Government of Western Australia
Department of Water and Environmental Regulation

Licence

Licence number	L5533/1976/11
Licence holder	BHP Billiton Nickel West Pty Ltd
ACN	004 184 598
Registered business address	125 St Georges Terrace PERTH WA 6000
DWER file number	2011/005902
Duration	5/10/2013 to 4/10/2030
Da**te of issue**	3/10/2013
Date of amendment	12/11/2024
Premises details	Kambalda Nickel Concentrator Durkin Road, KAMBALDA, WA 6442
	Legal description Mining Tenements ML15/149, ML15/150, lease agreement over part of Lot 13 on DP49832-K173678L, easement over part of Lot 13 on DP49832-K173679E, and lease agreement over portion of M26/317 KAMBALDA WA 6442 As depicted in Schedule 1

Prescribed premises category description (Schedule 1, *Environmental Protection Regulations 1987*)	**Production capacity**
Category 5: Processing or beneficiation of metallic or non-metallic ore	50,000 tonnes or more per year

This licence is granted to the licence holder, subject to the attached conditions, on 12 November 2024 by:

Caron Goodbourn

Digitally signed by Caron Goodbourn
Date: 2024.11.14 14:13:30 +08'00'

Manager, Process Industries

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

Licence history

Date	Reference number	Summary of changes
03/10/2013	L5533/1976/11	Licence Issued
15/07/2016	L5533/1976/11	Expiry date amended from 04/10/2018 to 04/10/2030 in accordance with Notice of amendment and schedule of licences with amended expiry dates(2016)
04/04/2022	W6624/2024/1	Works approval for optimisation works including approval for a newly constructed Concentrate Thickener
12/11/2024	L5533/1976/11	Licence holder-initiated amendment to authorise ongoing operations of the works constructed under W6624/2021/1 and changes to reflect temporary suspension of operations. Includes Department initiated amendments to format of the licence.

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 is maintained and operated in accordance with the corresponding operational requirement set out in Table 1.

Table 1: Infrastructure and equipment requirements

No.	Site infrastructure and equipment	Operational requirement	Infrastructure location – Schedule 1
1	Ore processing infrastructure consisting of: Crusher, conveyor coverings, dust filters, water sprays	a) The water sprays at the feed point must be operated and maintained at the feed point to the primary crusher and at all transfer points from the conveyor to sizing screens during operational periods. b) All dust collection and dust control systems must be working correctly during operational periods, including the coverings on conveyors, transfer points, discharge points, skirtings, and dust filters. c) Water run-off from the crushing area must be directed to a nominated catchment dam and the crushing area must be drained to ensure all wastewater is retained within the premises.	Shown as: "Crusher" in Figure 8.
2	Contaminated dams consisting of: Stormwater Catchment Dam (Unlined, clay core overlain by gravel), Capacity: 13,722m^3 Stormwater Catchment area (56Ha) draining to Stormwater Catchment Dam Return Water Dam (RWD) Process Water Dam (previously Cons 2 Dam) HDPE lined, Capacity: 15,000m^3	a) The licence holder must maintain a minimum top of embankment freeboard of 300mm for all containment dams. b) The Stormwater Catchment Dam must receive and contain all contaminated or potentially contaminated stormwater runoff from the hardstand processing plant stormwater catchment area. c) All decant return water from the tailing's storage facility (TSF) must be directed to and contained within the Process Water Dam for optional re-use within the process. d) All stormwater run-off must be directed away from waste management facilities.	Shown as: "Process Water Dam (previously Cons 2 Dam)" and "Stormwater Catchment dam" in Figure 5.
3	Tailing's Storage Facilities (TSF's)	a) A minimum top of embankment freeboard of 300mm must be	Shown as "NKC TSF" in

No.	Site infrastructure and equipment	Operational requirement	Infrastructure location – Schedule 1
	consisting of: TSF1, TSF2, TSFA and TSFB, TSF3B perimeter drain, Process water tanks: TK604 (contains Process Water) TK605 (collects thickener overflow process water).	maintained within TSF's. b) A perimeter drain immediately downstream from the external toe of TSF3B, must be maintained (where practical) to collect and recover any liquid matter from seepage or breach of the embankments.	Figure 8.
4	Tailings delivery and decant return water pipelines	a) All pipelines containing saline, alkaline or cyanide constituents must be either buried or installed within bunded facilities. Tailings delivery lines, elevated pipelines within the plant area and return water lines are exempt from this condition, provided they are maintained to contain contaminated material and are free from leaks and spills from pipeline breaks or operational error- b) All pipeline bund's must be maintained to contain leaks and spills. c) Catch pits located at low points, must be maintained and visually inspected biannually, during operational periods, to ensure they contain any spills from along the pipeline routes.	None shown.
5	Newly constructed Concentrate Thickener located on concrete hardstand with bunding consisting of: Concentrate thickener and associated infrastructure,	The Concentrate Thickener and associated infrastructure must be maintained to ensure: a) The maximum volume of concentrate in the thickener must not exceed 588m3. b) The hardstand/bunding for the thickener does not discharge liquids from this area directly to the environment. c) Bunding must meet the requirements of AS/NZS 4681:2000. d) All stormwater must drain to the stormwater sumps.	Shown as: "NKC Concentrator" in Figure 2 "Concentrate Thickener', 'Kambalda Concentrator Infrastructure" in Figure 8.
6	Dryer stack sampling ports	During operational periods, emission sampling ports must be maintained on the following discharge points: a) spray drier scrubber stack units 1, 2 and 3; b) ports: SD1TW7 for unit 1; SD2TW8 for unit 2, and SD3TW9 for unit 3.	None shown.

No.	Site infrastructure and equipment	Operational requirement	Infrastructure location – Schedule 1
7	Vehicle washdown facilities consisting of: Surface Mobile Equipment (SME) Light Vehicle (LV)	a) Vehicle washdown areas must have fuel/oil traps and provisions to contain all detergent or solvent-contaminated waters.	Shown as: "New SME wash down facility" and "Existing LV wash down facility" in Figure 10.

Emissions and discharges

Air Pollution Control Conditions

2. The licence holder must ensure that under normal operation, discharge from the concentrate dryer stacks does not exceed the values specified in Table 2 below:

Table 2 – Discharges from the concentrate dryer stacks

Discharge parameter	Discharge limit
Particulates	<250mg/m^3
Total of antimony, arsenic, cadmium, lead, vanadium and related compounds	<10mg/m^3
Nickel and related compounds	<20mg/m^3 expressed as Ni
Cadmium and related compounds	<3mg/m^3 expressed as Cd

Note: All results expressed dry at STP (0 degrees Celsius and 101.325 kilopascals.

Discharge to Land

3. The licence holder must ensure that wastewater from the vehicle washdown areas is not discharged to the leach drain unless the wastewater meets the limits specified in Table 3:

Table 3– Wastewater Emissions

Emission Point reference	Parameter	Limit (including units)	Averaging period
Wash down bay areas SME & LV as shown in Figure 10	pH	Within the range 5.5 to 8.5	Bi-annually
	Surfactants	5mg/L	
	Total recoverable hydrocarbons	5mg/L	
	BTEX	10µg/L	

Monitoring

Atmospheric Monitoring

4. During operational periods, the licence holder must undertake, on a three-monthly basis, sampling from nominated dryer stack sampling ports listed in Table 1, for the purpose of measuring concentrations of emissions listed in Table 2.

5. During operational periods, the sampling from the nominated dryer stack sampling ports referred to in Table 1, must be conducted so that the source testing in any 'relevant period' is conducted at least six weeks before and after the testing in any other relevant period, where the definition of relevant period means each of the three calendar month periods commencing on 1 January, 1 April, 1 July and 1 October in each year.

Tailings Storage Visual Inspections

6. During operational periods when tailings are deposited into the operational tailings storage facility (TSF) the licence holder must undertake visual inspections at least once every six hours. During non-operational periods when tailings are not deposited into the operational TSF, the licence holder must undertake visual inspections daily. As a minimum the following must be inspected:

(a) tailings delivery lines;

(b) return water lines;

(c) tailings deposition;

(d) ponding on the surface of the TSF;

(e) internal embankment freeboard; and

(f) the external walls of the TSF.

7. The licence holder must ensure a logbook is kept for all visual inspections as per condition 6. The logbook must be signed by the person undertaking the inspection and must indicate any deviations or problems noted from the usual operational observations.

8. The licence holder must ensure the logbook is retained in the plant control room and is made available to an inspector on request.

Pipeline Flow Monitoring

9. During operational periods, the licence holder must monitor and maintain all installed telemetry systems and pressure sensors fitted along pipelines to ensure detection of leaks or failures.

Hazardous Chemical Storage

10. The licence holder must immediately recover or remove and dispose of spills of environmentally hazardous materials outside an engineered containment system.

Suspended Solids Removal

11. The licence holder must ensure that primary and secondary settling basins are maintained at least at each point of discharge such that there is sufficient retention time within the basin to maximise removal of suspended solids prior to discharge to Lake Lefroy.

Water Monitoring Programme

12. The licence holder must, at the frequencies stated in column two, take a

measurement of standing water levels (SWL) and take representative water samples from the monitoring sites referred to in column 1 as depicted in Table 4 and have them analysed for the parameters to be measured in column 3.

Table 4 – SWL Measurements

COLUMN 1	**COLUMN 2**	**COLUMN 3**
Monitoring Sites and Location on Attachments 5 and 6	**Sampling frequency**	**Parameters to be measured**
KD5105A,KD5106A, KD6160, KD6159	Annually	Standing Water Level (SWL)[1] pH Total dissolved solids (TDS) Electrical conductivity (EC) Chromium (Cr) Iron (Fe) Copper (Cu) Nickel (Ni) Zinc (Zn) Arsenic (As)
KD5272, KD5267	Annually	SWL
KD5271, KD5273, KD5268, KD6159A, KD6031A, KD5270, KD5247A, KD5248, KD5249, KD5250, KD5251, KD5252, KD5253	Bi-Annually Annually	SWL pH, TDS, EC, Cr, Fe, Cu, Ni, Zn and As
Surface Location 1, Process Water Dam[2]	Annually	pH, TDS, EC, Cr, Fe, Cu, Ni, Zn and As
Stormwater Catchment Dam[3] discharge	Daily during each overflow event	pH, TDS, EC, Cr, Fe, Cu, Ni, Zn and As

Note1: SWL must be determined prior to collection of other water samples.

Note 2: Named the Cons 2 Dam in previous licence versions.

Note 3: Named the Process Water Dam in previous licence versions.

Note 4: These parameters should be measured and recorded in the field to ensure representativeness. An exemption from National Association of Testing Authorities (NATA) laboratory analysis is allowed given geographical remoteness of the sample site and short holding time of the parameter.

13. The licence holder must ensure that:

(a) all water samples are collected and preserved in accordance with AS/NZS 5667.1;

(b) all water 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.

Records and Reporting

14. The licence holder must dispose refractory waste to the Tailings Storage Facility Cell 3B, (location as marked in Figure 4) and in accordance with the document in Table 5 below.

Table 5 – Refractory Waste TSF Disposal

Construction requirements documentation	Parts	Date of Document
Licence Amendment – NKC Refractory Material Disposal - Supporting Information	All	24 February 2015

15. The licence holder must submit a compliance document to the CEO, within four weeks of the completion of the works in Table 5.

16. The compliance document must:

(a) certify that the works were completed in accordance with condition 14 of this Licence;

(b) be signed by a person authorised to represent the licensee licence holder and contain the printed name and position of that person within the company.

17. 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.

18. 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 conditions 14, 15 and 16 of this licence;

(c) any maintenance of infrastructure that is performed in the course of complying with condition 1 of this licence;

(d) monitoring requirements undertaken in accordance with conditions 4, 5, 6, 7, 8, 9, 10, 12 and 13 of this licence as specified in Table 6; and

(e) complaints received under condition 16 of this licence.

19. The books specified under condition 18 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.

20. The licence holder must advise the CEO in writing no later than 5pm of the next usual working day of becoming aware of an exceedance of any measurement which indicates that any discharge limit specified in these conditions of the licence has been exceeded.

21. The written advice required by condition 20 must include:

(a) the date, time and probable reason for the exceedance;

(b) an estimate of the period over which the limit was or is likely to be exceeded; and

(c) an estimate of the extent of the discharge over that period and an indication of known or potential environmental impacts.

22. The licence holder must provide a full report (unless otherwise approved by the CEO) on its investigations into any exceedance reported under condition 20 within 14 days of that exceedance, and it must include, but not be limited to:

(a) the date, time and reason for the exceedance;

(b) the period over which the exceedance occurred;

(c) the extent of the discharge over that period and potential or known environmental consequences;

(d) corrective action taken or planned to mitigate adverse environmental consequences; and

(e) corrective action taken or planned to prevent a recurrence of the exceedance.

23. 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 an Annual Audit Compliance Report in the approved form by 30 September each year.

24. The licence holder must:

(a) prepare an Environmental Report that provides information in accordance with Table 6 for the preceding annual period, and

(b) submit that Environmental Report to the CEO by 30 September each year.

Table 6: **Environmental reporting requirements**

Condition or table	Parameter
Table 1	Summary of biannual visual inspections of the catch pits
4 and 5	Summary of sampling from the concentrate dryer stacks on a three-monthly basis from nominated dryer stack sampling ports
7	Summary of the log book for all visual inspections

Condition or table	Parameter
9	Summary of leaks and/or failures detected by telemetry systems and pressure sensors on site
10	Summary of spills of environmentally hazardous materials outside an engineered containment system
Table 3	Summary of biannual wastewater monitoring from the emission point at the Wash down bay areas (SME & LV) as shown in Appendix 1, Figure 10.
Table 4	Summary of results of water laboratory samples tested for the parameters being measured
20, 21 and 22	Summary of any exceedances of any measurement which indicates that any discharge limit specified in the licence conditions has been exceeded
-	Summary of monthly piezometer monitoring for the phreatic surface of the tailings within the embankments of TSF3A and TSF3B

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 are available on the Department's website).
annual period	a 12 month period commencing from 1 July until 30 June of the immediately following year.
AS/NZS 5667.1	means the Australia and New Zealand Standard for water quality sampling
AS/NZS 4681:2000	means the Australian and New Zealand Standard for the storage and handling of Class 9 (miscellaneous) dangerous goods and articles
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
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.
Environmentally hazardous material	means material (either solid or liquid raw materials, materials in the process of manufacture, manufactured products, products used in the manufacturing process, by-products and waste) which if discharged into the environment from or within the premises may cause pollution or environmental harm.
HDPE	means high-density polyethylene;
EP Act	*Environmental Protection Act 1986* (WA)
EP Regulations	*Environmental Protection Regulations 1987* (WA)
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.

Term	Definition
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.
mg/m^3	means milligrams per cubic metre, expressed dry at 0 degrees Celsius and 1.0 atmospheric pressure (101.325 kilopascals);
NATA	means National Association of Testing Authorities
operational period	Any period of time the premises is undertaking processing operations in accordance with it's EP Act operating licence.
premises	refers to the premises to which this licence applies, as specified at the front of this licence and as shown within the premises maps in Schedule 1, Figures 1 and 2, to this licence.
prescribed premises	has the same meaning given to that term under the EP Act.
SWL	means standing water level
TSF	Tailings Storage Facility - an engineered containment pond or dam used to store tailings
waste	has the same meaning given to that term under the EP Act.
Working correctly	working to perform all specified functions and in accordance with operational design standards.
Usual working day	means 0800 – 1700 hours, Monday to Friday excluding public holidays in Western Australia

END OF CONDITIONS

Schedule 1: Maps

Premises maps

Figure 1: Kambalda Nickel Concentrator Mining Tenements and Premises Boundary

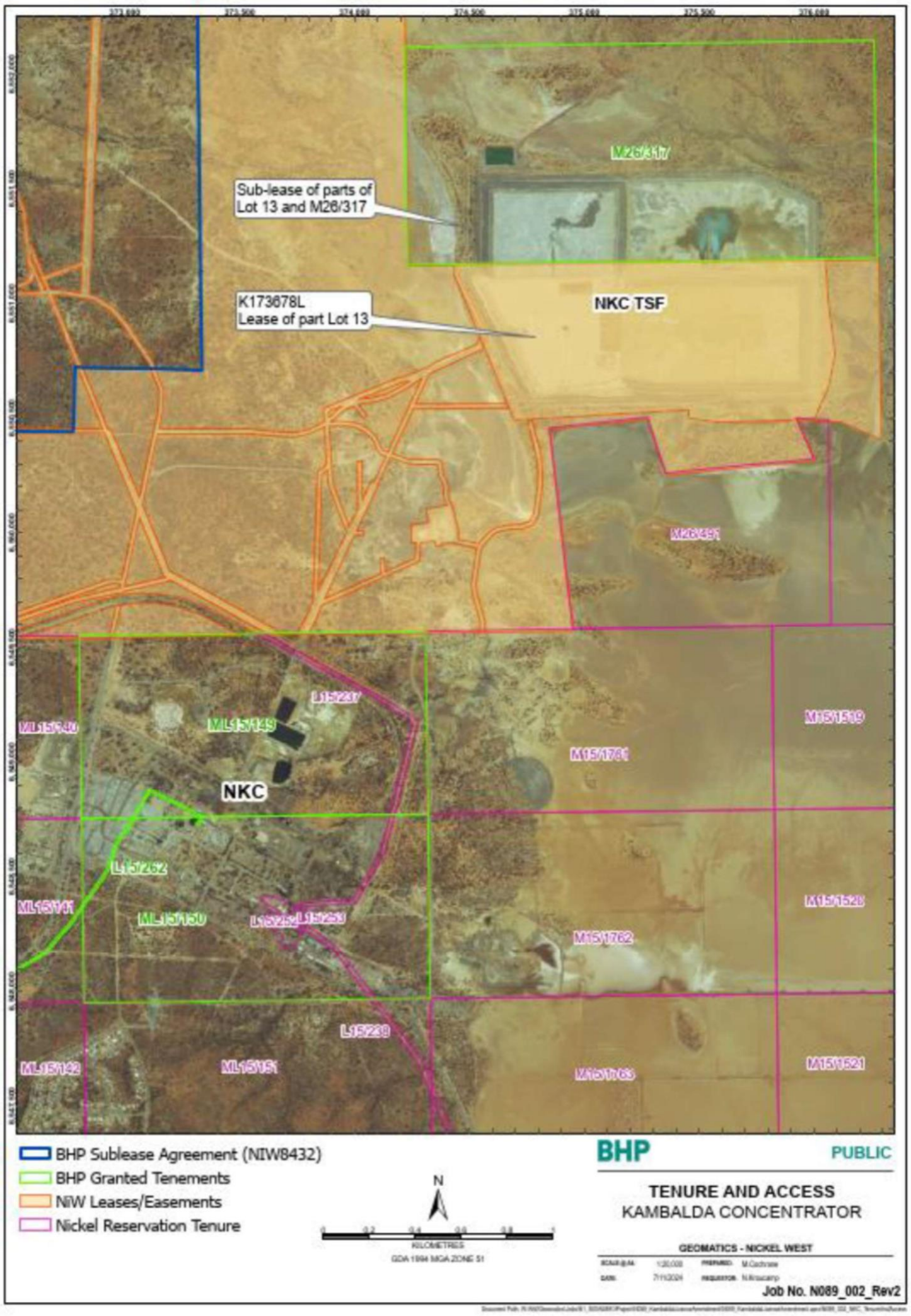


Figure 2: The boundary of the prescribed premises and location of nearby receptors is shown in the map below.

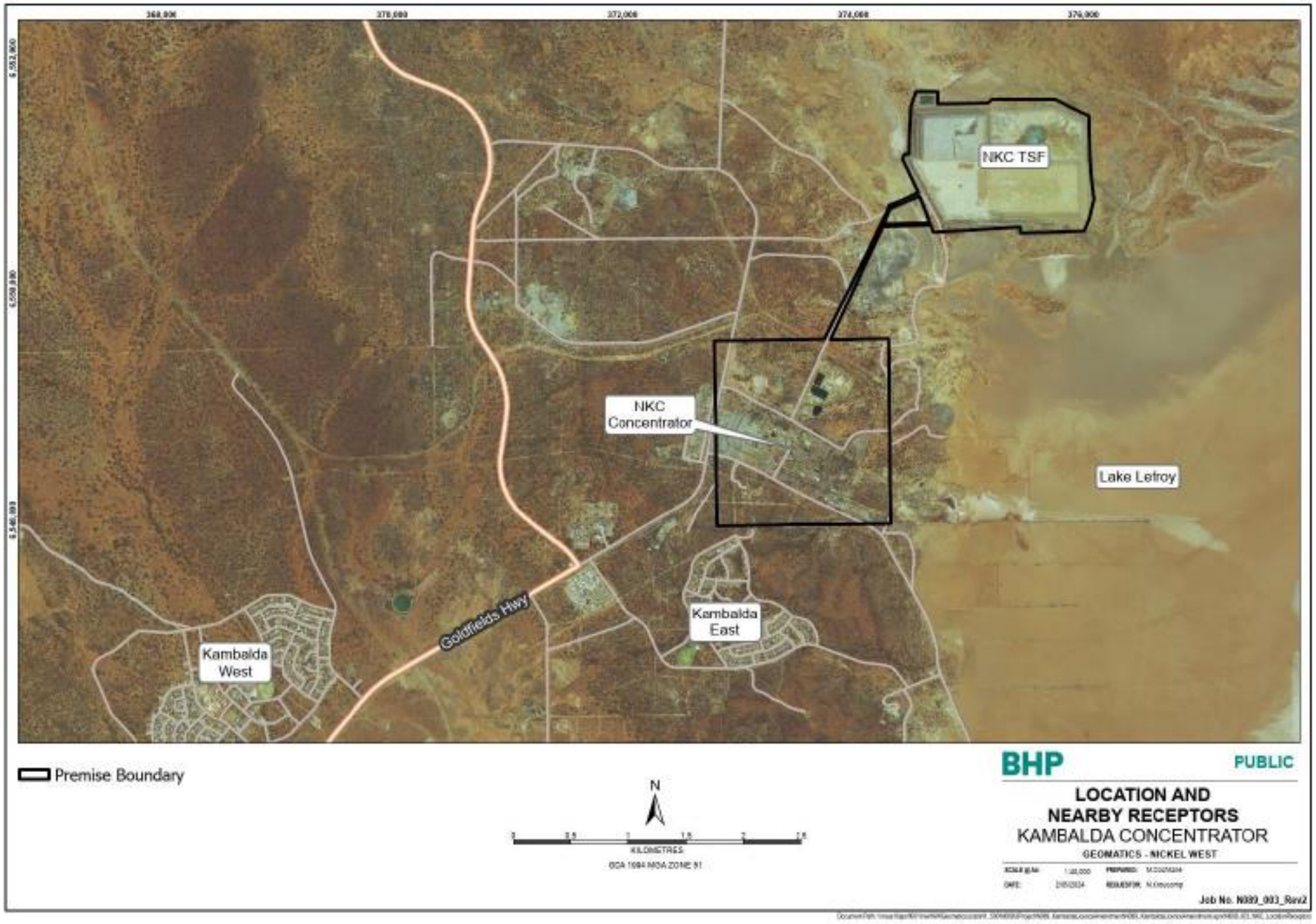


Figure 3: NKC Tailings Storage Facility

Figure 4: Water Management Improvement Dam

Source: Figure 4, page 10, Application Document titled "Licence Amendment Application Supplementary Information Concentrate Thickener – 15 July 2024".

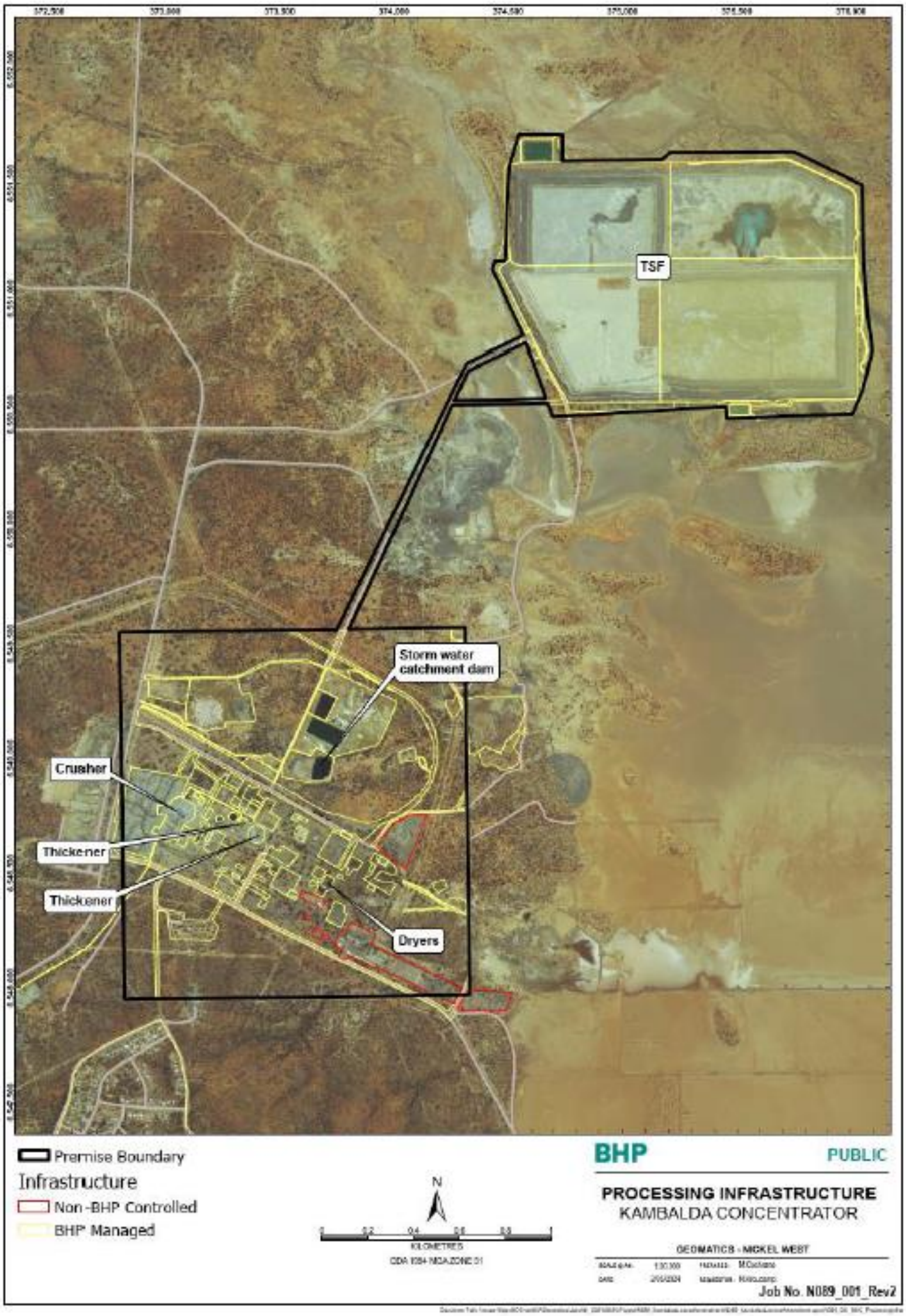
Figure 5: Water Management Improvement Dam

Figure 6: Monitoring Bore Locations

Figure 7: Map of the newly constructed Concentrate Thickener

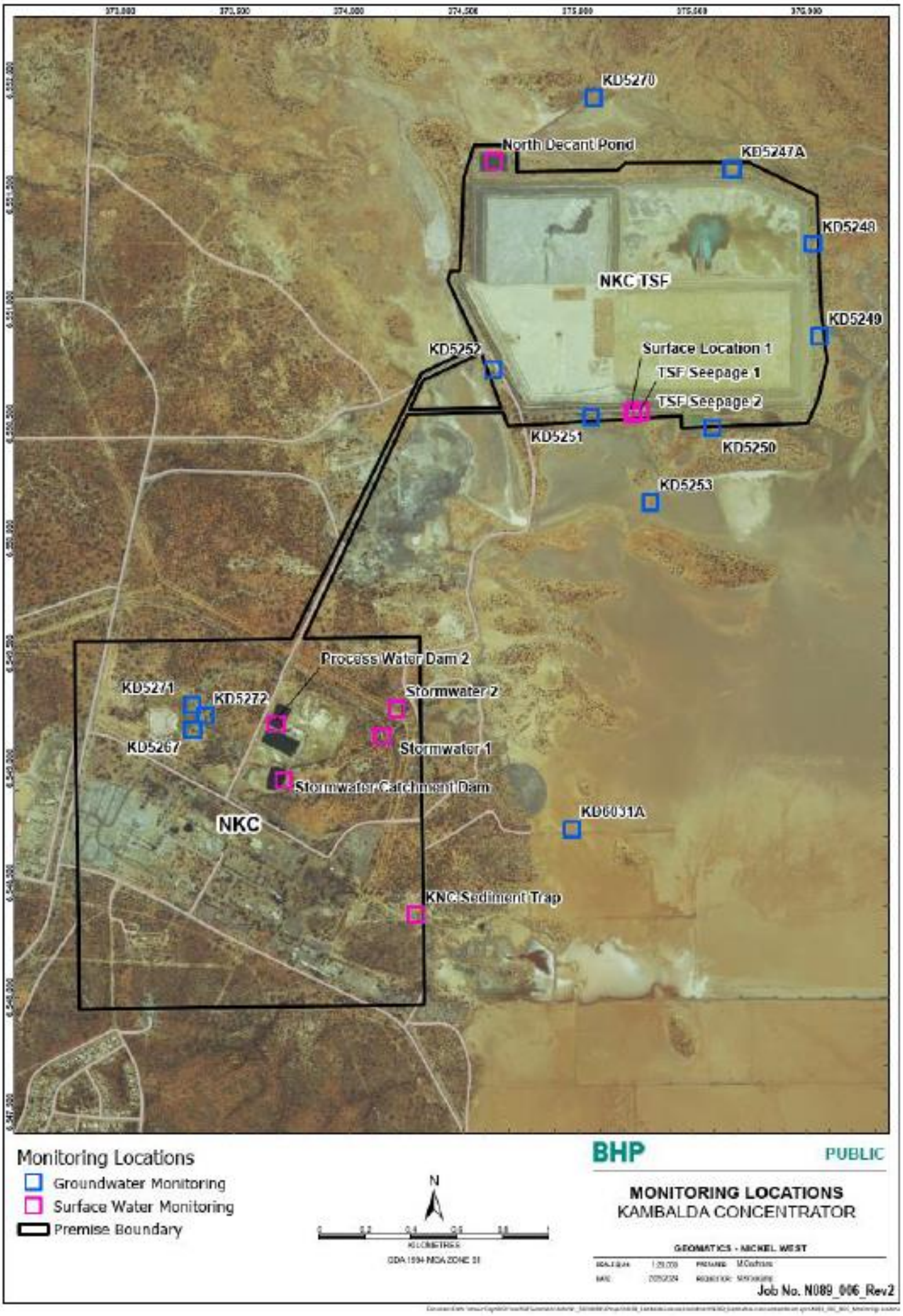
Source: Figure 6, page 16, Application Document titled "Licence Amendment Application Supplementary Information Concentrate Thickener – 15 July 2024",

Figure 8: Map of the Nickel Kambalda Concentrator (NKC) Process Infrastructure



Source: Figure 2, page 7, Application Document titled "Licence Amendment Application Supplementary Information Concentrate Thickener – 15 July 2024",

Figure 9: Map of the monitoring locations



Source: Figure 3, page 8, Application Document titled "Licence Amendment Application Supplementary Information Concentrate Thickener – 15 July 2024",

Figure 10: Map of the SME and LV Wash down bay areas as depicted in pink