 of this Licence;
  - (c) The maintenance of infrastructure required to ensure that it is kept in good working order in accordance with Condition 6 of this Licence;
  - (d) Monitoring undertaken in accordance with Conditions 24 to 32 and Schedule 3 of this Licence;
  - (e) Reportable Events reported in accordance with Condition 15 of this Licence; and
  - (f) Complaints received under Condition 34 of this Licence; and
  - (g) Any material change
- In addition, the Books must:

- (h) Be legible;
  - (i) If amended, be amended in such a way that the original and subsequent amendments remain legible and are capable of retrieval;
  - (j) Be retained for at least 3 years from the date the Books were made; and
  - (k) Be available to be produced to an Inspector or the CEO.
- 34.** The Licence Holder must record the number and details of any complaints received by the Licence Holder relating to its obligations under this Licence and its compliance with Part V of the EP Act at the Premises, and any action taken by the Licence Holder in response to the complaint. Details of complaints must include:
- (a) An accurate record of the concerns or issues raised, for example a copy of any written complaint or a written note of any verbal complaints made;
  - (b) The name and contact details of the complainant, if provided by the complainant;
  - (c) The date of the complaint; and
  - (d) The details and dates of the actions taken by the Licence Holder in response to the complaints.
- 35.** The Licence Holder must submit to the CEO, no later than 90 days after the annual period, an Annual Audit Compliance Report indicating the extent to which the Licence Holder has complied with the Conditions in this Licence, and any previous licence issued under Part V of the EP Act for the Premises for the preceding Annual Period. The Annual Audit Compliance Report shall be submitted using the Form available at the DWER website: [www.dwer.wa.gov.au](http://www.dwer.wa.gov.au) under the publications section
- 36.** 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.
- 37.** The Licence Holder shall submit to the CEO and Annual Environmental Report within 90 calendar days after the end of the annual period. The report shall contain the information listed in Table 16 in the format or form specified in that table. The Annual Environmental Report shall also contain:
- (a) An assessment of the information contained within the report against previous drawings, monitoring results and licence limits and/or trigger levels;-

**Table 16: Annual environmental report**

Condition or Table (if relevant)	Information required	Format or form
N/A	Updated site plan.	Map at least A3 size. All maps and plans in electronic format

Condition or Table (if relevant)	Information required	Format or form
N/A	A summary of leachate collection infrastructure performance including inputs, outputs, calculations and explanation of any changes that may indicate an issue with the leachate collection or management system or a breach of the landfill or leachate pond liner.	None specified
Including Condition 14	Summary of any failure or malfunction of any pollution control equipment (detailed in the Landfill Management Plan); and any environmental incidents that have occurred during the annual period, and any action taken in response to the incident	None specified
Table 11	Waste input and output data (including rejected loads)	None specified
Table 13	Process monitoring data	Including the information required by Conditions 24 to 32
Table 14	Ambient surface water quality monitoring data	
Table 15	Ambient groundwater quality monitoring data	
Condition 34	Summary of complaints received	None specified

**38.** The Licence Holder shall submit the information in Table 17 to the CEO according to the specifications in that table.

**Table 17: Notification requirements**

Condition or Table (if relevant)	Information required	Notification requirement1	Format or form2
Condition 14 and 15, including Table 8 and Table 9.	Failure or malfunction of the leachate collection and management system	Part A: As soon as practicable, but no later than 1700 hrs of the next usual working day  Part B: As soon as practicable	None specified

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

Schedule 1: Maps

Premises map

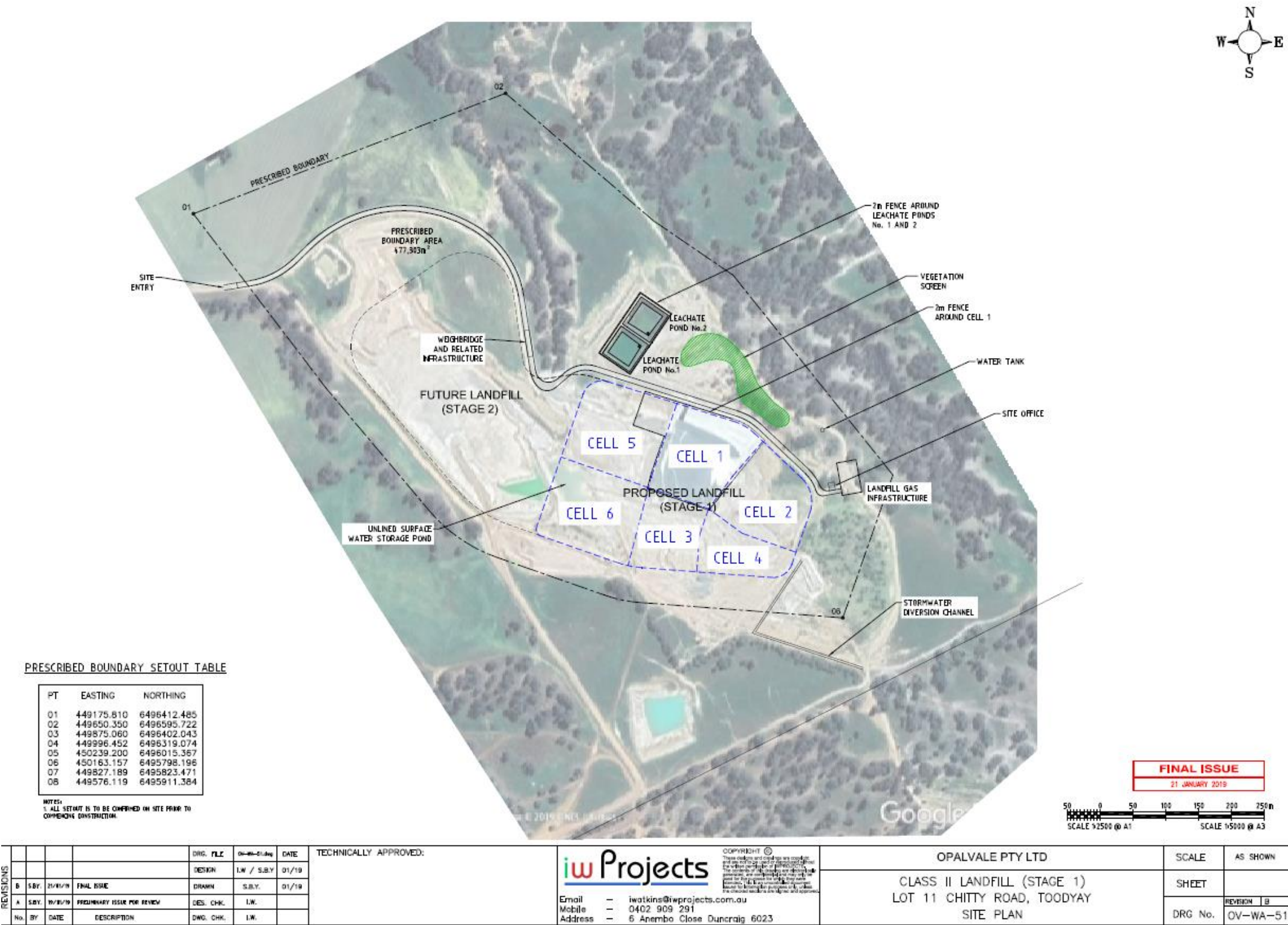


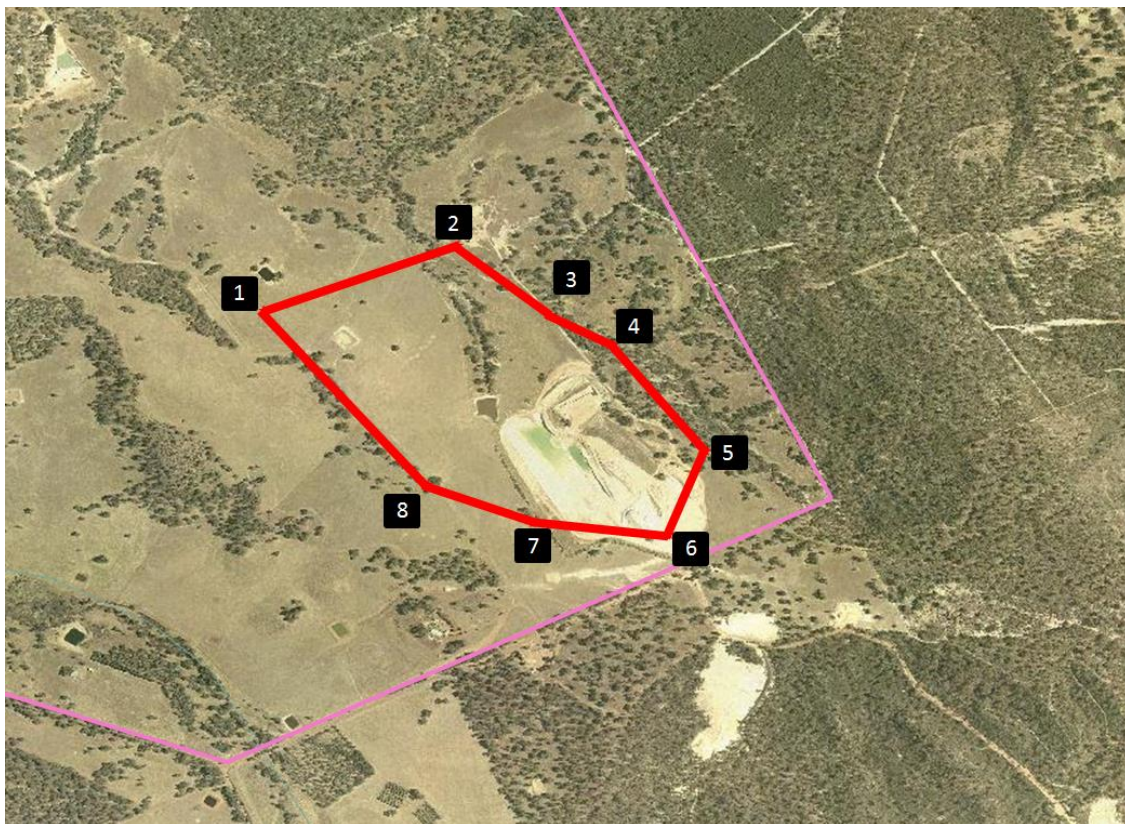
Figure S1-1: Site Layout source (Provided by Applicant in January 2019)

## Premises boundary

The Premises boundary is defined by the coordinates in Table 18 and depicted on Figure S1-2.

**Table 18: Premises boundary coordinates**

Point	Easting	Northing
1	449175.810	6496412.485
2	449650.350	6496595.722
3	449875.060	6496402.043
4	449996.452	6496319.074
5	450239.200	6496015.367
6	450163.157	6495798.196
7	449827.189	6495823.471
8	449576.119	6495911.384



**Figure S1-2: Premises boundary**

## Schedule 2: Primary Activities

At the time of assessment, Emissions and Discharges from the following Primary Activities were considered in the determination of the risk and related Conditions for the Premises.

The Primary Activities are listed in Table 19:

**Table 19: Primary Activities**

Primary Activity	Premises production or design capacity
Category 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	150,000 tonnes per annual period

## Infrastructure and equipment

The Primary Activity infrastructure and equipment situated on the Premises is listed in Table 20.

**Table 20: Infrastructure and equipment**

Infrastructure and equipment	Plan reference
One (1) lined landfill cell including leachate collection pipes and sumps	Premises Map in Schedule 1 (Figure S1-1)
Two (2) Lined leachate storage ponds	
Stormwater diversion bunds and trenches	
Weighbridge	
Entrance gate, site fencing and access roads	
Site office and staff amenities	
Unlined Surface water storage pond	
Groundwater Monitoring network including: Nine (9) deep groundwater monitoring wells; and Six (6) in-pit monitoring wells (Cell 1)	Groundwater Monitoring Network Map in Schedule 3 (Figure S3-1)

## Site layout

The Primary Activity infrastructure and equipment is set out on the Premises in accordance with the site layout specified on the Premises map in Schedule 1.

## Schedule 3: Monitoring

### Monitoring locations

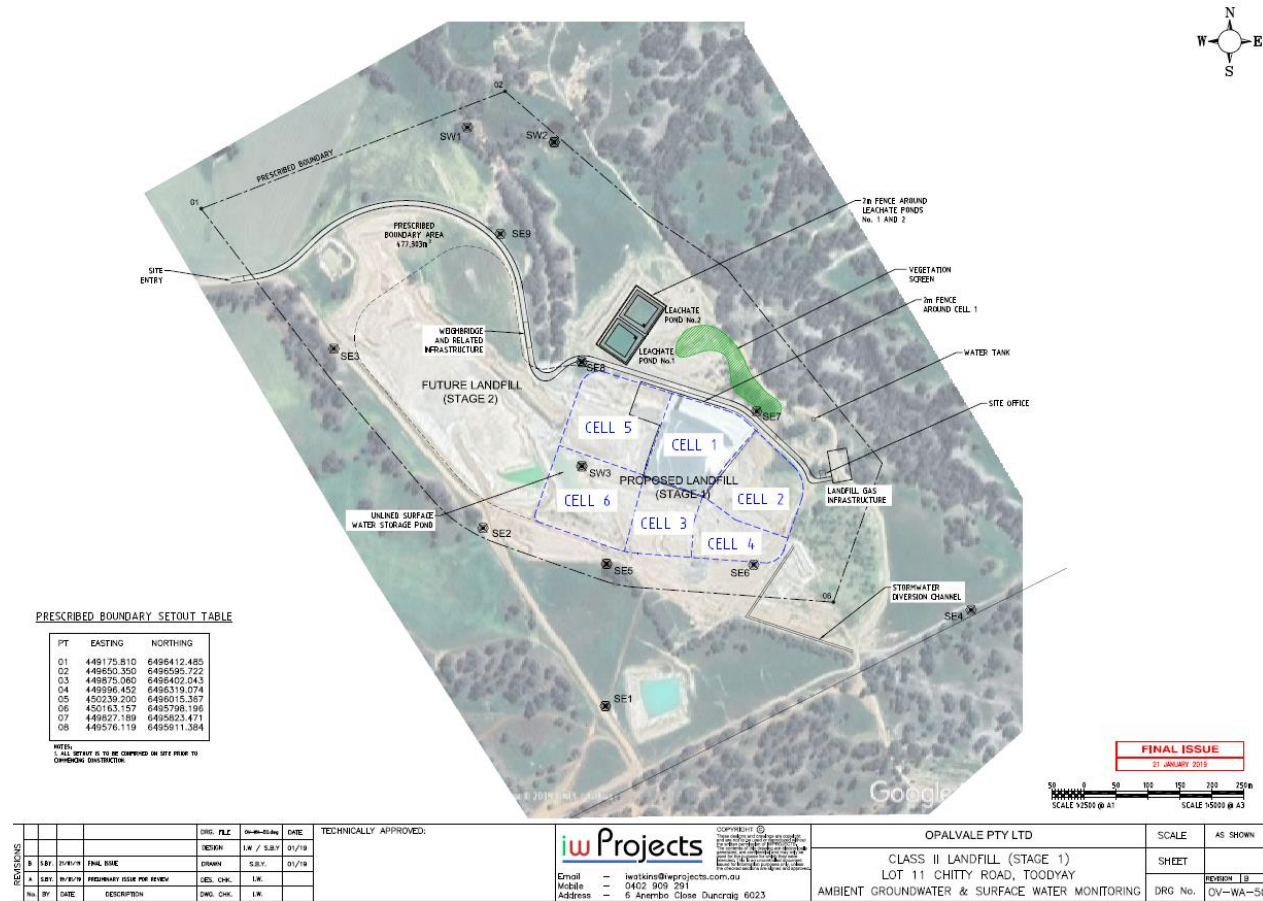


Figure S3-1: Groundwater monitoring well and Surface Water monitoring network

L9089/2017/1

IR-T06 Licence Template v2.0 (July 2017)