



<b>Licence number</b>	L6168/1991/11
<b>Licence holder</b>	BHP Iron Ore Pty Ltd
<b>ACN</b>	008 700 981
<b>Registered business address</b>	125 St Georges Terrace PERTH WA 6000
<b>DWER file number</b>	DER2013/001190-1
<b>Duration</b>	17/11/2025 to 16/11/2035
<b>Date of issue</b>	12/11/2015
<b>Date of amendment</b>	23/10/2024
<b>Premises details</b>	Yandi (Marillana Creek) Iron Ore Mine Mining Tenements M270SA, G47/12, G47/13, G47/14, G47/15, G47/16, G47/17, G47/18, G47/19, NEWMAN WA 6753  As defined by the coordinates in Schedule 2

<b>Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)</b>	<b>Assessed production / design capacity</b>
Category 5 – Processing or beneficiation of metallic or non-metallic ore	87,000,000 tonnes per annual period
Category 6 – Mine dewatering	15,000,000 tonnes per annual period
Category 12 – Screening, etc. of material	200,000 tonnes per annual period
Category 52 – Electric power generation	45 megawatts
Category 54 – Sewage facility	773 cubic metres per day
Category 62 – Solid waste depot	15,000 tonnes per annual period
Category 64 – Class II putrescible landfill site	31,800 tonnes per annual period
Category 73 – Bulk storage of chemicals etc.	4000 cubic metres in aggregate

This licence is granted to the licence holder, subject to the attached conditions, on 23 October 2024, by:

**MANAGER, RESOURCE INDUSTRIES  
INDUSTRY REGULATION (STATE-WIDE DELIVERY)**  
an officer delegated under section 20  
of the *Environmental Protection Act 1986* (WA)

[L6168/1991/11](#)

## Licence history

Date	Reference number	Summary of changes
15/11/2000	L6168/1991/3	Licence renewal
13/11/2001	L6168/1991/4	Licence renewal
15/11/2002	L6168/1991/5	Licence renewal
17/11/2003	L6168/1991/6	Licence renewal
15/11/2004	L6168/1991/7	Licence renewal
15/11/2005	L6168/1991/8	Licence renewal
12/11/2009	L6168/1991/9	Licence renewal
15/11/2012	L6168/1991/10	Licence renewal
12/11/2015	L6168/1991/11	Licence renewal
22/09/2016	L6168/1991/11	Licence amendment to update premises address, include inert waste disposal location and other minor amendments, including removal of conditions that are not valid, enforceable and/or risk based
05/12/2018	L6168/1991/11	Amendment notice 1 issued to include category 12 and 52, construct a new inert landfill, increase the category 64 disposal limit, increase the category 73 storage volume and update the premises map.
17/06/2022	L6168/1991/11	Licence amendment to consolidate amendment notice 1, remove tenements, remove discharge point MCDMDEW031, amend waste management conditions and modify landfarm conditions.
27/06/2023	L6168/1991/11	Licence amendment for the following landfill updates only: <ul style="list-style-type: none"> <li>• Allowing for the construction and operation of a Category 62 solid waste depot facility (consisting of two areas approximately 200m apart) with a capacity of 15,000 tonnes per annual period;</li> <li>• Allowing for the construction and operation of three new inert landfill facilities at Yandi Camp, increasing the Category 64 disposal limit by 10,000 tonnes per annum up to 31,800 tonnes per annual period; and</li> <li>• Adding the locations of the above new facilities to the map in Schedule 1 of the Licence.</li> </ul>
23/10/2024	L6168/1991/11	Licence amendment for the inclusion of an additional discharge point to enable the temporary provision of surplus groundwater for a short-term hydrogeological trial.

## 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:

### General Conditions

1. The Licence Holder must ensure the limits specified in Table 1 are not exceeded.

**Table 1: Production or design capacity limits**

Category	Category Description	Premises production or design capacity limit
5	Crushing and screening facilities	87,000,000 tonnes per annual period.
6	Dewatering infrastructure	15,000,000 tonnes per annual period.
12	Crushing and screening facilities	200,000 tonnes per annual period.
52	Power station	45 megawatts
73	Fuel storage and handling areas	4000 cubic metres in aggregate.

### Infrastructure and equipment

#### Premises operation

2. The Licence Holder shall only accept waste on to the landfill and WWTPs if:
  - (a) it is of a type listed in Table 2;
  - (b) the quantity accepted is below any quantity limit listed in Table 2; and
  - (c) it meets any specification listed in Table 2.

**Table 2: Waste acceptance**

Waste type	Quantity limit	Specification <sup>1</sup>
Inert Waste Type 1	Combined total of up to 31,800 tonnes per annual period for Category 64 activities	None specified Includes inert concrete and pipework
Inert Waste Type 2		Tyres, conveyor belts and plastic only
Putrescible Waste		None specified
Sewage	1,028 m <sup>3</sup> /day <sup>2</sup>	Accepted through sewer inflow(s) only

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: Quantity limit measured as volume of treated wastewater discharged to designated irrigation areas.

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 and removed to an appropriately authorised facility as soon as practicable.

4. The Licence Holder shall ensure that wastes accepted onto the landfill and WWTP are only subjected to the process(es) set out in Table 3 and in accordance with any process limits described in that Table.

**Table 3: Waste processing**

Waste type	Process(es)	Process limits <sup>1, 2</sup>
Inert Waste Type 1	Receipt, handling and disposal of waste by landfilling	<p><u>All waste types</u></p> <ul style="list-style-type: none"> <li>disposal of waste by landfilling shall only take place within the landfill area shown on the Map in Schedule 1: Maps, Premises map;</li> <li>waste is disposed of in a defined trench or within an area enclosed by earthen bunds;</li> <li>no waste shall be temporarily stored or landfilled within 35 metres from the boundary of the premises;</li> <li>the tipping area is restricted to a maximum linear length of 30 metres and is no greater than 2 metres in height;</li> <li>the separation distance between the base of the landfill and the highest groundwater level shall not be less than 2m;</li> <li>Windrows will be maintained along the landfill boundaries to direct stormwater away from the trenches; and</li> <li>Perimeter fencing maintained around active landfill trenches.</li> </ul> <p><u>Used Tyres and Conveyor belts</u></p> <p>Shall only be buried in the areas located within the prescribed premises boundary shown in Schedule 1: Maps, Premises map.</p> <p><u>Inert waste type 1</u></p> <p>Concrete and pipework only are also authorised for disposal within pit voids and overburden storage areas.</p> <p>Following up to 10,000 m<sup>3</sup> of inert concrete material, from the decommissioning of the Yandi Camp, placed into up to three Inert Landfills, excavated soil shall be used to cap the facility to a depth of 0.5m when deposition of the waste concrete is complete.</p>
Inert Waste Type 2		
Putrescible Waste		
Sewage	Biological, physical and chemical treatment	None specified
Sewage sludge	Drying and storage	None specified
Hydrocarbon contaminated waste	Bioremediation	Contaminated soil is only to be remediated within the Landfarm facilities shown on the Map in Schedule 1, Maps: Premises map.

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*.

- The Licence Holder shall ensure that cover is applied and maintained on landfilled wastes in accordance with Table 4 and that sufficient stockpiles of cover are maintained on site at all times.

**Table 4: Cover requirements<sup>1</sup>**

Waste Type	Material	Depth	Timescales
Inert Waste Type 1	No cover required		
Inert Waste Type 2	Type 1 Inert waste or soil	100 mm	As soon as practicable after deposit Plastic waste with the potential to become windblown shall be covered as soon as practicable after deposit
Putrescible Waste		300 mm	As soon as practicable after deposit and not later than weekly

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

- The Licence Holder shall ensure that wind-blown waste is contained within the boundary of the Premises and that wind-blown waste is returned to the tipping area on at least a monthly basis.
- The Licence Holder shall ensure that the waste material specified in Table 5 is only stored and/or treated within the vessels or compounds provided with the infrastructure detailed in Table 5.

**Table 5: Containment infrastructure**

Vessel or compound	Material	Infrastructure requirements
Spinifex Camp WWTP anaerobic, facultative and maturation ponds	Effluent from the Spinifex Camp	<ul style="list-style-type: none"> <li>HDPE lined to achieve a permeability of <math>1 \times 10^{-9}</math> m/s or less</li> <li>Maintain vertical freeboard of 400 mm</li> </ul>
OHP3 Oily Wastewater Ponds	Treated oily water from the OHP3 oily water separator	<ul style="list-style-type: none"> <li>HDPE lined to achieve a permeability of <math>1 \times 10^{-9}</math> m/s or less</li> <li>Maintain vertical freeboard of 400 mm</li> </ul>
OHP3 Sewage Treatment Facility Evaporation Ponds	Treated wastewater from the OHP3 Wastewater Treatment facility	<ul style="list-style-type: none"> <li>HDPE lined to achieve a permeability of <math>1 \times 10^{-9}</math> m/s or less</li> <li>Maintain vertical freeboard of 400 mm</li> </ul>
Central and Eastern Landfarms	Hydrocarbon contaminated soils	<ul style="list-style-type: none"> <li>Any potentially contaminated runoff from the treatment cells is contained</li> </ul>

8. The Licence Holder must construct and/or install the infrastructure listed in Table 6, in accordance with:
- (a) the corresponding design and construction requirement / installation requirement; and
  - (b) at the corresponding infrastructure location; and
  - (c) within the corresponding timeframe,
- As set out in Table 6.

**Table 6: Design and construction/installation requirements**

Infrastructure/ Equipment	Requirements (design and construction)	Site plan reference
Thirty-two (32) 1.6 MW Cat 3516B Diesel Generator Sets or similar	<ul style="list-style-type: none"> <li>• Design and construction specifications of temporary power station pad in accordance with the power generation facilities – Yandi, Temporary Power Station Pad – General Arrangement, Drawing No 644.</li> <li>• Generators equipped with belly tanks and internally bunded.</li> <li>• Bunded areas for oil storage.</li> </ul>	Schedule 1, Maps: Premises map and Temporary Power Station map general arrangement design drawing and typical layout
Power station bulk fuel storage facility	<ul style="list-style-type: none"> <li>• Four (4) 110,000 kL double skinned storage tanks.</li> <li>• Fuel unloading spill traps</li> <li>• Double skinned pipework, installed along a culvert system draining to underground level alarmed catchment tanks</li> <li>• Fuel unloading spill traps</li> </ul>	Schedule 1, Maps: Premises map
Putrescible landfills	<p>Three new putrescible landfills:</p> <ul style="list-style-type: none"> <li>• Each landfill will be constructed with a series of trenches (exact number will depend on available space at each location) with the following maximum dimensions: length of 200m, width 25m, depth 2.5m deep and volume 12,500 m<sup>3</sup>;</li> <li>• Windrows will be maintained along the landfill boundaries to direct stormwater away from the trenches;</li> <li>• Perimeter fencing maintained around active landfill trenches; and</li> <li>• To extend landfill life additional cells may be installed on top of the original cells once they have</li> </ul>	Schedule 1, Maps: Premises map

Infrastructure/ Equipment	Requirements (design and construction)	Site plan reference
	reached capacity.	
Bioremediation landfarms	<p>Landfarm facilities will be constructed with the following requirements:</p> <ul style="list-style-type: none"> <li>• Synthetic Lined to achieve a permeability of <math>1 \times 10^{-9}</math> m/s;</li> <li>• Stormwater run-off diverted so as not to flow onto the treatment facility;</li> <li>• designed so that any potentially contaminated runoff from the treatment cells is contained;</li> <li>• Within the prescribed premises</li> <li>• Not to be constructed within 50m of surface water courses;</li> <li>• Adequately fenced or positioned to prevent public access; and</li> <li>• Appropriate signage warning of contamination placed.</li> </ul>	Schedule 1, Maps: Premises map
Solid waste depot	<ul style="list-style-type: none"> <li>• Located within the cleared footprint of OHP1 in a previously cleared, levelled and bunded area to minimise surface water entry to the OHP1 operational areas;</li> <li>• Existing bund / windrow which will minimise water entering and exiting the facility;</li> <li>• Two areas approximately 200 m apart; and</li> <li>• Maximum capacity of 15,000 tonnes per annual period.</li> </ul>	Schedule 1, Maps: Premises map
Inert landfills	<ul style="list-style-type: none"> <li>• Up to three new inert landfills;</li> <li>• Approximately 1.5 ha in area;</li> <li>• Maximum capacity of 10,000 tonnes per annual period;</li> <li>• Excavation to a depth of 3 m;</li> <li>• Windrow to be established along the landfill boundaries to direct stormwater away from the excavation; and</li> <li>• Landfill to be covered with 0.5 m of excavated soil following completion of deposition of waste.</li> </ul>	Schedule 1, Maps: Premises map



9. The Licence Holder shall submit a compliance document to the CEO, following the construction and/or installation of an item of infrastructure or equipment required by Condition 8, Table 6. The compliance document/s shall:
  - (a) be certified by a suitably qualified engineer and certify that the works were constructed in accordance with the construction requirements specified in Condition 8, Table 6;
  - (b) include as constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure specified in condition 8, Table 6; and
  - (c) be signed by a person authorised to represent the Licence Holder and contain the printed name and position of that person within the company.
10. The Licence Holder shall operate the infrastructure specified in Condition 8, Table 6 in accordance with the conditions of this Licence, following submission of the compliance documents required under condition 0.
11. The Licence Holder must:
  - (a) notify the department one week prior to the power station commencing operation; and
  - (b) must operate the power station for a period of twelve (12) months only unless authorised by the CEO.

## Emissions and discharges

### Point source emissions to surface water and groundwater

12. The Licence Holder shall ensure that where waste is emitted to surface water from the emission points in Table 7 and identified on the map of emission points in Schedule 1 it is done so in accordance with the conditions of this Licence.

**Table 7: Emission points to surface water**

Emission point reference and location	Description	Source including abatement
MCDMDEW040 (As depicted in the Premises Map under Schedule 1, Figure 1)	Discharge of excess mine dewatering water to Marillana Creek	Water abstracted to facilitate mining below the water table
MCDMDEW041 (As depicted in the Premises Map under Schedule 1, Figure 1)	Contingency discharge point to Marillana Creek	Discharge of water during wet weather events
Yandi Transfer Tanks to reinjection bore HMN0045P (As depicted under Schedule 1, Figure 6)	Temporary discharge point to Ministers North Aquifer as part of the hydrogeological trial (for a period up to 6 months)	Discharge of water to support groundwater supplementation at Ministers North Aquifer

13. The Licence Holder shall implement the Jugari Short Term Trial Groundwater Supplementation Scheme: Trigger Action Response Plan (TARP).
14. The Licence Holder must ensure that emissions from the discharge points listed in Table 8 do not exceed the parameter concentration limits specified in Table 8 when monitored in accordance with condition 22 and 26.

**Table 8: Emission and Discharge limits**

Discharge points	Parameter	Limit	Unit
MCDMDEW040	Perfluorooctane sulfonic acid (PFOS)	0.0091	µg/L
MCDMDEW041 Yandi Transfer Tanks to reinjection bore HMN0045P (refer to Table 7 for discharge description and location details)	Perfluorooctanoic acid (PFOA)	19	

15. If PFAS compounds monitored in accordance with Condition 22 and 26 are found to exceed the limits specified in Table 8, the Licence Holder shall carry-out additional monitoring of the source water and prepare a detailed risk assessment in accordance with the PFAS NEMP to determine related risks to the receiving environment. A report outlining the outcomes of the risk assessment shall be provided to the CEO within 60 days of the related analytical results being issued by the laboratory.

### Emissions to land

16. The Licence Holder shall ensure that where waste is emitted to land from the emission points in Table 9 and identified on the map of emission points in Schedule 1 it is done so in accordance with the conditions of this Licence.

**Table 9: Emissions to land**

Emission point reference and location	Emission point reference on Map of emission points	Description	Source including abatement
MCSWSTP004 (As depicted in the Premises Map under Schedule 1, Figure 1)	Spinifex Camp WWTP irrigation area	6.9 hectare irrigation area	Treated wastewater from Spinifex Camp WWTP (420 m <sup>3</sup> /day)
OHP3 Oily Waste Water Ponds (As depicted in the Premises Map under Schedule 1, Figure 1)	OHP3 Oily Waste Water Ponds	Discharge of treated wastewater	Treated wastewater from the OHP3 Oily Water Treatment Facility

### Point source emissions to air

17. The Licence Holder shall ensure that where waste is emitted to air from the emission

points in Table 10 and identified on the map of emission points in Schedule 1, it is done so in accordance with the conditions of this licence.

**Table 10: Point source emissions to air**

Emission point reference and location	Source including abatement
45MW temporary power station (As depicted in the Premises Map under Schedule 1, Figure 1)	Thirty-two (32) Cat 3516B diesel generators, or similar

## Monitoring

### General monitoring

18. The Licence Holder shall ensure that:
  - (a) all water samples are collected and preserved in accordance with AS/NZS 5667.1;
  - (b) all wastewater sampling is conducted in accordance with AS/NZS 5667.10;
  - (c) all surface water sampling is conducted in accordance with AS/NZS 5667.6 as relevant;
  - (d) laboratory sample must be analysed using the appropriate limit of reporting to allow comparison with relevant assessment levels for water quality; and
  - (e) all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured unless indicated otherwise in the relevant table.
19. The Licence Holder shall ensure that:
  - (a) monthly monitoring is undertaken at least 15 days apart; and
  - (b) quarterly monitoring is undertaken at least 45 days apart.
20. The Licence Holder shall ensure that all monitoring equipment used on the Premises to comply with the conditions of this Licence is calibrated in accordance with the manufacturer's specifications.
21. The Licence Holder shall, where the requirements for calibration cannot be practicably met, or a discrepancy exists in the interpretation of the requirements, bring these issues to the attention of the CEO accompanied with a report comprising details of any modifications to the methods.

### Monitoring of point source emissions to surface water

22. The Licence Holder shall undertake the monitoring in Table 11 according to the specifications in that table and record and investigate results.

**Table 11: Monitoring of point source emissions to surface water**

Emission point reference	Monitoring point location	Parameter	Units	Averaging Period	Frequency	Method
MCDMDEW040 MCDMDEW041 (As depicted in the Premises Map under Schedule 1, Figure 1)	Flow meters to discharge point	Volumetric flow rate (cumulative)	m <sup>3</sup> /day	Quarterly	Continuous	As per condition 18
		Discharge points	pH <sup>1</sup>			
	Electrical Conductivity		(µS/cm)			
	Total Dissolved Solids		mg/L or µg/L			
	Total Suspended Solids					
	TRH C <sub>6</sub> -C <sub>10</sub>					
	TRH C <sub>10</sub> -C <sub>16</sub>					
	TRH C <sub>16</sub> – C <sub>34</sub>					
	TRH C <sub>34</sub> – C <sub>40</sub>					
	Benzene, toluene, ethylbenzene and xylenes (BTEX)					
	Total Polycyclic Aromatic Hydrocarbons (PAH)					
	Sodium					
	Potassium					
	Calcium					
	Magnesium					
	Chloride					
	Carbonate					
Bicarbonate						
Sulfate						

Emission point reference	Monitoring point location	Parameter	Units	Averaging Period	Frequency	Method
		Nitrate				
		Aluminium				
		Boron				
		Iron				
		Copper				
		Zinc				
		Silver				
		Arsenic				
		Chromium				
		Cadmium				
		Mercury				
		Nickel				
		Selenium				
		Manganese				
		PFOS				
		PFOA				
		PFAS compounds, as listed in Schedule 3.				

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

### Monitoring of emissions to land

23. The Licence Holder shall undertake the monitoring in Table 12 according to the specifications in that table.

**Table 12: Monitoring of emissions to land**

Emission point reference	Monitoring point location	Parameter	Limit	Units	Averaging period	Frequency
MCSWSTP001 (As depicted in the Premises Map under	Treated wastewater from final storage	Volumetric flow rate	-	m <sup>3</sup> /day	Quarterly	Continuous
		pH <sup>1</sup>	-	-	Spot	Quarterly

Emission point reference	Monitoring point location	Parameter	Limit	Units	Averaging period	Frequency
Schedule 1, Figure 1)  MCSWSTP004 (As depicted in the Premises Map under Schedule 1, Figure 1)	tank prior to discharge  Spinifex Camp WWTP maturation pond	Biochemical Oxygen Demand	-	mg/L	sample	
		Total Suspended Solids	-	mg/L		
		Residual Chlorine <sup>1</sup>	-	mg/L		
		Total Nitrogen	-	mg/L		
		Total Phosphorus	-	mg/L		
		<i>E.coli</i>	-	MPN or cfu/ 100mL where MPN is not available		
OHP3 Oily Wastewater Ponds (As depicted in the Premises Map under Schedule 1, Figure 1)	Treated wastewater pond prior to discharge	Total Recoverable Hydrocarbons	15	mg/L	Spot sample	Prior to discharge

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

### Monitoring of inputs and outputs

24. The Licence Holder shall undertake the monitoring in Table 13 according to the specifications in that table.

**Table 13: Monitoring of inputs and outputs**

Input/Output	Parameter	Units	Averaging period	Frequency
Waste inputs	Inert Waste Type 1 and Inert Waste Type 2	Tonnes	N/A	Annual records of total waste arriving at the landfill facility

**Ambient environmental quality monitoring**

25. The Licence Holder shall undertake the monitoring in Table 14 according to the specifications in that table and record and investigate results.

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

Monitoring point reference and location	Parameter	Units	Averaging period	Frequency
Marillana Creek surface water monitoring sites YNSWPC001 YNSWPC002 (As depicted in the Premises Map under Schedule 1, Figure 1).	pH <sup>1</sup>	-	Spot sample	Following rain events
	Electrical Conductivity	(µS/cm)		
	Total Dissolved Solids	mg/L		
	Total Suspended Solids	mg/L		
	Total Recoverable Hydrocarbons	mg/L		
	Sodium	mg/L		
	Potassium	mg/L		
	Calcium	mg/L		
	Magnesium	mg/L		
	Chloride	mg/L		
	Carbonate	mg/L		
	Bicarbonate	mg/L		
	Sulfate	mg/L		
	Nitrate	mg/L		
	Aluminium	mg/L		
	Boron	mg/L		
	Iron	mg/L		
	Copper	mg/L		
	Zinc	mg/L		
	Silver	mg/L		
Arsenic	mg/L			
Chromium	mg/L			

	Cadmium	mg/L		
	Mercury	mg/L		
	Nickel	mg/L		
	Selenium	mg/L		
	Manganese	mg/L		

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

26. The Licence Holder shall undertake the monitoring in Table 15 according to the specifications in that table and record and investigate results.

**Table 15: Monitoring of point source emissions to groundwater and ambient groundwater quality (Jugari Gorge Reinjection Trial)**

Monitoring point reference as shown in Figure 6: Trial monitoring bore locations	Parameter	Units	Averaging Period	Frequency	Method	
<u>Adjacent Monitoring bores:</u> HMN0015M HMN0016M HMN0083M	Standing water level <sup>2</sup>	m (AHD) and mbgl	-	Monthly	As per condition 18	
<u>Jugari Gorge Monitoring Bores</u> HMN0077M HMN0078M HMN0079M HMN0080M HMN0081M HMN0082M HMN0084M <sup>1</sup> HMN0085M <sup>1</sup> HMN0086M <sup>1</sup> HMN0087M <sup>1</sup>	pH <sup>3</sup>	-	Spot sample	Fortnightly for the first two months of hydrogeological trial and quarterly thereafter.		
	Electrical Conductivity <sup>3</sup>	(µS/cm)				
	Total Dissolved Solids	mg/L or µg/L				
	Total Suspended Solids					
	TRH C <sub>6</sub> -C <sub>10</sub>					
	TRH C <sub>10</sub> -C <sub>16</sub>					
	TRH C <sub>16</sub> -C <sub>34</sub>					
	TRH C <sub>34</sub> – C <sub>40</sub>					
	<u>Ministers North Aquifer Monitoring Bores</u> HMN0013P HMN0017M HMN0018M HMN0024M HMN0028M HMN0032M HMN0034M	Benzene, toluene, ethylbenzene and xylenes (BTEX)				
	Total Polycyclic Aromatic Hydrocarbons (PAH)					
Sodium						



HMN0046M HMN0047M HMN0049M HMN0054M HMN0057M MN1499RM MN1503RM MN0088RM MN0121RM MN2623RM  <u>Yandi Transfer                  Tanks to                  reinjection bore                  HMN0045P</u>	Potassium				
	Calcium				
	Magnesium				
	Chloride				
	Carbonate				
	Bicarbonate				
	Sulfate				
	Nitrate				
	Aluminium				
	Boron				
	Iron				
	Copper				
	Zinc				
	Silver				
	Arsenic				
	Chromium				
	Cadmium				
	Mercury				
	Nickel				
	Selenium				
	Manganese				
PFOS					
PFOA					
PFAS compounds, as listed in Schedule 3					

Note 1: Monitoring for standing water levels only.

Note 2: Monitoring of standing water levels does not apply to the Yandi Transfer tanks

Note 3: In-field non-NATA accredited analysis permitted.

## Records and reporting

### Records

- 27.** All information and records required by the Licence shall:
- (a) be legible;
  - (b) if amended, be amended in such a way that the original and subsequent amendments remain legible or are capable of retrieval;
  - (c) except for records listed in 27(d) be retained for at least 6 years from the date the records were made or until the expiry of the Licence or any subsequent licence; and
  - (d) for those following records, be retained until the expiry of the Licence and any subsequent licence:
    - (i) off-site environmental effects; or
    - (ii) matters which affect the condition of the land or waters.
- 28.** 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 1 October after the end of the annual period an Annual Audit Compliance Report in the approved form.
- 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 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 works conducted in accordance with condition 8 of this licence;
  - (c) monitoring programmes undertaken in accordance with conditions 22 to 26 of this licence; and
  - (d) complaints received under condition 29 of this licence.
- 31.** The books specified under condition 30 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.

## Reporting

- 32.** The Licence Holder shall submit to the CEO an Annual Environmental Report by the 1 October each year. The report shall contain the information listed in Table 16 in the format or form specified in that table.

**Table 16: Annual Environmental Report**

Condition or table (if relevant)	Parameter	Format or form <sup>1</sup>
-	Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken	None specified
Condition 1, Table 1 Condition 2, Table 2	Production or design capacity data and limit exceedances	None specified
Condition 2, Table 2	Waste acceptance	None specified
Condition 4, Table 3	Quantity of hydrocarbon contaminated waste placed in landfarms for remediation. Reporting required for monitoring purposes only – no limit in place.	None specified
Condition 12, Table 7	Cumulative volume discharged via each separate emission point	None specified
Condition 13	Summary of implementing the TARP.	None specified
Condition 14, Table 8	Summary of limit exceedances.	None specified
Condition 15	Summary of investigations and reports provided to the CEO	None specified
Condition 22, Table 11	Point source emissions to surface water monitoring results and a comparison of results against established trigger values. Details of investigations conducted, including outcomes, environmental impacts and remedial actions, in relation to trigger exceedances and a discussion of any trends identified	None specified
Condition 23, Table 12	Limit exceedances and emissions to land monitoring results and comparison of results against the manufacturers specifications	None specified
Condition 24, Table 13	Monitoring of inputs and outputs	None specified

Condition or table (if relevant)	Parameter	Format or form <sup>1</sup>
Condition 25, Table 14	Ambient surface water quality monitoring results and a comparison of results against established trigger values. Details of investigations conducted, including outcomes, environmental impacts and remedial actions, in relation to trigger exceedances and a discussion of any trends identified	None specified
Condition 26, Table 15	Dewatering source water and ambient groundwater quality monitoring results for the Jugari Reinjection Trial and a comparison of results against relevant assessment levels and/or established trigger values.  Details of investigations conducted, including outcomes, environmental impacts and remedial actions, in relation to trigger exceedances and a discussion of any trends identified.	None specified
Condition 28	Compliance	None specified
Condition 29	Complaints summary	None specified

33. The Licence Holder shall ensure that the Annual Environmental Report also contains an assessment of the information contained within the report against previous monitoring results and Licence limits.

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

**Table 17: Non-annual reporting requirements**

Condition or table (if relevant)	Parameter	Reporting period	Reporting date (after end of the reporting period)	Format or form <sup>1</sup>
-	Copies of original monitoring reports submitted to the Licence Holder by third parties	Not Applicable	Within 14 days of the CEOs request	As received by the Licence Holder from third parties

Note 1: Forms are in Schedule 3

**Notification**

**35.** The Licence Holder shall ensure that the parameters listed in Table 18 are notified to the CEO in accordance with the notification requirements of the table.

**Table 18: Notification requirements**

Condition or table (if relevant)	Parameter	Notification requirement <sup>1</sup>	Format or form <sup>2</sup>
Condition 1, Table 1 Condition 2, Table 2 Condition 14, Table 8 Condition 23, Table 12	Breach of any limit specified in the Licence	Part A: As soon as practicable but no later than 5pm of the next usual working day. Part B: As soon as practicable	N1
Condition 21	Calibration report	As soon as practicable.	None specified

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

Note 2: Forms are in Schedule 4

## Definitions

In this licence, the terms in Table 19 have the meanings defined.

**Table 19: Definitions**

Term	Definition
ACN	Australian Company Number.
Act	means the Environmental Protection Act 1986.
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	means the inclusive period from 1 July until 30 June in the following year.
AS/NZS 5667.1	means the Australian Standard AS/NZS 5667.1 Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples
AS/NZS 5667.6	means the Australian Standard AS/NZS 5667.6 Water Quality – Sampling – Guidance on sampling of rivers and streams
AS/NZS 5667.10	means the Australian Standard AS/NZS 5667.10 Water Quality – Sampling – Guidance on sampling of waste waters
averaging period	means the time over which a limit is measured or a monitoring result is obtained.
books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer of the Department of Environment Regulation.
CEO	for the purpose of correspondence means: Chief Executive Officer / Director General Department administering the <i>Environmental Protection Act 1986</i> Locked Bag 10 Joondalup DC WA 6919 Telephone: (08) 6367 7000 or: <a href="mailto:info@dwer.wa.gov.au">info@dwer.wa.gov.au</a>
Compliance Report	means a report in a format approved by the CEO as presented by the or as specified by the CEO from time to time and published on the Department's website.
controlled waste	has the definition in Environmental Protection (Controlled Waste) Regulations 2004.

<b>Term</b>	<b>Definition</b>
Department	means the department established under section 53 of the Public Sector Management Act and designated as responsible for the administration of Division 3 Part V of the Environmental Protection Act 1986.
discharge	has the same meaning given to that term under the EP Act.
emission	has the same meaning given to that term under the EP Act.
EP Act	<i>Environmental Protection Act 1986 (WA)</i> .
freeboard	means the distance between the maximum water surface elevation and the top of retaining banks or structures at their lowest point.
HDPE	means high density polyethylene.
Inert Waste Type 1	has the meaning defined in Landfill definitions.
Inert Waste Type 2	has the meaning defined in Landfill definitions.
Landfill Definitions	means the document titled “Landfill Waste Classification and Waste Definitions 1996” published by the Chief Executive Officer of the Department of Environment as amended from time to time.
licence	means this Licence numbered L6168/1991/11 and issued under the under section 57 of the EP Act by the CEO, subject to the specified conditions contained within.
licence holder	means the person or organisation who is the occupier of the premises, named as Licence Holder on page 1 of the Licence.
MPN	most probable number.
NATA	means the National Association of Testing Authorities, Australia.
NATA accredited	means in relation to the analysis of a sample that the laboratory is NATA accredited for the specified analysis at the time of the analysis.
normal operating conditions	means any operation of a particular process (including abatement equipment) excluding start-up, shut-down and upset conditions, in relation to stack sampling or monitoring.
OHP	Ore Handling Plant
PAS NEMP	means <i>Heads of EPAs Australia and New Zealand (HEPA) 2020, 'PFAS National Environmental Management Plan Version 2.0', – January 2020, Department of Climate Change, Energy, the Environment and Water</i>

Term	Definition
premises	means the area defined in the Premises Map in Schedule 1 and listed as the Premises address on page 1 of the Licence.
prescribed premises	has the same meaning given to that term under the EP Act.
Putrescible	has the meaning defined in Landfill definitions.
quarterly	means the 4 inclusive periods from 1 April to 30 June, 1 July to 30 September, 1 October to 31 December and in the following year, 1 January to 31 March.
Relevant assessment levels	Means relevant screening risk assessment levels published in the following standards and/or guidelines: <ul style="list-style-type: none"> <li>• “Assessment of Site Contamination NEPM” means the <i>National Environment Protection (Assessment of Site Contamination) Measure 1999</i>, as amended from time to time; and/or</li> <li>• “Guideline: Assessment and management of contaminated sites” means the document titled <i>Assessment and management of contaminated sites, Contaminated sites guidelines</i>, as amended from time to time; and/or</li> <li>• PFAS NEMP.</li> </ul>
Schedule 1	means Schedule 1 of this Licence unless otherwise stated.
Schedule 2	means Schedule 2 of this Licence unless otherwise stated.
Schedule 3	means Schedule 3 of this Licence unless otherwise stated.
spot sample	means a discrete sample representative at the time and place at which the sample is taken.
TARP	means BHP’s <i>Jugari Short Term Trial Groundwater Supplementation Scheme – Trigger Action Response Plan (TARP)</i> , dated 21 October 2024.
TRH	means Total Recoverable Hydrocarbons
usual working day	means 0800 – 1700 hours, Monday to Friday excluding public holidays in Western Australia.
waste	has the same meaning given to that term under the EP Act.
WWTP	means wastewater treatment plant.

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**END OF CONDITIONS**



# Schedule 1: Maps

## Premises map

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

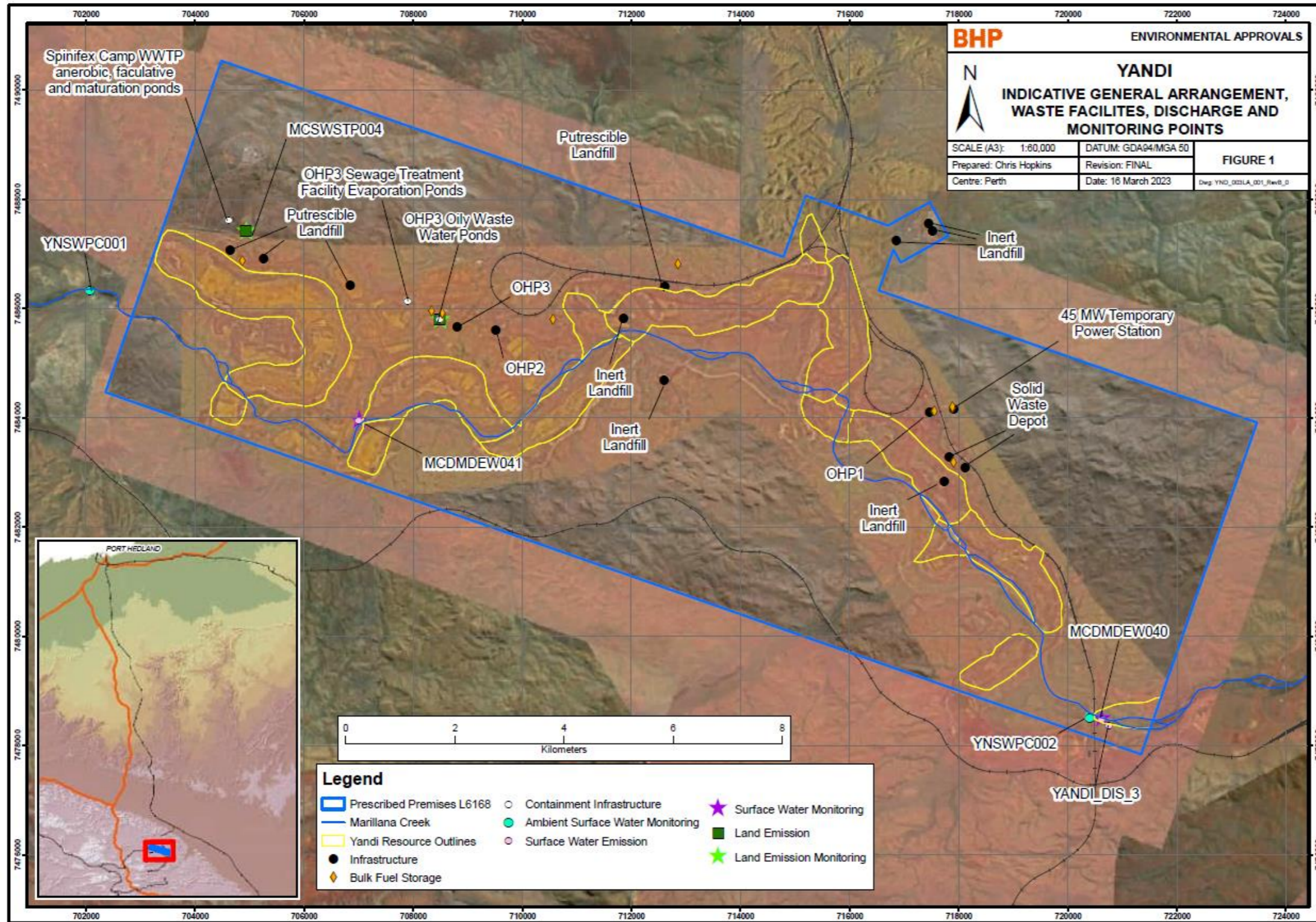


Figure 1: Map of the boundary of the prescribed premises and arrangement of major infrastructure

# Temporary Power Station map

The General (Pad) arrangement of the temporary power station is shown in the map below (Figure 2).

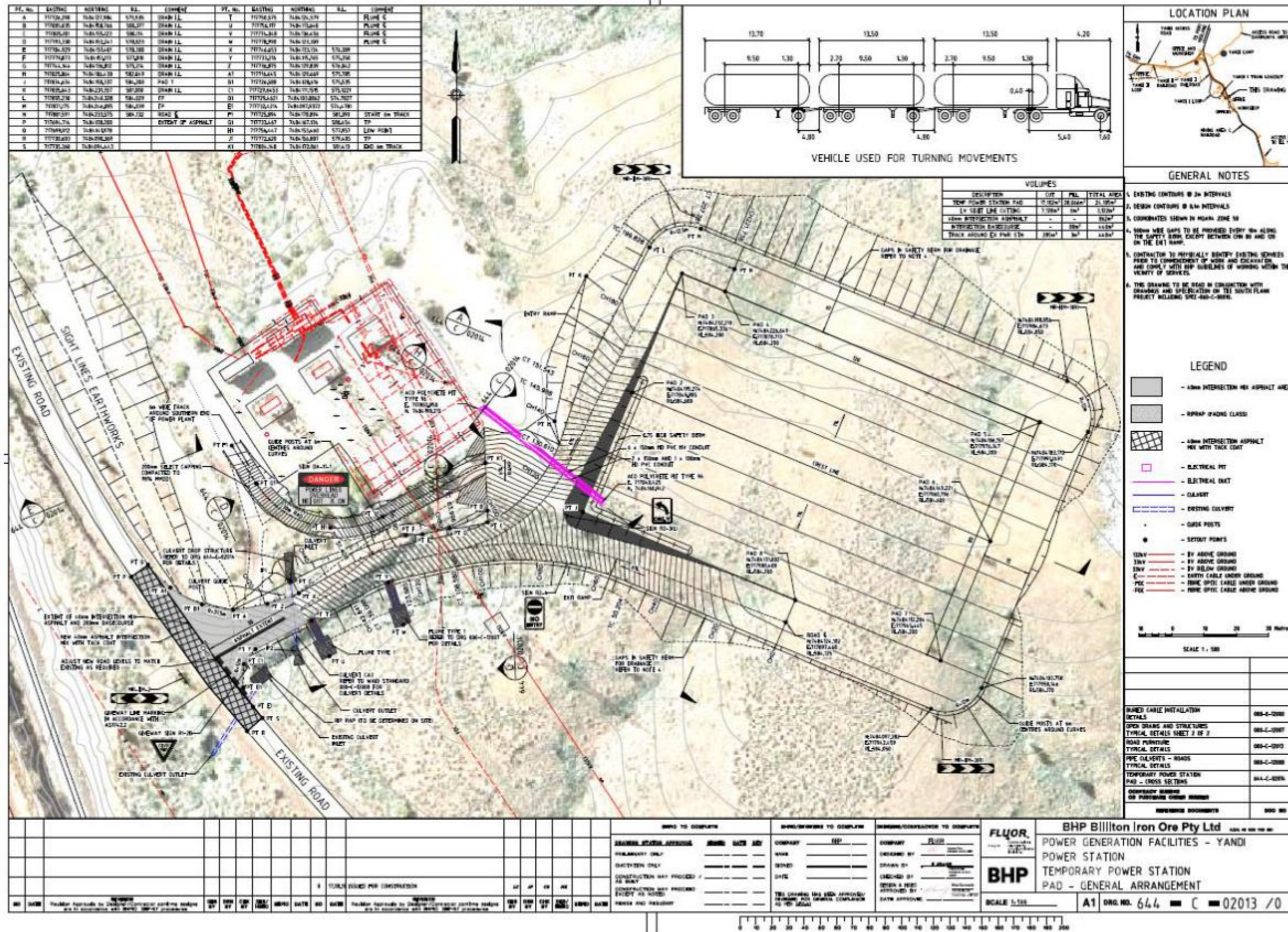


Figure 2: General (Pad) arrangement of the temporary power station

Typical layout of the Temporary Power Station is shown in the figure below (Figure 3)

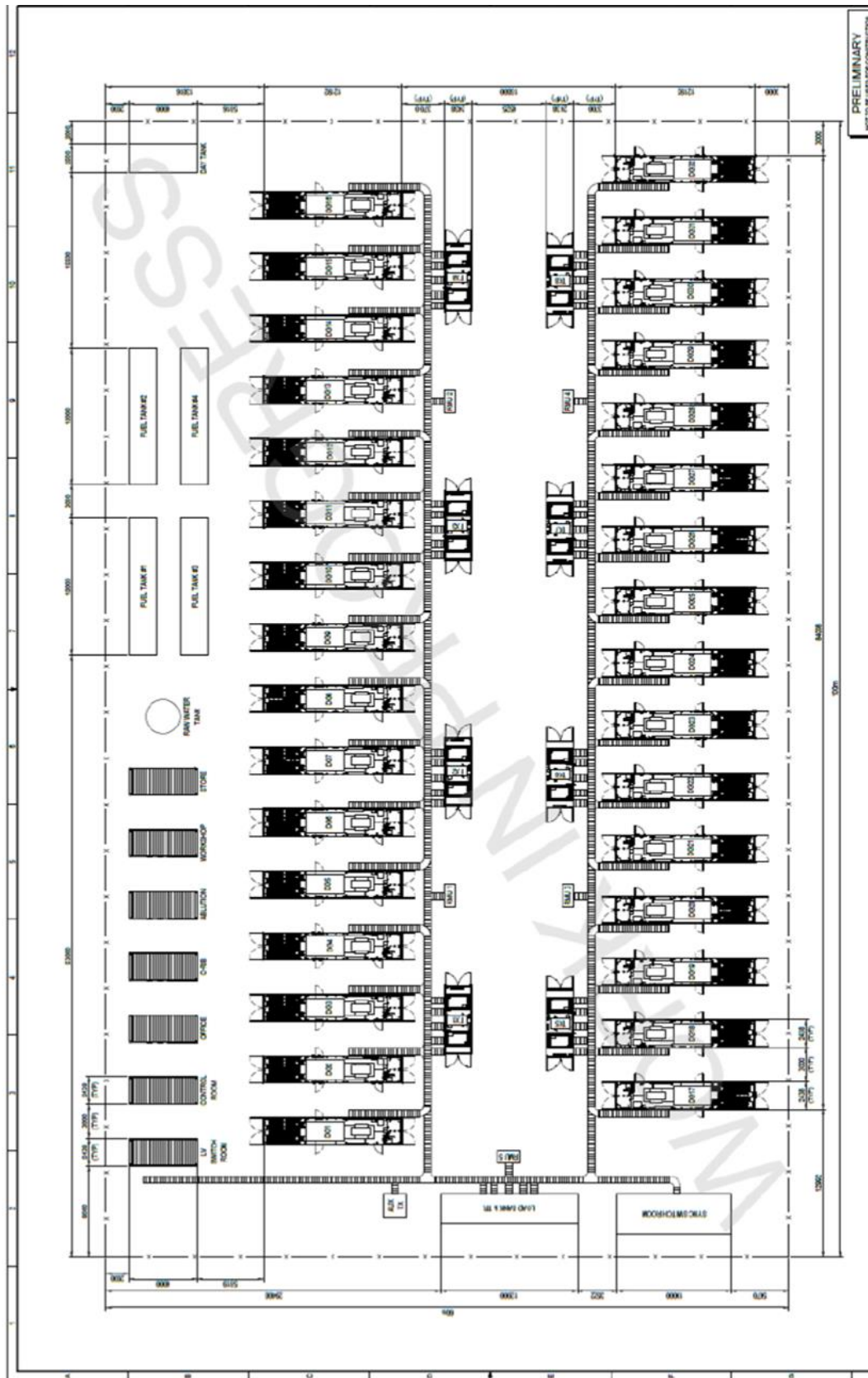


Figure 3: Temporary power station – typical layout

L6168/1991/11 (amended 23 October 2024)

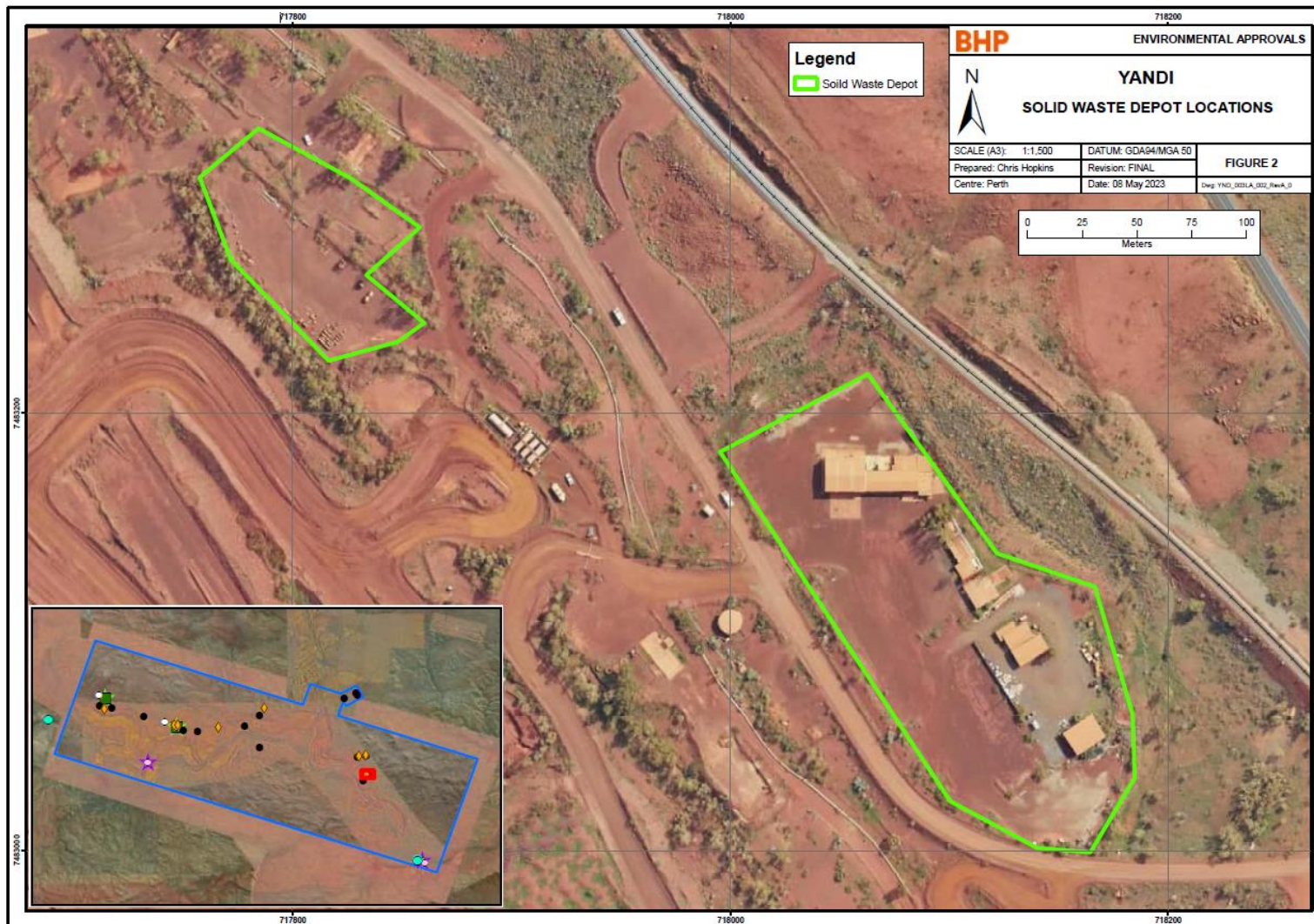


Figure 4: Solid Waste Depot Locations

L6168/1991/11 (amended 23 October 2024)

IR-T06 Licence template (v7.0) (February 2020)

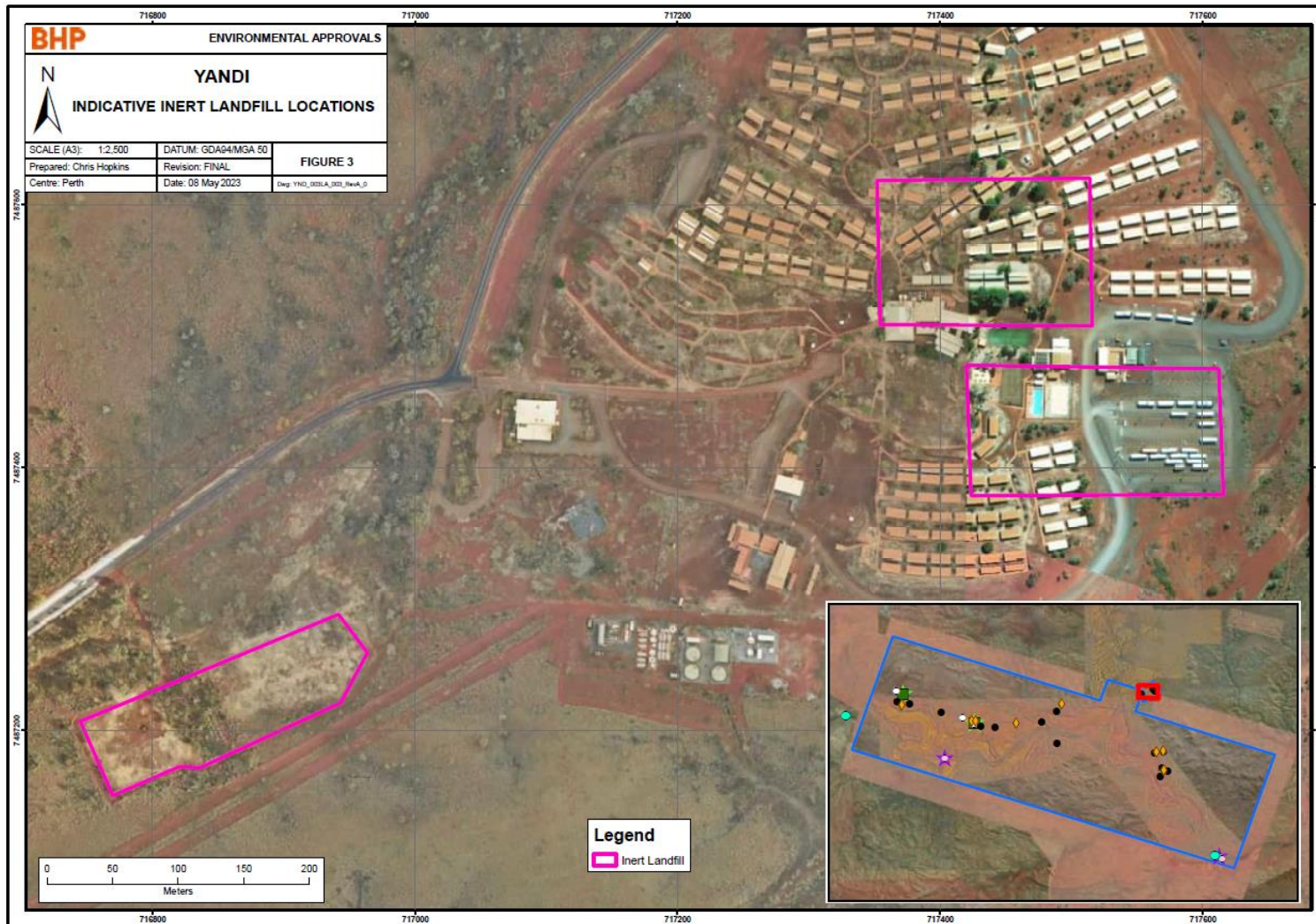


Figure 5: Indicative Inert Landfill Locations

L6168/1991/11 (amended 23 October 2024)

IR-T06 Licence template (v7.0) (February 2020)

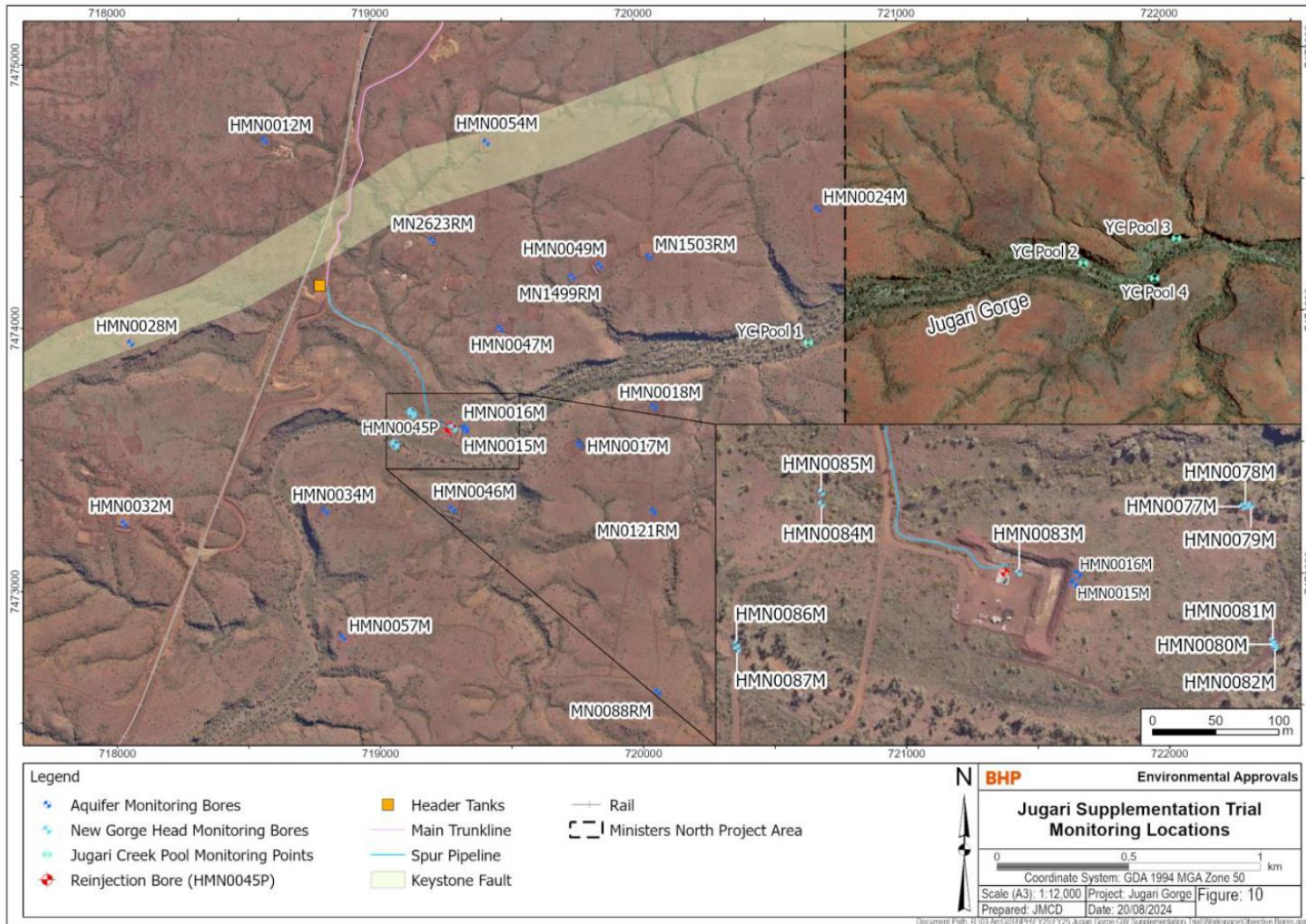


Figure 6: Trial monitoring bore locations

L6168/1991/11 (amended 23 October 2024)

## Schedule 2: Premises boundary

The corners of the premises boundary are the coordinates listed in Table 20.

**Table 20: Premises boundary coordinates (GDA2020)**

	<b>Easting</b>	<b>Northing</b>	<b>Zone</b>
1.	704481.82	7490541.67	GDA 1994 MGA Zone 50
2.	714784.89	7486945.16	GDA 1994 MGA Zone 50
3.	715198.68	7488071.36	GDA 1994 MGA Zone 50
4.	716701.09	7487519.20	GDA 1994 MGA Zone 50
5.	717466.94	7487946.94	GDA 1994 MGA Zone 50
6.	717808.33	7487335.66	GDA 1994 MGA Zone 50
7.	716935.12	7486847.97	GDA 1994 MGA Zone 50
8.	716805.61	7487079.86	GDA 1994 MGA Zone 50
9.	716531.93	7486335.29	GDA 1994 MGA Zone 50
10.	723469.10	7483913.57	GDA 1994 MGA Zone 50
11.	721347.81	7477838.09	GDA 1994 MGA Zone 50
12.	702360.11	7484466.54	GDA 1994 MGA Zone 50
13.	704481.82	7490541.67	GDA 1994 MGA Zone 50

## Schedule 3: Monitoring parameters

Table 21: Point source emissions to surface water monitoring parameters

Monitoring parameter
<p><b>PFAS (28 compounds):</b></p> <p><u>Perfluoroalkyl sulfonic acids</u></p> <ol style="list-style-type: none"> <li>1. Perfluorobutane sulfonic acid (PFBS);</li> <li>2. Perfluoropentane sulfonic acid (PFPeS);</li> <li>3. Perfluorohexane sulfonic acid (PFHxS);</li> <li>4. Perfluoroheptane sulfonic acid (PFHpS);</li> <li>5. Perfluorooctane sulfonic acid (PFOS)<sup>1</sup>;</li> <li>6. Perfluorodecane sulfonic acid (PFDS);</li> </ol> <p><u>Perfluoroalkyl carboxylic acids</u></p> <ol style="list-style-type: none"> <li>7. Perfluorobutanoic acid (PFBA);</li> <li>8. Perfluoropentanoic acid (PFPeA);</li> <li>9. Perfluoroheptanoic acid (PFHpA);</li> <li>10. Perfluorohexanoic acid (PFHxA);</li> <li>11. Perfluorooctanoic acid (PFOA)<sup>1</sup>;</li> <li>12. Perfluorononanoic acid (PFNA);</li> <li>13. Perfluorodecanoic acid (PFDA);</li> <li>14. Perfluoroundecanoic acid (PFUnDA);</li> <li>15. Perfluorododecanoic acid (PFDoDA);</li> <li>16. Perfluorotridecanoic acid (PFTrDA);</li> <li>17. Perfluorotetradecanoic acid (PFTeDA);</li> </ol> <p><u>Perfluoroalkyl sulfonamides</u></p> <ol style="list-style-type: none"> <li>18. Perfluorooctane sulfonamide (FOSA);</li> <li>19. N-methyl perfluorooctane sulfonamide (MeFOSA);</li> <li>20. N-ethyl perfluorooctane sulfonamide (EtFOSA);</li> <li>21. N-methyl perfluorooctane sulfonamidoethanol (MeFOSE);</li> <li>22. N-ethyl perfluorooctane sulfonamidoethanol (EtFOSE);</li> <li>23. N-methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA);</li> <li>24. N-ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA);</li> </ol> <p><u>Fluorotelomer sulfonic acid</u></p> <ol style="list-style-type: none"> <li>25. 4:2 fluorotelomer sulfonic acid (4:2 FTS);</li> <li>26. 6:2 fluorotelomer sulfonic acid (6:2 FTS);</li> <li>27. 8:2 fluorotelomer sulfonic acid (8:2 FTS);</li> <li>28. 10:2 fluorotelomer sulfonic acid (10:2 FTS).</li> </ol> <p>Appropriate limits of reporting (LOR) must be adopted.</p>

Note 1: Parameter already specified in Table 11.



## Schedule 4: Notification Form



Government of **Western Australia**  
Department of **Water and Environmental Regulation**

Licence:

Licence holder:

Form: N1

Date of breach:

### Notification of detection of the breach of a limit.

These pages outline the information that the operator must provide.

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

### Part A

Licence number	
Name of operator	
Location of premises	
Time and date of the detection	

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

Part B

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

Name	
Post	
Signature on behalf of licence holder	
Date	