Licence number L9240/2020/1

Licence holder Tellus Holdings Ltd

**ACN** 138 119 829

Registered business address Suite 2, level 10, 151 Castlereagh Street

SYDNEY NSW 2000

DWER file number DER2020/000039

**Duration** 29/06/2020 to 28/06/2040

**Date of issue** 29/06/2020

**Date of amendment** 19 March 2021

Premises details Sandy Ridge Facility

Crown lease O289974 granted by the State of Western Australia to Tellus Holdings Ltd in respect of Lot 510 on Deposited Plan 413497, Whole Volume 3169 Folio 365, as depicted in Figure 1 and Figure 2; and as defined by the coordinates in

Schedule 2.

102.5km north of Great Eastern Highway, via Access Reserve 44102, BOORABBIN WA 6429.

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i> )	Assessed production / design capacity		
Category 61: Liquid Waste Facility	100,000 tonnes (combined)		
Category 61A: Solid Waste Facility	per annual period		
Category 65: Class IV secure landfill site	280,000 tonnes (combined)		
Category 66: Class V intractable landfill site	per annual period		

This licence is granted to the licence holder, subject to the attached conditions, on 19 March 2021 by:

# SENIOR MANAGER WASTE INDUSTRIES REGULATORY SERVICES

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

## **Licence history**

Date	Reference number	Summary of changes
29/07/2020	L9240/2020/1	Licence granted.
10/09/2020	L9240/2020/1	Amendment to increase above-ground storage from 3,000 tonnes to 10,000 tonnes utilising the Non-radioactive Waste Inspection and Unloading Warehouse, Low Level Radiation Warehouse, Flammable Goods Store and East Yards Part 1 and 2 constructed under Works Approval W6308/2019/1
01/12/2020	L9240/2020/1	Amendment to increase above-ground storage from 10,000 tonnes to 15,000 tonnes.
19/03/2021	L9240/2020/1	Amendment to include prescribed premises categories 65 & 66 (waste cells), increase waste throughput tonnages and to authorise operation of the waste immobilisation plant.

### Interpretation

In this licence:

- (a) the words 'including', 'includes' and 'include' in conditions mean "including but not limited to", and similar, as appropriate;
- (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:
  - (i) if dated, refers to that particular version; and
  - (ii) if not dated, refers to the latest version and therefore may be subject to change over time.
- (e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and
- (f) unless specified otherwise, all definitions are in accordance with the EP Act.

**NOTE:** This licence requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this licence.

#### **Licence conditions**

The Licence Holder must ensure that the following conditions are complied with:

#### Infrastructure and equipment

1. The Licence Holder must ensure that the site infrastructure and equipment listed in Table 1 and located at the corresponding infrastructure location listed in Table 1, is maintained and operated in accordance with the corresponding operational requirement set out in Table 1.

Table 1: Infrastructure and equipment requirements

Site infrastructure and equipment	Operational requirements	Infrastructure location
East Yard (solids) Storage Area	(a) Sloped to allow surface water within the East Yard (solids) storage area to drain to the Stormwater Retention Pond.	Located in the area depicted as East Yard (Solids) in Figure 3 in Schedule 1
East Yard Stormwater Drains	(a) Stormwater diversion drain located on the eastern side of the East Yard storage area capable of diverting surface storm water away from the East Yard (solids) Storage Area; and	Located in the area depicted as Stormwater V Drain in Figure 4 in Schedule 1
	(b) Stormwater drain located within the East Yard (solids) Storage Area capable of diverting surface storm water within the East Yard (solids) Storage Area to the Stormwater Retention Pond.	
Stormwater Retention Pond (East Yard)	<ul> <li>(a) Total capacity of 3,623 m³, capable of capturing a 1 in 100 year 72-hour storm event from the East Yard (solids) Storage Area.</li> </ul>	Located in the area depicted as Stormwater Retention Pond (ID 33) in Figure 3, and Temporary Storage Pond in Figure 4; in Schedule 1
PFAS Contaminated Waste Storage Area	(a) Maintained as an impervious concrete floor sloped to an impervious floor sump (blind) with a 400mm high perimeter bund constructed of concrete <sup>1</sup> ; and	Located in the area depicted as PFAS Storage Area in Figure 3 in Schedule 1.
	(b) Maintained to retain at least 110% of the largest ISO storage container within the bunded area and sump.	
Non-Radioactive Waste Inspection and Unloading Warehouse	<ul> <li>(a) Maintained as a roofed and walled warehouse with concrete floor and perimeter concrete bunding; and</li> <li>(b) Warehouse floor to be sloped to allow drainage to traversable blind sumps.</li> </ul>	Located in the area depicted as Non- Radioactive Waste Inspection and Unloading Warehouse in Figure 3 in Schedule 1.

Site infrastructure and equipment	Operational requirements	Infrastructure location
Low Level Radiation Waste Warehouse/ Liquid Waste Unloading Area	<ul> <li>(a) Maintained as a roofed and walled warehouse with concrete floor sloping to a concrete floor sump (blind), and perimeter concrete bunding; and</li> <li>(b) Maintained to retain at least 110% of the largest ISO storage container within the bunded area and sump.</li> </ul>	Located in the area depicted as Low Level Radiation Waste Warehouse/Liquid Waste Unloading Area in Figure 3 in Schedule 1.
Flammable Goods Store	(a) Maintained as a sealed interlocking concrete paving floor with joint stabiliser and sealant to be maintained as per manufacturers' specifications; and	Located in the area depicted as Flammable Goods Store in Figure 3 in Schedule 1.
	(b) Storage area to be maintained with 300mm high concrete perimeter bund and concrete sumps (blind) capable of retaining 1:100 year, 72 hour rainfall event.	
Mixed Store	(a) Maintained as a sealed interlocking concrete floor with joint stabiliser and sealant to be maintained as per manufacturers' specifications.	Located in the area depicted as Mixed Store – Main Yard in Figure 3 in Schedule 1.
Low Level Radiation Waste, Liquid Waste and Sludge Storage Yard	(a) Maintained as a sealed interlocking concrete paving floor with joint stabiliser and sealant to be maintained as per manufacturers' specifications; and	Located in the area depicted as LLW, Liquid Waste Storage Yard in Figure 3 in Schedule 1.
	(b) Hardstand drainage to include blind sumps constructed of concrete, capable of retaining 1:100 year, 72 hour rainfall event when combined with the 4x Stormwater Storage Tanks.	
Yard Containment Pond	(a) HDPE lined retention pond capable of capturing a 1 in 100 year 72-hour storm event from the Mixed Store; and	Located in the area depicted as Storm Water Retention Pond (ID 18) in
	(b) Stock fencing to be maintained around the pond to prevent stock access.	Figure 3 in Schedule 1.
4 x Stormwater Storage Tanks	(a) Capable of holding stormwater from the Low Level Radiation waste, Liquid Waste and Sludge Storage Yard and Liquid Waste Unloading Area;	Located in the area depicted as Stormwater Tanks in Figure 3 in Schedule 1.
	(b) Four stormwater tanks each with a capacity of 45,000 litres; and	
	(c) Tanks connected in series with the final tank to overflow into the HDPE lined Brine Pond.	
Brine Pond	(a) HDPE lined pond with a minimum capacity of 2,293m³; and	Located in the area depicted as Brine Pond in
	(b) Stock fencing to be maintained around the pond to prevent stock access.	Figure 3 in Schedule 1.

Site infrastructure and equipment	Operational requirements	Infrastructure location
Waste Immobilisation Plant	(a) Located within a bunded concrete hardstand capable of retaining a 1:100 year 72-hour rainfall event;	Located in the area depicted as Waste Immobilisation Plant "WIP"
	(b) Hardstand drainage to include blind sumps constructed of concrete;	in Figure 3 in Schedule 1.
	(c) Above ground pipework located within concrete bund;	
	(d) Enclosed planetary mixer located within the bunded concrete hardstand with 30 tonnes/hour nominal throughput;	
	(e) 100 tonne bulk cement storage silo fitted with dust collection and filtration system;	
	(f) Automatic dosing of waste and binding additives;	
	(g) Dispensing pumps fitted with emergency stop function; and	
	(h) Kaolin conveyors to be covered.	
Waste Cell 1, Air Dome, Settlement Pond	(a) Excavated mine cell (Cell 1) for waste deposition of nominal size 80m x 160m x 30m;	Located in the area depicted as Cell 1 in Figure 3 and Figure 5 in Schedule
	(b) Covered air dome enclosing the width of the excavated waste cell 1;	1.
	(c) Air dome fitted with entry and exit doorway airlock; and	
	(d) Air dome to be maintained at an inflated pressure to +500 Pa.	
Workshop and Laydown Yard	N/A	Located in the area depicted as Workshop Laydown Yard in Figure 3 in Schedule 1.

Note 1: The PFAS National Environmental Management Plan may require additional specifications for appropriate infrastructure for the storage of PFAS wastes.

#### **Waste Acceptance**

- **2.** Prior to the acceptance of any waste at the premises, the Licence Holder must ensure that:
  - (a) information on the characteristics of the waste is obtained through assessment and testing in accordance with the Landfill Definitions to identify contaminants of concern and their variability; and
  - (b) a qualified chemist assesses the information and determines whether the waste can be received at the premises to meet the requirements of the licence.
- 3. The Licence Holder must only accept onto the premises waste of a waste type and waste description, which does not exceed the corresponding rate at which waste is received, and which meets the corresponding acceptance specification set out in Table 2.

Table 2: Waste acceptance

Waste Type	Waste Description	Controlled Waste Code	Rate at which waste is received	Acceptance Specification
Contaminated Solid Wastes	Waste resulting from surface treatment of metals and plastics	A100	Combined total limit of 100,000 tonnes per	Receipt, handling and temporary storage prior to
	Waste from heat treatment and tempering operations which use cyanide	A110	annual period	disposal <sup>1,2,3</sup> Must meet
	Inorganic cyanide	A130		acceptance criteria
	Acidic solutions or acids in solid form	B100		for Class IV landfills or must be classified as
	Basic (alkaline) solutions or bases (alkalis) in solid form	C100		intractable waste in accordance with
	Metal carbonyls	D100		the Landfill
	Inorganic fluorine compounds (excluding calcium fluoride)	D110		Definitions <sup>1,2,3</sup>
	Mercury and mercury compounds	D120		
	Arsenic and arsenic compounds	D130		
	Chromium compounds	D140		
	Tannery waste containing chromium	D141		
	Cadmium and cadmium compounds	D150		
	Used nickel cadmium batteries	D151		
	Beryllium and beryllium compounds	D160		
	Antimony and antimony compounds	D170		
	Thallium and thallium compounds	D180		
	Copper compounds	D190		
	Cobalt compounds	D200		
	Nickel compounds	D210		
	Used nickel metal hydride batteries	D211		
	Lead and lead compounds	D220		
	Used lead acid batteries	D221		
	Zinc compounds	D230		
	Selenium and selenium compounds	D240		
	Tellurium and tellurium compounds	D250		

Waste Type	Waste Description	Controlled Waste Code	Rate at which waste is received	Acceptance Specification
	Vanadium compounds	D270		
	Barium and barium compounds	D290		
	Non toxic salts	D300		
	Boron compounds	D310		
	Inorganic sulfides	D330		
	Perchlorates	D340		
	Chlorates	D350		
	Phosphorus compounds excluding mineral phosphates	D360		
	Waste containing peroxides excluding hydrogen peroxide	E100		
	Highly reactive chemicals not otherwise specified	E130		
	Aqueous-based wastes from the production, formulation and use of inks, dyes, pigments, paints, lacquers and varnish	F100		
	Aqueous-based wastes from the production, formulation and use of resins, latex, plasticisers, glues and adhesives	F110		
	Solvent-based wastes from the production, formulation and use of inks, dyes, pigments, paints, lacquers and varnish	F120		
	Solvent based wastes from the production, formulation and use of resins, latex, plasticisers, glues and adhesives	F130		
	Ethers	G100		
	Non-halogenated organic solvents	G110		
	Dry-cleaning wastes containing perchloroethylene	G130		
	Halogenated organic solvents	G150		
	Waste from production, use and formulation of organic solvents not otherwise specified	G160		
	Waste from the production, formulation or use of biocides and phytopharmaceuticals	H100		

Waste Type	Waste Description	Controlled Waste Code	Rate at which waste is received	Acceptance Specification
	Organic phosphorous compounds	H110		
	Organochlorine pesticides	H130		
	Waste wood-preserving chemicals	H170		
	Waste mineral oils unfit for their intended purpose	J100		
	Waste oil and water mixtures or emulsions, and hydrocarbon and water mixtures or emulsions	J120		
	Oil interceptor wastes	J130		
	Waste tarry residues arising from refining, distillation or pyrolytic treatment	J160		
	Used oil filters	J170		
	Oil sludge	J180		
	Tannery wastes not containing chromium	K140		
	Wool scouring wastes	K190		
	Car and truck waste waters	L100		
	Industrial wash waters contaminated with a controlled waste	L150		
	Waste substances and articles containing polychlorinated biphenyls (PCBs)	M100		
	Waste substances and articles containing polybrominated biphenyls (PBB), polychlorinated napthalenes (PCN), and/or polychlorinated terphenyls (PCT)	M105		
	Non-halogenated organic chemicals	M130		
	Phenols, phenol compounds including halogenated phenols	M150		
	Organohalogen compounds not listed elsewhere (e.g. CFCs)	M160		
	Polychlorinated dibenzo-furan (any congener)	M170		
	Polychlorinated dibenzo p- dioxin (any congener)	M180		
	Cyanides (organic)	M210		

Waste Type	Waste Description	Controlled Waste Code	Rate at which waste is received	Acceptance Specification
	Isocyanate compounds	M220		
	Triethylamine catalysts for setting foundry sands	M230		
	Surfactants and detergents	M250		
	Highly odorous organic chemicals including mercaptans and acrylates	M260		
	Containers or drums contaminated with residues of a controlled waste	N100		
	Soils contaminated with a controlled waste	N120		
	Fire debris or fire wash waters	N140		
	Fly ash excluding fly ash generated from Australian coal fired power stations	N150		
	Encapsulated, chemically fixed, solidified or polymerised controlled wastes	N160		
	Filter cake containing a controlled waste	N190		
	Industrial waste treatment plant residues	N205		
	Ceramic based fibres with physio-chemical characteristics similar to asbestos	N230		
	Waste pharmaceuticals, drugs and medicines	R120		
	Waste from the production and preparation of pharmaceutical products	R140		
	Waste chemical substances arising from research and development or teaching activities	T100		
	Waste from production or formulation of photographic chemicals or processing materials	T120		
Special Waste Type 1	Asbestos	N220		

Waste Type	Waste Description	Controlled Waste Code	Rate at which waste is received	Acceptance Specification
Special Waste Type 3	Solid waste, including soils and other solid wastes impacted by Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS).	M270		Receipt, handling and temporary storage prior to disposal <sup>1,2,3</sup> Must meet acceptance criteria for Class IV landfills or must be classified as intractable waste in accordance with the Landfill Definitions <sup>1,2,3</sup>
Liquid Waste	Per- and polyfluoroalkyl substances (PFAS) contaminated materials, including waste PFAS containing products and contaminated containers	M270		Receipt, handling, temporary storage, treatment and disposal (post immobilisation) <sup>1,2,3</sup>
	Waste resulting from surface treatment of metals and plastics	A100		
	Waste from heat treatment and tempering operations which use cyanide	A110		
	Inorganic cyanide	A130		
	Acidic solutions or acids in solid form	B100		
	Basic (alkaline) solutions or bases (alkalis) in solid form	C100		
	Metal carbonyls	D100		
	Inorganic fluorine compounds (excluding calcium fluoride)	D110		
	Mercury and mercury compounds	D120		
	Arsenic and arsenic compounds	D130		
	Chromium compounds	D140		
	Tannery waste containing chromium	D141		
	Cadmium and cadmium compounds	D150		
	Used nickel cadmium batteries	D151		

Waste Type	Waste Description	Controlled Waste Code	Rate at which waste is received	Acceptance Specification
	Beryllium and beryllium compounds	D160		
	Antimony and antimony compounds	D170		
	Thallium and thallium compounds	D180		
	Copper compounds	D190		
	Cobalt compounds	D200		
	Nickel compounds	D210		
	Used nickel metal hydride batteries	D211		
	Lead and lead compounds	D220		
	Used lead acid batteries	D221		
	Zinc compounds	D230		
	Selenium and selenium compounds	D240		
	Tellurium and tellurium compounds	D250		
	Vanadium compounds	D270		
	Barium and barium compounds	D290		
	Non toxic salts	D300		
	Boron compounds	D310		
	Inorganic sulfides	D330		
	Perchlorates	D340		
	Chlorates	D350		
	Phosphorus compounds excluding mineral phosphates	D360		
	Waste containing peroxides excluding hydrogen peroxide	E100		
	Highly reactive chemicals not otherwise specified	E130		
	Aqueous-based wastes from the production, formulation and use of inks, dyes, pigments, paints, lacquers and varnish	F100		

Waste Type	Waste Description	Controlled Waste Code	Rate at which waste is received	Acceptance Specification
	Aqueous-based wastes from the production, formulation and use of resins, latex, plasticisers, glues and adhesives	F110		
	Solvent-based wastes from the production, formulation and use of inks, dyes, pigments, paints, lacquers and varnish	F120		
	Solvent based wastes from the production, formulation and use of resins, latex, plasticisers, glues and adhesives	F130		
	Ethers	G100		
	Non-halogenated organic solvents	G110		
	Dry-cleaning wastes containing perchloroethylene	G130		
	Halogenated organic solvents	G150		
	Waste from production, use and formulation of organic solvents not otherwise specified	G160		
	Waste from the production, formulation or use of biocides and phytopharmaceuticals	H100		
	Organic phosphorous compounds	H110		
	Organochlorine pesticides	H130		
	Waste wood-preserving chemicals	H170		
	Waste mineral oils unfit for their intended purpose	J100		
	Waste oil and water mixtures or emulsions, and hydrocarbon and water mixtures or emulsions	J120		
	Oil interceptor wastes	J130		
	Waste tarry residues arising from refining, distillation or pyrolytic treatment	J160		
	Used oil filters	J170		
	Oil sludge	J180		

Waste Type	Waste Description	Controlled Waste Code	Rate at which waste is received	Acceptance Specification
	Tannery wastes not containing chromium	K140		
	Wool scouring wastes	K190		
	Car and truck waste waters	L100		
	Industrial wash waters contaminated with a controlled waste	L150		
	Waste substances and articles containing polychlorinated biphenyls (PCBs)	M100		
	Waste substances and articles containing polybrominated biphenyls (PBB), polychlorinated napthalenes (PCN), and/or polychlorinated terphenyls (PCT)	M105		
	Non-halogenated organic chemicals	M130		
	Phenols, phenol compounds including halogenated phenols	M150		
	Organohalogen compounds not listed elsewhere (e.g. CFCs)	M160		
	Polychlorinated dibenzo-furan (any congener)	M170		
	Polychlorinated dibenzo p- dioxin (any congener)	M180		
	Cyanides (organic)	M210		
	Isocyanate compounds	M220		
	Triethylamine catalysts for setting foundry sands	M230		
	Surfactants and detergents	M250		
	Highly odourous organic chemicals including mercaptans and acrylates	M260		
	Containers or drums contaminated with residues of a controlled waste	N100		
	Soils contaminated with a controlled waste	N120		
	Fire debris or fire wash waters	N140		

Waste Type	Waste Description	Controlled Waste Code	Rate at which waste is received	Acceptance Specification
	Fly ash excluding fly ash generated from Australian coal fired power stations	N150		
	Encapsulated, chemically fixed, solidified or polymerised controlled wastes	N160		
	Filter cake containing a controlled waste	N190		
	Industrial waste treatment plant residues	N205		
	Ceramic based fibres with physio-chemical characteristics similar to asbestos	N230		
	Waste pharmaceuticals, drugs and medicines	R120		
	Waste from the production and preparation of pharmaceutical products	R140		
	Waste chemical substances arising from research and development or teaching activities	T100		
	Waste from production or formulation of photographic chemicals or processing materials	T120		
Intractable Waste (Radioactive Waste)	Low-Level Wastes (LLW) and NORM	-		Receipt, handling temporary storage, subject to approval under the Radiation Safety Act 1975 <sup>3,4</sup>

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

Note 2: Additional requirements for the handling and storage of PFAS wastes under the PFAS National Environmental Management Plan may apply

Note 3: Additional requirements for the acceptance and handling and disposal of wastes under Ministerial Statement 1078 or other approvals may apply

Note 4: Additional requirements for the acceptance and handling of radioactive wastes under Radiation Safety Act 1975 may apply

- 4. The Licence Holder must ensure that where waste does not meet the waste acceptance criteria set out in Condition 3 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.
- 5. The Licence Holder must manage waste acceptance on the premises in accordance with the procedure "Sandy Ridge Facility Waste Acceptance

- Procedure, Doc. # TS00-50930523-8, August 2016" and document "Sandy Ridge Facility Waste Acceptance Criteria, Doc. #TS00-50930523-7, August 2016".
- **6.** The Licence Holder must not accept radioactive wastes onto the premises unless approval to do so has been granted under the *Radiation Safety Act 1975*, issued by the Radiological Council.
- 7. The Licence Holder must only store wastes accepted onto the premises in accordance the storage requirements, and at the storage location, as set out in Table 3.

**Table 3: Waste Storage** 

Waste Type	Storage Requirements <sup>3</sup>	Storage Location
Waste Type  Contaminated Solid Wastes (excluding Contaminated Solid Wastes – Bulky Items <sup>1</sup> , and Special Waste Type 3), Special Waste Type 1, Intractable Wastes <sup>2</sup>	(a) within primary packaging and within secondary shipping containers; (b) in manner that does not obscure fire protection equipment or signage; and (c) no longer than 12 months from the date of receipt.	East Yard (Solids) Storage Area located in the area depicted as East Yard (Solids) in Figure 3 in Schedule 1;  Non-radioactive Waste Inspection and Unloading Warehouse, located in the area depicted as Non-radioactive Waste Inspection and Unloading Warehouse in Figure 3 in Schedule 1;  Low Level Radiation Waste Warehouse, located in the area depicted as Low Level Radiation
		Waste Warehouse/Liquid Waste Unloading Area in Figure 3 in Schedule 1;
		Flammable Goods Store, located in the area depicted as Flammable Goods Store in Figure 3 in Schedule 1;
		PFAS Storage Area located in the area depicted as PFAS Storage Area in Figure 3 in Schedule 1;
		Mixed Store, located in the area depicted as Mixed Store – Main Yard in Figure 3 in Schedule 1; and
		Low Level Radiation Waste, Liquid Waste and Sludge Storage Yard located in the area depicted as LLW, Liquid Waste Storage Yard in Figure 3 in Schedule 1.

Waste Type	Storage Requirements <sup>3</sup>	Storage Location
Contaminated Solids Wastes – Bulky Items <sup>1</sup>	<ul><li>(a) completely dry;</li><li>(b) within suitable secure and sealed packaging that:</li></ul>	East Yard (Solids) Storage Area located in the area depicted as East Yard (Solids) in Figure 3 in Schedule 1;
	i) completely contains the waste;  ii) does not allow the ingress of stormwater; and  iii) prevents the discharge of contaminants;  (c) in manner that does not obscure fire protection equipment or signage; and  (d) no longer than 12 months	Non-radioactive Waste Inspection and Unloading Warehouse, located in the area depicted as Non-radioactive Waste Inspection and Unloading Warehouse in Figure 3 in Schedule 1;  Low Level Radiation Waste Warehouse, located in the area depicted as Low Level Radiation Waste Warehouse/Liquid Waste Unloading Area in Figure 3 in Schedule 1;
	from the date of receipt.	Flammable Goods Store, located in the area depicted as Flammable Goods Store in Figure 3 in Schedule 1;
		PFAS Storage Area located in the area depicted as PFAS Storage Area in Figure 3 in Schedule 1;
		Mixed Store, located in the area depicted as Mixed Store – Main Yard in Figure 3 in Schedule 1; and
		Low Level Radiation Waste, Liquid Waste and Sludge Storage Yard located in the area depicted as LLW, Liquid Waste Storage Yard in Figure 3 in Schedule 1.

Waste Type	Storage Requirements <sup>3</sup>	Storage Location
Special Waste Type 3	(a) must be stored in accordance with the requirements of the PFAS NEMP	Non-radioactive Waste Inspection and Unloading Warehouse, located in the area depicted as Non-radioactive Waste Inspection and Unloading Warehouse in Figure 3 in Schedule 1;
		Low Level Radiation Waste Warehouse, located in the area depicted as Low Level Radiation Waste Warehouse/Liquid Waste Unloading Area in Figure 3 in Schedule 1;
		Flammable Goods Store, located in the area depicted as Flammable Goods Store in Figure 3 in Schedule 1;
		PFAS Storage Area located in the area depicted as PFAS Storage Area in Figure 3 in Schedule 1;
		Mixed Store, located in the area depicted as Mixed Store – Main Yard in Figure 3 in Schedule 1; and
		Low Level Radiation Waste, Liquid Waste and Sludge Storage Yard located in the area depicted as LLW, Liquid Waste Storage Yard in Figure 3 in Schedule 1.

Waste Type	Stor	age Requirements <sup>3</sup>	Storage Location
Liquid Waste (excluding PFAS liquid waste)	(a)	within primary enclosed packaging in an impervious and bunded storage area;	PFAS storage area, located in the area depicted as PFAS Storage Area in Figure 3 in Schedule 1;
	(b)	in manner that does not obscure fire protection equipment or signage; and	Non-radioactive Waste Inspection and Unloading Warehouse, located in the area depicted as
	(c)	no longer than 12 months from the date of receipt.	Non-radioactive Waste Inspection and Unloading Warehouse in Figure 3 in Schedule 1;
			Low Level Radiation Waste Warehouse/Liquid Waste Unloading Area, located in the area depicted as Low Level Radiation Waste Warehouse/Liquid Waste Unloading Area in Figure 3 in Schedule 1;
			Flammable Goods Store, located in the area depicted as Flammable Goods Store in Figure 3 in Schedule 1;
			Mixed Store, located in the area depicted as Mixed Store – Main Yard in Figure 3 in Schedule 1; and
			Low Level Radiation Waste, Liquid Waste and Sludge Storage Yard located in the area depicted as LLW, Liquid Waste Storage Yard in Figure 3 in Schedule 1.
PFAS liquid waste	(a)	must be stored in accordance with the requirements of the PFAS NEMP	PFAS storage area, located in the area depicted as PFAS Storage Area in Figure 3 in Schedule 1.

Note 1: Contaminated Solid Wastes – Bulky Items for the purposes of this licence means contaminated waste items that are unable to be contained within enclosed shipping containers such as power poles or power pole butts, pipes, structures, mechanical equipment or large machine parts

Note 2: Additional storage requirements may be required for intractable waste (radioactive wastes) under the Radiation Safety Act 1975.

Note 3: Additional storage requirements may be required under the Dangerous Goods Safety Act 2004

- **8.** The Licence Holder must ensure that no more than 15,000 tonnes of waste is stored above-ground at any one time.
- 9. The Licence Holder must ensure solid and liquid waste containers on the premises remain closed, unless waste verification inspection or testing is being undertaken within inspection warehouses, or is being managed in accordance with the procedure listed in Condition 5.
- **10.** The Licence Holder must implement the following security measures at the site:
  - (a) erect and maintain suitable fencing to prevent unauthorised access to the site;
  - (b) ensure that any entrance gates to the Premises are securely locked when the premises are unattended; and
  - (c) undertake weekly inspections of all security measures and repair damage as soon as practicable.
- 11. The Licence Holder must conduct and record the details of daily inspections of all waste storage areas on the Premises to assess for spills or leaks of waste or breaches of waste storage containers.
- 12. The Licence Holder must immediately recover spills of hydrocarbons, contaminated solid wastes, liquid wastes, radioactive wastes or chemicals associated with the storage or handing of waste onsite, whether inside or outside of an engineered containment system.
- 13. The Licence Holder must ensure that all spilled waste, contaminated soil and contaminated material used for the recovery of spills of hydrocarbons, contaminated solid wastes, liquid wastes, radioactive wastes or chemicals onsite is stored in an impermeable container prior to disposal at an appropriately authorised facility.
- 14. The Licence Holder must ensure that Emergency Response Equipment is located on the premises and is available at all times to assist with the clean-up of spills of waste.

#### **Waste Processing and Disposal**

15. The Licence Holder must ensure that the waste types specified in Table 4 are only subjected to the corresponding process(es), subject to the corresponding process and disposal limits and/or specifications.

Table 4: Waste processing and disposal

Waste type	Process(es)	Process and disposal limits and/or specifications
Liquid Waste (excluding PFAS liquid waste)	Treatment through the waste immobilisation plant to stabilise and solidify wastes prior to disposal in Waste Cell 1	<ul> <li>Liquid wastes to be solidified and immobilised such that no leachate will be generated; and Solidified wastes should meet the following specifications:</li> <li>Compaction density ≥ 0.5 MPa</li> <li>Fixated and solidified waste meets a free liquid limit of &lt;0.1%</li> </ul>
PFAS liquid waste	Treatment through the WIP to stabilise and solidify wastes prior to disposal in Waste Cell 1	<ul> <li>Liquid wastes to be solidified and immobilised such that no leachate will be generated; and Solidified PFAS wastes must meet the following specifications:</li> <li>Compaction density ≥ 0.5 MPa</li> <li>Fixated and solidified waste meets a free liquid limit of &lt;0.1%</li> <li>Maximum PFAS concentration ≤50mg/kg. Solidified waste must not be diluted to achieve this limit.</li> </ul>
Contaminated Solid Wastes (as identified in Table 2)	Disposal to Waste Cell 1	Must meet acceptance criteria for Class IV landfills or must be classified as intractable waste in accordance with the Landfill Definitions <sup>1</sup>
Special Waste Type 1	Disposal to Waste Cell 1	Must meet acceptance criteria for Class IV landfills or must be classified as intractable waste in accordance with the Landfill Definitions <sup>1</sup>
Special Waste Type 3	Disposal to Waste Cell 1	Maximum PFAS concentration ≤50mg/kg. Waste must not be diluted to meet this limit.

Note 1: Additional requirements for the acceptance and handling and disposal of wastes under Ministerial Statement 1078 or other approvals may apply

- **16.** The Licence Holder must, for each liquid waste stream accepted onto the premises for processing in the WIP:
  - (a) characterise each liquid waste type and stream, which shall include:
    - (i) Identifying the source and process which produced the liquid waste stream; and

- (ii) determining the contaminants and the contaminant concentration ranges within the liquid waste stream through laboratory analysis for parameters including as a minimum, those corresponding to the controlled waste category for that liquid waste steam as set out in Table 2.
- (b) prepare and document the waste immobilisation and treatment process(es) and the quality assurance/quality control procedures to be applied to each liquid waste steam, that includes, but are not limited to:
  - (i) the characteristics of the waste obtained in accordance with condition 16 (a);
  - (ii) details of the treatment and immobilisation process, treatment materials, physical and chemical additives, and binding agents to be used for each liquid waste stream, across the expected range of contaminant concentrations;
  - (iii) operational aspects of the waste immobilisation plant to ensure consistent batching for each liquid waste stream, including with the required additives and binding agents;
  - (iv) the sampling and testing procedure(s) (including parameters to be tested, analysis method and rate of sampling) to verify the effectiveness of the immobilisation treatment process for each liquid waste stream prior to disposal within the waste cell;
  - (v) the results of the sampling and testing conducted under the procedure identified in condition 16(b)(iii), including copies of laboratory certificates of analysis; and
  - (vi) an assessment of the effectiveness of the treatment process for immobilising the waste, including post-treatment conformational testing, with reference to the process limits and/or specifications in Table 4.
- 17. The Licence Holder must undertake post-immobilisation waste verification sampling and analysis for each batch of liquid waste processed through the WIP, in accordance with the sampling frequency outlined in the Landfill Definitions, to verify the immobilised waste meets the process specifications listed in Table 4.
- 18. The Licence Holder must ensure that where waste does not meet the specifications in Table 4 following processing in the WIP, the waste is either reprocessed, or, stored in a Quarantined Storage Area or Container and removed to an appropriately authorised facility as soon as practicable.

#### **Waste Disposal**

- **19.** The Licence Holder must manage in ground waste disposal activities to ensure:
  - (a) only one waste cell is used for the disposal of waste at a time;
  - (b) where immobilised liquid wastes are disposed, these wastes have been subject to the requirements of condition 16;
  - (c) no waste is placed on top of any waste placed in the waste cell which has not cured and/or hardened;
  - (d) immobilised waste that does not cure or harden is to be removed from the waste cell, including any free liquid or slurry residue;
  - (e) waste is placed in the waste cell in a manner that does not generate free liquid or liquid leachate;
  - (f) incompatible materials are physically separated upon placement in the waste cell;
  - (g) where dust suppression or compaction activities are conducted within the waste cell, water is applied in a manner that prevents pooling, free flowing liquid and leachate generation; and
  - (h) the waste cell air dome remains in place over the waste cell until waste disposal and capping activities for the waste cell are complete.

#### **Stormwater Management**

- **20.** The Licence Holder must ensure that stormwater diversion infrastructure within the Premises is adequately maintained to ensure that stormwater is diverted from areas of the Premises where waste is handled or stored.
- 21. The Licence Holder must ensure that stormwater within East Yard (solids) Storage Area is diverted to the Stormwater Retention Pond (East Yard).
- **22.** The Licence Holder must ensure that stormwater within the Mixed Store area is diverted to the Yard Containment Pond.
- 23. The Licence Holder must ensure that excess stormwater within the Low Level Radiation Waste, Liquid Waste and Sludge Storage Yard and Liquid Waste Unloading Area is diverted to the 4 Stormwater Storage Tanks.
- **24.** The Licence Holder shall manage the Stormwater Retention Pond (East Yard), Yard Containment Pond and Brine Pond such that:
  - (a) Overtopping of the pond does not occur;
  - (b) The integrity of the containment infrastructure is maintained; and
  - (c) The design capacity of the pond is maintained.
- 25. The Licence Holder must ensure that stormwater is diverted away from the waste cells using surface water diversion channels to divert stormwater to the Settlement Sump.

#### **Monitoring**

26. The Licence Holder must record the total amount of waste accepted onto the premises, treated, disposed of, or removed from the premises, for each waste type listed in Table 5, with the corresponding parameters listed in the Table 5, and for each corresponding time period set out in Table 5.

**Table 5: Waste monitoring** 

Waste Type <sup>1</sup>	Parameter <sup>1</sup>	Time Period <sup>1</sup>
Contaminated Solid Wastes, Special Waste	(a) time and date of delivery;	Each load arriving at the Premises.
Type 1, Special Waste	(b) waste type;	the Fremises.
Type 3, Liquid Wastes and Intractable Wastes	(c) quantity of the waste (tonnes);	
	(d) the name of the waste generator;	
	<ul><li>(e) the origin and source location of the waste;</li></ul>	
	<ul><li>(f) the physical and chemical characteristics of the waste;</li></ul>	
	<ul><li>(g) the name and contact details of the company transporting the waste to the Premises; and</li></ul>	
	(h) the name of the driver and registration number of the delivery vehicle.	
Non-conforming wastes or wastes removed after 12	(a) time and date of removal;	Each load leaving at the Premises.
months temporary storage	(b) waste type;	the Fremises.
	(c) quantity of the waste (tonnes);	
	(d) the intended disposal location;	
	<ul><li>(e) the physical and chemical characteristics of the waste;</li></ul>	
	<ul> <li>(f) the name and contact details of the company transporting the waste from the Premises; and</li> </ul>	
	(g) the name of the driver and registration number of the delivery vehicle.	
Liquid Wastes	(a) waste type;	Each load accepted to the WIP for
	(b) quantity of the waste (tonnes);	processing
	(c) the origin and source location of the waste; and	
	(d) the physical and chemical characteristics of the waste.	

Waste Type <sup>1</sup>	Parameter <sup>1</sup>	Time Period <sup>1</sup>
Contaminated Solid Wastes, Special Waste	(a) waste type;	Each load disposed to the waste cell
Type 1, Special Waste	(b) quantity of waste (tonnes);	10 1110 11 11010 0011
Type 3, Liquid Wastes and Intractable Wastes	(c) the origin and source location of the waste;	
	(d) the class of waste at disposal; and	
	(e) the disposal location within the waste cell.	
Immobilised Liquid Waste (post processing within the	(a) waste type	Each load disposed to the waste cell
WIP)	(b) quantity of waste (tonnes)	
	<ul><li>(c) the origin and source location of the waste;</li></ul>	
	<ul><li>(d) the quantity of binding agents and additives (tonnes) added during the immobilisation process; and</li></ul>	
	(e) the disposal location within the waste cell.	

Note 1: Additional waste monitoring and reporting requirements may be required by Ministerial Statement 1078

#### **Records and reporting**

- **27.** 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) any maintenance of infrastructure that is performed in the course of complying with condition 1 of this licence:
  - (c) waste characterisation in accordance with condition 2 of this licence:
  - (d) above ground waste storage (in tonnes) in accordance with condition 8 of this licence;
  - (e) security inspections undertaken in accordance with condition 10 of this licence;
  - (f) daily waste inspections undertaken in accordance with condition 11 of this licence;
  - (g) the details of any spills or leaks observed during inspections undertaken in accordance with condition 11 of this licence, including time and date, waste type, quantity and location;
  - (h) any actions undertaken in accordance with conditions 12 and 13 of this licence;
  - (i) the procedures and documentation relating to liquid waste immobilisation treatment methods, including verification testing results and copies of laboratory analysis in accordance with condition 0 of this licence;
  - (j) liquid waste immobilisation verification testing conducted in accordance with condition 17 of this licence;
  - (k) waste removed from the premises in accordance with condition 18 of this licence;
  - (I) monitoring undertaken in accordance with condition 26 of this licence; and
  - (m) complaints received under condition 29 of this licence.
- **28.** The Books specified under condition 27 must:
  - (a) be legible;
  - (b) if amended, be amended in such a way that the original version(s) and any subsequent amendments remain legible and are capable of retrieval;
  - (c) be retained by the Licence Holder for the duration of the licence; and
  - (d) be available to be produced to an Inspector or the CEO as required.
- 29. The Licence Holder must record the following information in relation to complaints received by the licence holder (whether received directly from a complainant or forwarded to them by the Department or another party) about any alleged emissions from the premises:
  - (a) the name and contact details of the complainant, (if provided);
  - (b) the time and date of the complaint;
  - (c) the complete details of the complaint and any other concerns or other issues raised; and
  - (d) the complete details and dates of any action taken by the licence holder to investigate or respond to any complaint.

- **30.** 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 60 days after the end of that Annual Period an Annual Audit Compliance Report in the approved form.
- 31. The Licence Holder must submit to the CEO by no later than 60 days after the end of each Annual Period, an Annual Environment Report for that Annual Period for the conditions listed in Table 6, and which provides the information in accordance with the corresponding requirement set out in Table 6.

**Table 6: Annual Environment Report** 

Condition	Requirement
-	A summary of any failure or malfunction of any pollution control equipment or any incidents that have occurred during the annual period and any action taken.
16	Results of liquid waste characterisation and CQA testing from the WIP for each new testing procedure undertaken for each new liquid waste stream during the annual period
26	A summary of waste accepted, removed and disposed of during the annual period
29	A summary of complaints received during the annual period

### **Definitions**

In this licence, the terms in Table 7 have the meanings defined.

**Table 7: Definitions** 

Term	Definition
ACN	Australian Company Number
Annual Audit Compliance Report (AACR)	means a report submitted in a format approved by the CEO (relevant guidelines and templates may be available on the Department's website).
Annual Period	a 12 month period commencing from 1 July until 30 June of the immediately following year.
Books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer of the Department.
	"submit to / notify the CEO" (or similar), means either:
	Director General Department administering the Environmental Protection Act 1986 Locked Bag 10 Joondalup DC WA 6919
	or:
	info@dwer.wa.gov.au
Contaminated Solid Waste	has the meaning as referenced in the Landfill Definitions.
Controlled Waste Regulations	Environmental Protection (Controlled Waste) Regulations 2004 (WA)
Dangerous goods	has the meaning defined in the <i>Dangerous Goods Safety (Storage and Handling of Non-Explosives) Regulations 2007.</i>
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.
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.
EP Act	Environmental Protection Act 1986 (WA)
EP Regulations	Environmental Protection Regulations 1987 (WA)

Term	Definition
Emergency Response Equipment	means the equipment stored on site for the purposes of responding to emergencies and waste spills. Equipment is to include earth moving equipment and a spill response trailer, and may also include but not limited to, firefighting apparatus, fire extinguishers, decontamination equipment, emergency spill cleanup equipment and chemical containment drums.
Hazardous waste	has the meaning defined in the Landfill Definitions.
Immobilised	Means contaminants in a waste are fixed or locked up rendering the waste suitable for long-term disposal.
Impervious	means a material with a coefficient of permeability <1 x 10 <sup>-9</sup> metres per second
Inspector	means an inspector appointed by the CEO in accordance with s.88 of the EP Act.
Inert waste type 1	has the meaning defined in the Landfill Definitions.
Inert waste type 2	has the meaning defined in the Landfill Definitions.
Intractable waste	has the same meaning given in the Landfill Definitions
Landfill Definitions	means the document titled 'Landfill Waste Classification and Waste Definitions 1996' published by the CEO of DWER and as amended from time to time.
LLW	means Low Level Waste (radioactive) as defined in the Classification of Radioactive Waste – Radiation Protection Series Publication 20, Australian Radiation Protection and Nuclear Safety Agency.
Licence	refers to this document, which evidences the grant of a licence by the CEO under section 57 of the EP Act, subject to the specified conditions contained within.
Licence Holder	refers to the occupier of the premises, being the person specified on the front of the licence as the person to whom this licence has been granted.
NORM	Naturally Occurring Radioactive Material
PFAS	Per- and polyfluoroalkyl substances
PFAS National Environmental Management Plan (NEMP)	means the PFAS National Environmental Management Plan (as amended), Heads of EPA Australia and New Zealand.
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 premises maps (Figure 1 and 2) in Schedule 1 to this licence.
Prescribed Premises	has the same meaning given to that term under the EP Act.

Term	Definition		
Putrescible waste	has the meaning defined in the Landfill Definitions.		
Qualified Civil or Geotechnical Engineer	means a person who:  a) holds a Bachelor of Engineering recognised by the Institute of Engineers; and		
	b) has a minimum of five years of experience working in a supervisory area of civil, structural or geotechnical engineering; and		
	c) Is employed by an independent third party external to the Licence Holder's business;		
	or is otherwise approved in writing by the CEO to act in this capacity.		
Qualified Chemist	means a person whose qualifications and experience qualifies them for a Chartered Membership or higher with the Royal Australian Chemical Institute.		
Quarantined Storage Area or Container	means a hardstand storage area or sealed-bottomed container that is separate and isolated from authorized 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.		
Radiological Council	means the independent statutory authority appointed under the <i>Radiation</i> Safety Act 1975 in Western Australia.		
RMP	Radiation Management Plan		
Serious Environmental Harm	has the same meaning given to that term under the EP Act.		
Special Waste Type 1	pe 1 has the meaning defined in the Landfill Definitions.		
Special Waste Type 3	has the meaning defined in the Landfill Definitions.		
sco	means Surface Contaminated Object as defined in Code for the Safe Transport of Radioactive Material – Radiation Protection Series C-2 (Rev. 1), Australian Radiation Protection and Nuclear Safety Agency, 2019.		
Waste	has the same meaning given to that term under the EP Act.		
Controlled Waste Code	means the waste code assigned to a type of controlled waste for purposes of waste tracking and reporting as specified in DWER's 'Controlled Waste Category List; (July 2014), as amended from time to time.		
Waste Type	Means waste types identified in the Landfill Definitions and/or in Schedule 1 of the Controlled Waste Regulations.		
WIP	Waste Immobilisation Plant		

#### **END OF CONDITIONS**

## Schedule 1: Maps

#### **Premises map**

The boundary of the prescribed premises is shown in the map below (Figure 1).

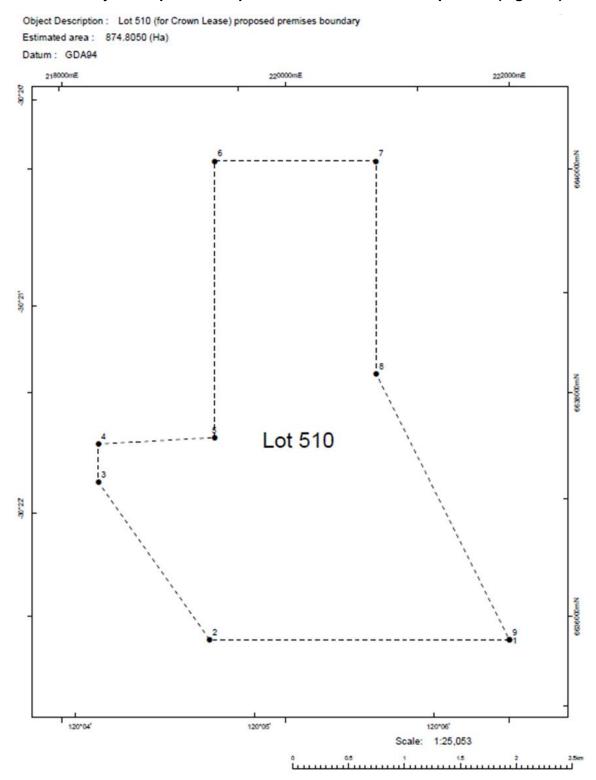


Figure 1: Map of the boundary of the prescribed premises (dashed line)

Figure provided by the Applicant

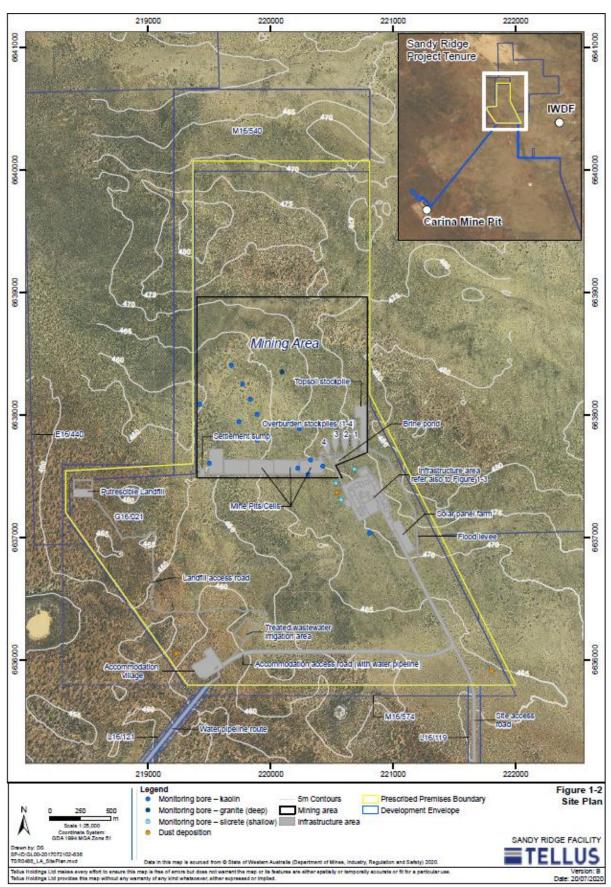


Figure 2: Map of the boundary of the prescribed premises with site layout (prescribed premises boundary marked by the yellow line)

Figure provided by the Applicant

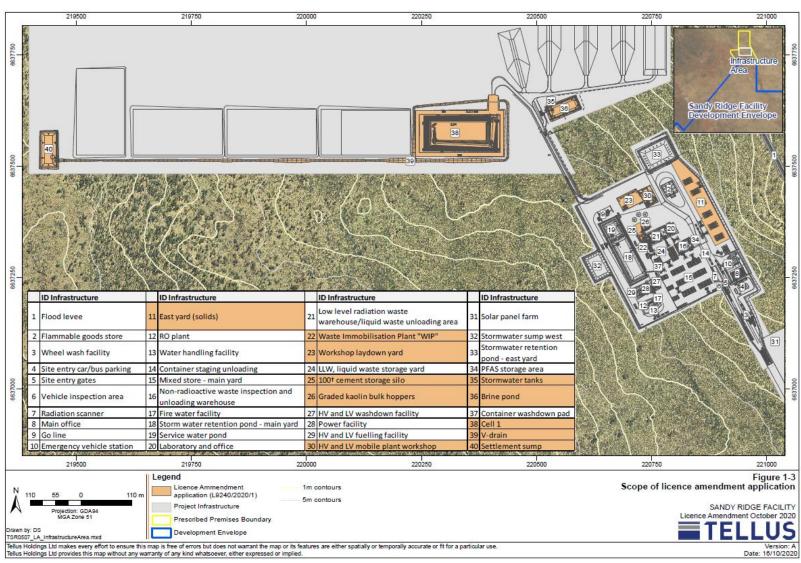


Figure 3: Infrastructure Area

Figure provided by the Applicant

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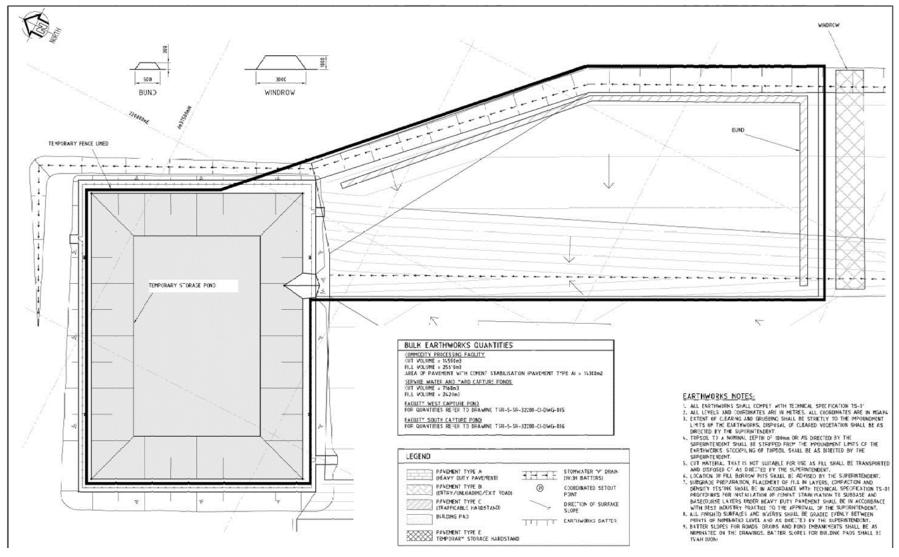


Figure 4: East Yard (solids) Storage Area – drainage, bunding and pond detail Figure provided by the Applicant

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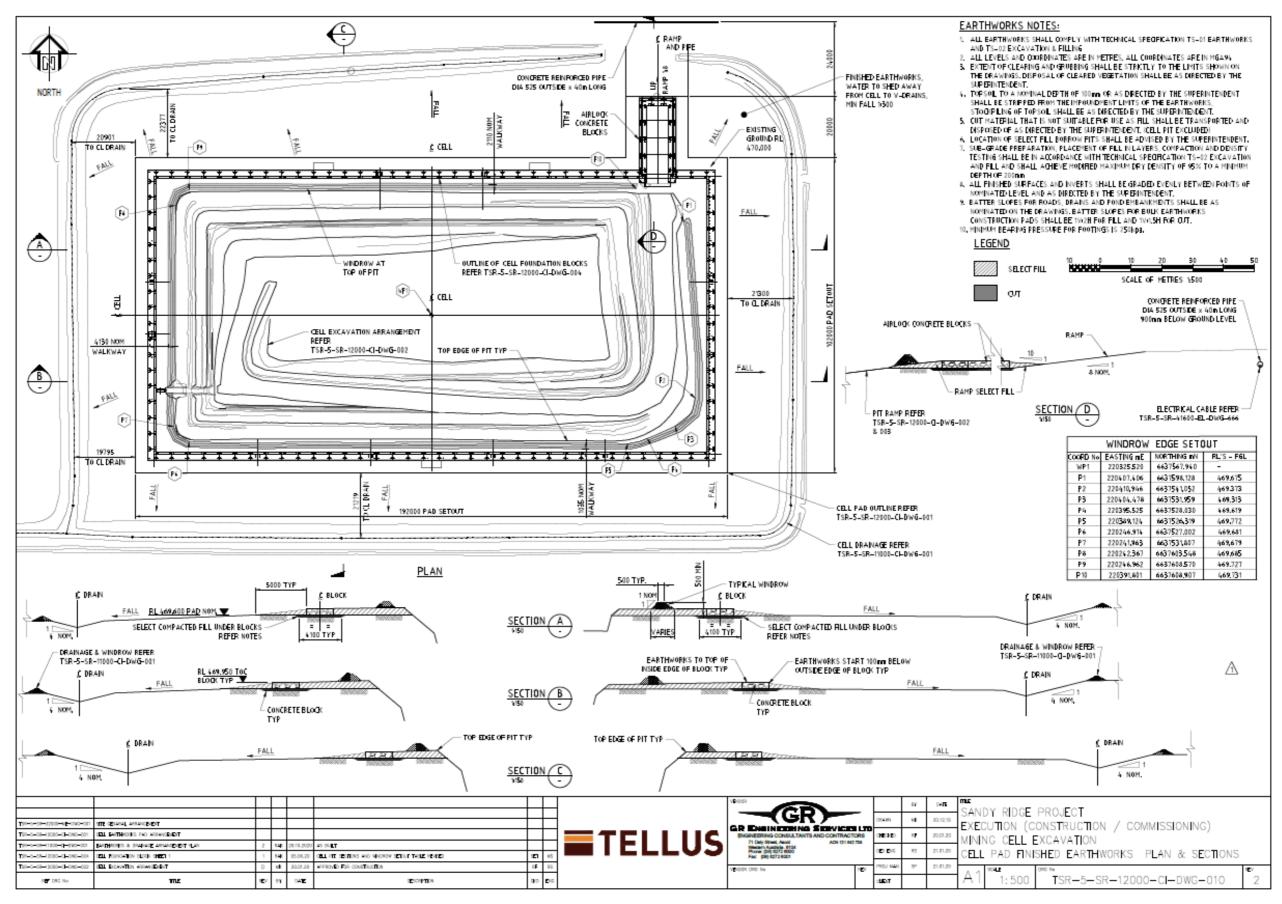


Figure 5: Landfill area

## **Schedule 2: Premises Boundary - Coordinates**

The prescribed premises boundary is defined by the coordinates in Table 8.

#### Table 8: Premises boundary coordinates (MGA GDA94)

Point	Easting	Northing	Zone
1	222001.483	6635790.945	51
2	219320.942	6635790.945	51
3	218326.700	6637198.348	51
4	218326.700	6637541.348	51
5	219367.045	6637599.746	51
6	219367.045	6640073.123	51
7	220809.210	6640073.123	51
8	220810.991	6638167.711	51
9	222001.483	6635790.945	51