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|------------------------------------|-----------------------------------------------------------------------------------------------------|----|-----------|
| <b>Licence Number</b>              | L9109/2017/1                                                                                        |    |           |
| <b>Licence Holder</b>              | Contract Resources (Karratha) Pty Ltd                                                               |    |           |
| <b>ACN</b>                         | 609 929 580                                                                                         |    |           |
| <b>Registered business address</b> | 6 Sheriffs Road<br>LONSDALE SA 5160                                                                 |    |           |
| <b>File Number</b>                 | DER2017/002200                                                                                      |    |           |
| <b>Duration</b>                    | 2/03/2018                                                                                           | to | 1/03/2038 |
| <b>Date of issue</b>               | 16/02/2018                                                                                          |    |           |
| <b>Date of Amendment</b>           | 13/05/2019                                                                                          |    |           |
| <b>Prescribed Premises</b>         | Category 61: Liquid waste facility<br>Category 61A: Solid waste facility                            |    |           |
| <b>Premises</b>                    | Karratha Mercury Treatment Plant<br>117 Bedrock Turn<br>GAP RIDGE WA 6714                           |    |           |
|                                    | Legal description<br>Lot 117 on Deposited Plan 76660<br>As defined by the coordinates in Schedule 1 |    |           |

This amended Licence is granted to the Licence Holder, subject to the following conditions, on 13/05/2019, by:

**Manager, Process Industries**

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

## Explanatory notes

These explanatory notes do not form part of this Licence.

### Defined terms

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

### Department of Water and Environmental Regulation

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

### Licence

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

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

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

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

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

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

### Responsibilities of a Licence Holder

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

- the duties of an occupier under section 61; and
- restrictions on making certain changes to Prescribed Premises unless the changes are in accordance with a works approval, Licence, closure notice or environmental protection notice (s.53).

Strict penalties apply for offences under the EP Act.

## Reporting of incidents

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

## Offences and defences

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

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

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

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

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

## Authorised Emissions and Discharges

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

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

## Amendment of licence

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

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

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

### Duration of Licence

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

### Suspension or revocation

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

### Fees

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The Licence Holder must pay an annual licence fee. Late payment of annual licence fees may result in the licence ceasing to have effect. A licence that has ceased to have effect due to non-payment of annual licence fees continues to exist; however, it ceases to provide a defence to an offence under s.74A of the EP Act.

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

## Definitions and interpretation

### Definitions

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

**Table 1: Definitions**

| Term             | Definition                                                                                                                                                                                  |
|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ACN              | Australian Company Number                                                                                                                                                                   |
| Amendment Notice | means an amendment granted under s.59 of the EP Act in accordance with the procedure set out in s.59B of the EP Act.                                                                        |
| Annual Period    | means a 12 month period commencing from 1 January until 31 December.                                                                                                                        |
| Approved form    | means the AACR Form template approved by the CEO for use and available via DWER's external website.                                                                                         |
| AS 4323          | means the Australian Standard <i>AS 4323.1 Stationary source emissions Method 1: Selection of sampling positions</i> .                                                                      |
| AS/NZS 5667.1    | means the Australian Standard <i>AS/NZS 5667.1 Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples</i> |
| AS/NZS 5667.10   | means the Australian Standard <i>AS/NZS 5667.10 Water Quality – Sampling – Guidance on sampling of waste waters</i>                                                                         |
| AS/NZS 5667.11   | means the Australian Standard <i>AS/NZS 5667.11 Water Quality – Sampling – Guidance on sampling of groundwaters</i>                                                                         |
| ASTM D93-18      | means <i>ASTM D93-18 Standard Test Methods for Flash Point by Pensky-Martens Closed Cup Tester</i>                                                                                          |
| ASTM D3278-96    | means <i>ASTM D3278-96 Standard Test Methods for Flash Point of Liquids by Small Scale Closed-Cup Apparatus</i>                                                                             |
| Averaging period | means the time over which a limit is measured or a monitoring results is obtained                                                                                                           |
| Class II Waste   | has the meaning defined in the Landfill Definitions.                                                                                                                                        |
| Condition        | means a condition to which this Licence is subject under s.62 of the EP Act.                                                                                                                |
| Books            | has the same meaning given to that term under the EP Act.                                                                                                                                   |

|                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CEO                                  | means Chief Executive Officer.<br>CEO for the purposes of notification means:<br><br>Director General<br>Department Administering the <i>Environmental Protection Act 1986</i><br>Locked Bag 10<br>JOONDALUP DC WA 6919<br><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 Licence Holder or as specified by the CEO (guidelines and templates may be available on the Department's website).                                                                                                                                                                                                                                                                                                                              |
| Department                           | means the department established under section 35 of the <i>Public Sector Management Act 1994</i> and designated as responsible for the administration of Part V, Division 3 of the EP Act.                                                                                                                                                                                                                                                                                                                        |
| Department Request                   | means a request for Books or other sources of information to be produced, made by an Inspector or the CEO to the Licence Holder in writing and sent to the Licence Holder's address for notifications, as described at the front of this Licence, in relation to:<br><br>(a) compliance with the EP Act or this Licence;<br>(b) the Books or other sources of information maintained in accordance with this Licence; or<br>(c) the Books or other sources of information relating to Emissions from the Premises. |
| Discharge                            | has the same meaning given to that term under the EP Act.                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| DWER                                 | Department of Water and Environmental Regulation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Emission                             | has the same meaning given to that term under the EP Act.                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Environmental Harm                   | has the same meaning given to that term under the EP Act.                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| EP Act                               | means the <i>Environmental Protection Act 1986</i> (WA).                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| EP Regulations                       | means the <i>Environmental Protection Regulations 1987</i> (WA).                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Freeboard                            | means the distance between the maximum water surface elevations and the top of retaining banks or structures at their lowest point                                                                                                                                                                                                                                                                                                                                                                                 |
| HDPE                                 | means high density polyethylene                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| HTTU                                 | means the High Temperature Treatment Unit                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Implementation Agreement or Decision | has the same meaning given to that term under the EP Act.                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Inspector                            | means an inspector appointed by the CEO in accordance with s.88 of the EP Act.                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Landfill Definitions                 | means the document titled "Landfill Waste Classification and Waste Definitions 1996" published by the Chief Executive Officer of the                                                                                                                                                                                                                                                                                                                                                                               |

|                             |                                                                                                                                                                        |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                             | Department of Environment as amended from time to time.                                                                                                                |
| Licence                     | refers to this document, which evidences the grant of a Licence by the CEO under s.57 of the EP Act, subject to the Conditions.                                        |
| Licence Holder              | refers to the occupier of the premises being the person to whom this Licence has been granted, as specified at the front of this Licence.                              |
| Material Environmental Harm | has the same meaning given to that term under the EP Act.                                                                                                              |
| 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.                           |
| NORM                        | means naturally occurring radioactive material                                                                                                                         |
| Pollution                   | has the same meaning given to that term under the EP Act.                                                                                                              |
| Premises                    | refers to the premises to which this Licence applies, as specified at the front of this Licence and as shown on the map in Schedule 1 to this Licence.                 |
| Prescribed Premises         | has the same meaning given to that term under the EP Act.                                                                                                              |
| Primary Activities          | refers to the Prescribed Premises activities to which this licence applies, as specified in Schedule 2 and as shown on the premises map in Schedule 1 to this Licence. |
| Serious Environmental Harm  | has the same meaning given to that term under the EP Act.                                                                                                              |
| STP dry                     | means standard temperature and pressure (0° Celsius and 101.325 kilopascals respectively), dry.                                                                        |
| TDU                         | means the VacuDry Thermal Desorption Unit                                                                                                                              |
| Unreasonable Emission       | has the same meaning given to that term under the EP Act.                                                                                                              |
| USEPA                       | means United States [of America] Environmental Protection Agency.                                                                                                      |
| USEPA Method 5              | means <i>USEPA Method 5 Determination of Particulate Matter Emissions from Stationary Sources</i>                                                                      |
| USEPA Method 6C             | means <i>USEPA Method 6C Determination of Sulfur Dioxide Emissions From Stationary Sources (Instrumental Analyzer Procedure)</i>                                       |
| USEPA Method 7E             | means <i>USEPA Method 7E Determination of Nitrogen Oxides Emissions from Stationary Sources (Instrumental Analyzer Procedure)</i>                                      |
| USEPA Method 10             | means <i>USEPA Method 10 Determination of carbon monoxide emissions from stationary sources</i>                                                                        |
| USEPA Method 17             | means <i>USEPA Method 17 Determination of Particulate Matter Emissions</i>                                                                                             |

|                    |                                                                                                                             |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------|
|                    | <i>From Stationary Sources</i>                                                                                              |
| USEPA Method 25A   | means <i>USEPA Method 25A Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer</i>        |
| USEPA Method 26    | means <i>USEPA Method 26 Determination of Hydrogen Halide and Halogen Emissions From Stationary Sources</i>                 |
| USEPA Method 29    | means <i>USEPA Method 29 Determination of Metals Emissions from Stationary Sources</i>                                      |
| USEPA Method 3051A | means <i>USEPA Method 3051A (SW-846): Microwave Assisted Acid Digestion of Sediments, Sludges, and Oils</i>                 |
| USEPA Method 6010C | means <i>USEPA Method 6010C (SW-846): Inductively Coupled Plasma-Atomic Emission Spectrometry</i>                           |
| USEPA Method 7471B | means <i>USEPA Method 7471B (SW-846): Mercury in Solid or Semisolid Wastes (Manual Cold-Vapor Technique)</i>                |
| USEPA Method 9077  | means <i>USEPA method 9077: Test Methods for Total Chlorine in New and Used Petroleum Products (Field Test Kit Methods)</i> |
| Waste              | has the same meaning given to that term under the EP Act.                                                                   |

## Interpretation

In this Licence:

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

## Conditions

### Works

1. The Licence Holder must construct and/or install the infrastructure listed in Table 2, in accordance with;
  - (a) the corresponding design and construction requirement / installation requirement; and
  - (b) within the corresponding timeframe,as set out in Table 2.

**Table 2: Design and construction requirements / installation requirements**

| Infrastructure          | Design and construction requirement / installation requirement                                                                                                         | Timeframe                                 |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| NORM Waste Storage Area | Bundling or other suitable containment infrastructure to ensure that, in the event of a fire, all firewater occurring within the NORM Waste Storage Area is contained. | Within 12 months of the date of Amendment |

2. The Licence Holder must not depart from the requirements specified in Table 2 except:
  - (a) where such departure does not increase risks to public health, public amenity or the environment; and
  - (b) all other Conditions in this works approval are still satisfied.
3. Subject to Condition 2, and 1 month from the completion of the works, the Licence Holder must provide to the CEO written confirmation (including photographic evidence) confirming each item of infrastructure or component of infrastructure specified in Table 2 has been constructed with no material defects and to the requirements specified.
4. Where a departure from the requirements specified in Table 2 occurs and is of a type allowed by Condition 2, the Licence Holder must provide to the CEO a description of, and explanation for, the departure along with the certification required by Condition 3.

### Emissions

5. The Licence Holder must not cause any Emissions from the Primary Activities on the Premises except for specified Emissions and general Emissions described in Column 1 of Table 3 subject to the exclusions, limitations or requirements specified in Column 2 of Table 3.

**Table 3: Authorised Emissions table**

| Column 1                                                                 | Column 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Emission type                                                            | Exclusions/Limitations/Requirements                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Specified Emissions</b>                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Liquid Waste Emission                                                    | Subject to compliance with Conditions 6, 7, 8 and 9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Solid Waste Emission                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Emissions to air                                                         | Subject to compliance with Conditions 10, 11, 12, 13, 16, 19 and 20                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>General Emissions<br/>(excluding Specified Emissions)</b>             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Emissions which arise from the Primary Activities set out in Schedule 2. | <p>Emissions excluded from General Emissions are:</p> <ul style="list-style-type: none"> <li>• Unreasonable Emissions; or</li> <li>• Emissions that result in, or are likely to result in, Pollution, Material Environmental Harm or Serious Environmental Harm; or</li> <li>• Discharges of Waste in circumstances likely to cause Pollution; or</li> <li>• Emissions that result, or are likely to result in, the Discharge or abandonment of Waste in water to which the public has access; or</li> <li>• Emissions or Discharges which do not comply with an Approved Policy; or</li> <li>• Emissions or Discharges which do not comply with a prescribed standard; or</li> <li>• Emissions or Discharges which do not comply with the conditions in an Implementation Agreement or Decision; or</li> <li>• Emissions or Discharges the subject of offences under regulations prescribed under the EP Act, including materials discharged under the <i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i>.</li> </ul> |

## Infrastructure and equipment

6. The Licence Holder must ensure that the infrastructure and equipment specified in Column 1 of Table 4 is maintained in good working order and operated in accordance with the requirements specified in Column 2 of Table 4.

**Table 4: Infrastructure and equipment controls table**

| Column 1                          | Column 2                                                                                                                                                                                                                      |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Site infrastructure and equipment | Operational requirements                                                                                                                                                                                                      |
| Liquid Waste Storage Bund         | <p>Reinforced impermeable concrete construction</p> <p>Free of leaks and defects</p> <p>Capable of containing 800 t of liquid within the bunded area and stormwater from a 1 in 20 year, 72 hour duration rainfall event.</p> |
| Spent Catalyst Laydown A          | Compacted road base;                                                                                                                                                                                                          |

| Column 1                                    | Column 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Site infrastructure and equipment           | Operational requirements                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                                             | Capable of storing 330 t of waste                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Spent Catalyst Laydown B                    | Compacted road base<br>Capable of storing 470 t of waste                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Perimeter fencing                           | To completely enclose the Premises and be capable of being securely locked.<br>Minimum of 1.8 m high                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Onsite fire detection system                | Operated in accordance with the manufacture's specifications                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Ring main fire system                       | 5 fire hydrants maintained in accordance with the manufacture's specifications<br>Fire pump system maintained in order to store 392kl of water at all times                                                                                                                                                                                                                                                                                                                                                                                                              |
| Warehouse sump and internal graded flooring | Sump to be kept free of liquids and debris to permit full capacity at all times<br>Internal graded flooring to be maintained so as to not restrict the flow of spills, leaks, firefighting water and other liquids to the sump.                                                                                                                                                                                                                                                                                                                                          |
| Evaporation Ponds (Pond 1 and Pond 2)       | Storage of the following process effluents: <ul style="list-style-type: none"> <li>treated process wastewater from the TDU and HTTU;</li> <li>treated wastewater from the NORM Decontamination Cell;</li> <li>Liquid waste types specified in Table 5 that meets the classification of Class II Waste; and</li> <li>Stormwater and wastewater from containment bunds.</li> </ul> Lined with HDPE liner with a permeability of $2 \times 10^{-10}$ m/s or less<br>Designed to capture a 1:20 year, 72 hour duration rainfall event<br>Freeboard of 0.5m to be maintained. |
| Liquid Waste Transfer Bund                  | Constructed of concrete                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Washpad                                     | Constructed of concrete draining to 2 x 5,000L underground tanks<br>Designed to capture a 1:20 year, 72 hour duration rainfall event                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| NORM Waste Storage Area                     | Compacted road base capable of storing 1,250 tonnes of waste.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| NORM Decontamination Cell                   | 2 x 16.3m Cargo baskets lined with HDPE to capture liquid waste and wash spray                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Recovered Solids Lay Down                   | Compacted road base capable of storing 1,250 tonnes of waste.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| High Temperature Treatment Unit             | Dust filter with automatic jet cleaning system<br>Alkaline scrubber system with automatic pH monitoring and caustic dosing systems<br>Impact separator<br>Dual carbon filters consisting of a primary and secondary sulfur impregnated carbon filter maintained to have a maximum saturation of                                                                                                                                                                                                                                                                          |

| Column 1                          | Column 2                                                                                                                                                                                                                       |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Site infrastructure and equipment | Operational requirements                                                                                                                                                                                                       |
|                                   | 80%.<br><br>Interlocks restricting the use of recovered oil from the Thermal Desorption Unit as a fuel source for the burner to when the temperature within the combustion chamber exceeds 800°C and is maintained above 750°C |
| VacuDry Thermal Desorption Unit   | Vapour filter to treat off-gas from the evaporation chamber.<br><br>Dual carbon filters consisting of a primary and secondary sulfur impregnated carbon filter maintained to have a maximum saturation of 80%.                 |
| Mercury Purification Unit         | Dual carbon filters consisting of a primary and secondary sulfur impregnated carbon filter maintained to have a maximum saturation of 80%.                                                                                     |

## Waste acceptance and storage

7. The Licence Holder must only accept wastes at the Premises if it is of a type specified in Column 1 of Table 5 and is below the quantity specified in Column 2 of Table 5, and meets the any specification listed in Column 3 of Table 5.

**Table 5: Waste Acceptance table**

| Column 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Column 2                                        | Column 3                                                                                                                                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Waste Type                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Quantity Limit                                  | Specifications                                                                                                                                                                                                                     |
| <p>Liquid Wastes:</p> <ul style="list-style-type: none"> <li>B100 Acidic solutions or acids in solid form;</li> <li>C100 Basic solutions or bases in solid form;</li> <li>D120 Mercury and mercury compounds;</li> <li>J100 Waste mineral oils unfit for their intended purpose;</li> <li>J120 Waste oil and water mixtures or emulsions and hydrocarbon and water mixtures or emulsions;</li> <li>J130 Oil interceptor waste;</li> <li>J160 Waste tarry residues arising from refining, distillation or pyrolytic treatment;</li> <li>J180 Oil sludge;</li> <li>L150 Industrial wash water.</li> </ul> | Combined limit of 4000 tonnes per annual period | <p><u>L150 Limited to:</u></p> <ul style="list-style-type: none"> <li>Industrial wash waters contaminated with the following controlled wastes: B100, C100, D120, J100, J120, J130, J160 J180 D200, D210, D270 and N160</li> </ul> |
| <p>Solid Wastes:</p> <ul style="list-style-type: none"> <li>D120 Mercury and mercury compounds;</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Combined limit of 2500 tonnes per annual period | <p><u>N100 Limited to:</u></p> <p>Drums and containers contaminated with the following controlled</p>                                                                                                                              |

| Column 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Column 2                       | Column 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Waste Type                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Quantity Limit                 | Specifications                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <ul style="list-style-type: none"> <li>D140 Chromium compounds;</li> <li>D190 Copper compounds;</li> <li>D200 Cobalt compounds;</li> <li>D210 Nickel compounds;</li> <li>D230 Zinc compounds;</li> <li>D270 Vanadium compounds;</li> <li>N160 Encapsulated or chemically fixed, solidified or polymerised controlled waste; and</li> <li>N100 Containers or drums contaminated with residues of a controlled waste;</li> <li>N190 Filter cake containing a controlled waste</li> <li>N205 Industrial waste treatment plant residue</li> </ul> |                                | <p>wastes: B100, C100, D120, J100, J120, J130, J160 J180, D200, D210, D270 and N160</p> <p><u>N190 Limited to:</u></p> <ul style="list-style-type: none"> <li>Filter cake containing the following controlled wastes: B100, C100, D120, J100, J120, J130, J160 J180 D200, D210 and D270.</li> </ul> <p><u>N205 Limited to:</u></p> <ul style="list-style-type: none"> <li>Industrial waste treatment plant residues containing the following controlled wastes B100, C100, D120, J100, J120, J130, J160 J180 D200, D210, D270 and N160.</li> </ul> |
| <p>NORM Waste (Solid)</p> <ul style="list-style-type: none"> <li>N100 Containers or drums contaminated with residues of a controlled waste;</li> <li>N120 Soils contaminated with a controlled waste;</li> <li>N190 Filter cake containing a controlled waste</li> </ul>                                                                                                                                                                                                                                                                      | 1,000 tonnes per annual period | <p><u>Waste containing NORM</u></p> <p>No waste containing NORM shall be accepted into the HTTU or TDU</p>                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <p>NORM Waste (Liquid)</p> <ul style="list-style-type: none"> <li>J120 Waste oil and water mixtures or emulsions and hydrocarbon and water mixtures or emulsions;</li> <li>J130 Oil interceptor waste;</li> <li>J160 Waste tarry residues arising from refining, distillation or pyrolytic treatment;</li> <li>J180 Oil sludge;</li> </ul>                                                                                                                                                                                                    | 500 tonnes per annual period   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

8. The Licence Holder must only store waste containing NORM within the NORM storage area (marked 'NORM Storage') in Schedule 1).
9. The Licence Holder must record the total amount of waste accepted onto the premises, for each waste type listed in Table 6, in the corresponding unit, and for each corresponding time period, as set out in Table 6.

**Table 6: Waste acceptance monitoring**

| Waste type <sup>1</sup> | Unit   | Time period                        |
|-------------------------|--------|------------------------------------|
| Liquid waste            | tonnes | Each load accepted at the premises |
| Solid waste             |        |                                    |
| NORM waste (Solid)      |        |                                    |
| NORM waste (Liquid)     |        |                                    |

Note 1: As described in Table 5.

## Emissions to Air

- 10.** The Licence Holder must ensure that the emissions specified in Table 7 are discharged only from the corresponding discharge point and only at the corresponding discharge point location.

**Table 7: Authorised discharge points**

| Emission                                            | Discharge point | Discharge point location             |
|-----------------------------------------------------|-----------------|--------------------------------------|
| NO <sub>x</sub> , CO, SO <sub>2</sub> , Hg, TOC, PM | HTTU Stack      | As shown in Schedule 1: Premises Map |
|                                                     | TDU Stack       |                                      |

- 11.** The Licence Holder must ensure that emissions from the discharge points listed in Table 8 for the corresponding parameter do not exceed the corresponding limit.

**Table 8: Emission and discharge limits**

| Discharge point | Parameter | Limit                 |
|-----------------|-----------|-----------------------|
| HTTU Stack      | Hg        | 0.05mg/m <sup>3</sup> |
| TDU Stack       |           |                       |

## Monitoring

- 12.** The Licence Holder must monitor emissions:
- (a) from each discharge point;
  - (b) for the corresponding parameter;
  - (c) at the corresponding frequency;
  - (d) for the corresponding minimum sampling period;
  - (e) in the corresponding reporting units; and
  - (f) using the corresponding method,
- as set out in Table 9.

**Table 9: Emissions and discharge monitoring**

| Discharge points         | Parameter         | Frequency                                                                                                             | Minimum sampling period | Reporting Units <sup>1, 2</sup> | Method               |
|--------------------------|-------------------|-----------------------------------------------------------------------------------------------------------------------|-------------------------|---------------------------------|----------------------|
| HTTU Stack and TDU Stack | NO <sub>x</sub>   | Biannually between 1 January 2019 and 31 December 2019 and then annually thereafter <sup>[3]</sup>                    | 30 minutes              | g/min and mg/m <sup>3</sup>     | USEPA Method 7E      |
|                          | CO                |                                                                                                                       |                         |                                 | USEPA Method 10      |
|                          | SO <sub>2</sub>   |                                                                                                                       |                         |                                 | USEPA Method 6C      |
|                          | Hg                |                                                                                                                       | 120 minutes             |                                 | USEPA Method 29      |
|                          | TOC               |                                                                                                                       | 60 minutes              |                                 | USEPA Method 25A     |
|                          | PM                |                                                                                                                       |                         |                                 | USEPA Method 5 or 17 |
|                          | NO <sub>x</sub>   | At least one stack test per year, for two years, carried out while the HTTU burner is operating on oil <sup>[4]</sup> | 30 minutes              |                                 | USEPA Method 7E      |
|                          | CO                |                                                                                                                       |                         |                                 | USEPA Method 10      |
|                          | SO <sub>2</sub>   |                                                                                                                       |                         |                                 | USEPA Method 6C      |
|                          | TOC               |                                                                                                                       | 60 minutes              |                                 | USEPA Method 25A     |
|                          | PM                |                                                                                                                       |                         |                                 | USEPA Method 5 or 17 |
|                          | Arsenic           |                                                                                                                       | 120 minutes             |                                 | USEPA Method 29      |
|                          | Cadmium           |                                                                                                                       |                         |                                 |                      |
|                          | Chromium          |                                                                                                                       |                         |                                 |                      |
|                          | Lead              |                                                                                                                       |                         |                                 |                      |
|                          | Mercury           |                                                                                                                       | 60 minutes              |                                 | USEPA Method 26      |
|                          | Hydrogen chloride |                                                                                                                       |                         |                                 |                      |
|                          | Hydrogen fluoride |                                                                                                                       |                         |                                 |                      |

Note 1: All units are referenced to STP dry.

Note 2: Concentration units for all gases are referenced to 11% O<sub>2</sub>.

Note 3: Results of testing undertaken in accordance with conditions of Works Approval W5958/2016/1 may be submitted to fulfil this requirement.

Note 4: Recovered oil used as fuel in the HTTU burner must have undergone compositional analysis as required by condition 19 prior to the stack test occurring.

- 13.** The Licence Holder ensure that all non-continuous sampling and analysis undertaken required by condition 12 is undertaken by a holder of NATA accreditation for the relevant methods of sampling and analysis.
- 14.** The Licence Holder must monitor the groundwater for concentrations of the parameter listed in Table 10:
  - (a) at the corresponding monitoring location;
  - (b) in the corresponding unit;
  - (c) at no less that the corresponding frequency;
  - (d) for the corresponding averaging period; and
  - (e) using the corresponding method,
 as set out in Table 10.

**Table 10: Monitoring of ambient concentrations**

| Parameter                        | Monitoring location                                                         | Unit  | Frequency | Averaging period | Method                          |
|----------------------------------|-----------------------------------------------------------------------------|-------|-----------|------------------|---------------------------------|
| pH                               | BH01, BH02 and BH03<br><br>As shown in Schedule 1: Map of monitoring points | -     | Annual    | Spot sample      | AS/NZS 5667.1<br>AS/NZS 5667.10 |
| Electrical conductivity          |                                                                             | µS/cm |           |                  |                                 |
| Aluminum                         |                                                                             | mg/L  |           |                  |                                 |
| Arsenic                          |                                                                             |       |           |                  |                                 |
| Chromium                         |                                                                             |       |           |                  |                                 |
| Copper                           |                                                                             |       |           |                  |                                 |
| Mercury                          |                                                                             |       |           |                  |                                 |
| Nickel                           |                                                                             |       |           |                  |                                 |
| Lead                             |                                                                             |       |           |                  |                                 |
| Zinc                             |                                                                             |       |           |                  |                                 |
| Total Recoverable Hydrocarbons   |                                                                             | µg/L  |           |                  |                                 |
| Polycyclic Aromatic Hydrocarbons |                                                                             |       |           |                  |                                 |

- 15.** The Licence Holder must ensure that all laboratory samples collected in accordance with condition 14 are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured unless indicated otherwise in the relevant table.
- 16.** The Licence Holder must ensure that:
- (a) monitoring is undertaken in each six-monthly period such that there are at least 5 months in between the days on which samples are taken in successive periods of six months; and
  - (b) monitoring is undertaken in each annual period such that there are at least 9 months in between the days on which samples are taken in successive years.

### Specified actions

- 17.** The Licence Holder must immediately clean up and dispose of any spills of waste on the Premises.
- 18.** The Licence Holder must securely lock the Premises when not attended.
- 19.** The Licence Holder must undertake monitoring of recovered waste oil from the Thermal Desorption Unit to be used as a fuel in the High Temperature Treatment Unit for the parameters listed in Table 11:
- (a) at the corresponding frequency;
  - (b) for the corresponding averaging period;
  - (c) in the corresponding unit;
  - (d) using the corresponding method,
- as set out in Table 11.

**Table 11: Monitoring of recovered oil**

| Parameter      | Frequency                                                                                       | Average period | Unit                            | Method                       |
|----------------|-------------------------------------------------------------------------------------------------|----------------|---------------------------------|------------------------------|
| Flash point    | At least once prior to undertaking stack testing while operating the HTTU on the recovered oil. | Spot sample    | °C                              | ASTM D93-18 or ASTM D3278 96 |
| Arsenic        |                                                                                                 |                | mg/kg, dry basis <sup>[1]</sup> | USEPA 3051A and USEPA 6010C  |
| Cadmium        |                                                                                                 |                |                                 |                              |
| Chromium       |                                                                                                 |                |                                 |                              |
| Lead           |                                                                                                 |                |                                 |                              |
| Mercury        |                                                                                                 |                |                                 | USEPA 7471B                  |
| Total chlorine |                                                                                                 |                |                                 | USEPA Method 9077            |

Note 1: Dry mass means that the samples are dried to a constant weight at ~100 degrees Celsius

- 20.** The Licence Holder must ensure that all laboratory samples collected in accordance with condition 19 are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured unless indicated otherwise in the relevant table.

## Record-keeping

- 21.** 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; and
  - (b) the maintenance of infrastructure required to ensure that it is kept in good working order in accordance with Condition 2 of this Licence.
- In addition, the Books must:
- (c) be legible;
  - (d) if amended, be amended in such a way that the original and subsequent amendments remain legible and are capable of retrieval;
  - (e) be retained for at least 3 years from the date the Books were made; and
  - (f) be available to be produced to an Inspector or the CEO.
- 22.** The Licence Holder must record the number and details of any complaints received by the Licence Holder relating to its obligations under this Licence and its compliance with Part V of the EP Act at the Premises, and any action taken by the Licence Holder in response to the complaint. Details of complaints must include:
- (a) an accurate record of the concerns or issues raised, for example a copy of any written complaint or a written note of any verbal complaints made;
  - (b) the name and contact details of the complainant, if provided by the complainant;
  - (c) the date of the complaint; and
  - (d) the details and dates of the actions taken by the Licence Holder in response to the complaints.

- 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 by no later than 1 March each year an Annual Audit Compliance Report in the approved form.

- 24.** The Licence Holder must submit to the CEO by no later than 1 March each year, an Annual Environmental Report for the preceding annual period for the conditions listed in Table 12, and which provides information in accordance with the corresponding requirement set out in Table 12.

**Table 12. Annual Environmental Report**

| Condition                            | Requirement                                                                                                                                                                                                                                       |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9<br>Waste input monitoring          | None specified                                                                                                                                                                                                                                    |
| 12<br>Monitoring of emissions to air | Tabulated monitoring data results and time-series graphs in Microsoft Excel format for each monitoring location showing concentrations of all parameters over a minimum three year period (where sufficient data allows).                         |
| 14<br>Ambient monitoring             |                                                                                                                                                                                                                                                   |
| 19<br>Specified actions              | An interpretation of the monitoring data including comparison to historical trends and emission limits (where applicable)<br><br>Copies of original monitoring, laboratory and analysis reports submitted to the Licence Holder by third parties. |
| 16<br>Complaints                     | Summary of complaints received and any action taken to investigate or respond to any complaint                                                                                                                                                    |

- 25.** The Licence Holder must comply with a Department Request, within 14 days from the date of the Department Request or such other period as agreed to by the Inspector or the CEO.
- 26.** The Licence Holder must notify the CEO of any fire which occurs at the Premises within 24 hours of becoming aware of the fire, including the date/time of becoming aware, the extent and severity of the fire, the measures already taken or being taken to control the fire and any potential environmental or public health impacts that have occurred or are occurring as a result of the fire.
- 27.** The Licence Holder must, within seven days of becoming aware of any non-compliance with an emission limit specified in condition 11 of the Licence, notify the CEO in writing of that non-compliance and include in that notification the following information:
- (a) which emission limit was not complied with;
  - (b) the time and date when the non-compliance occurred;
  - (c) if any environmental impact occurred as a result of the non-compliance and if so what that impact is and where the impact occurred;
  - (d) the details and result of any investigation undertaken into the cause of the non-compliance;
  - (e) what action has been taken and the date on which it was taken to prevent the

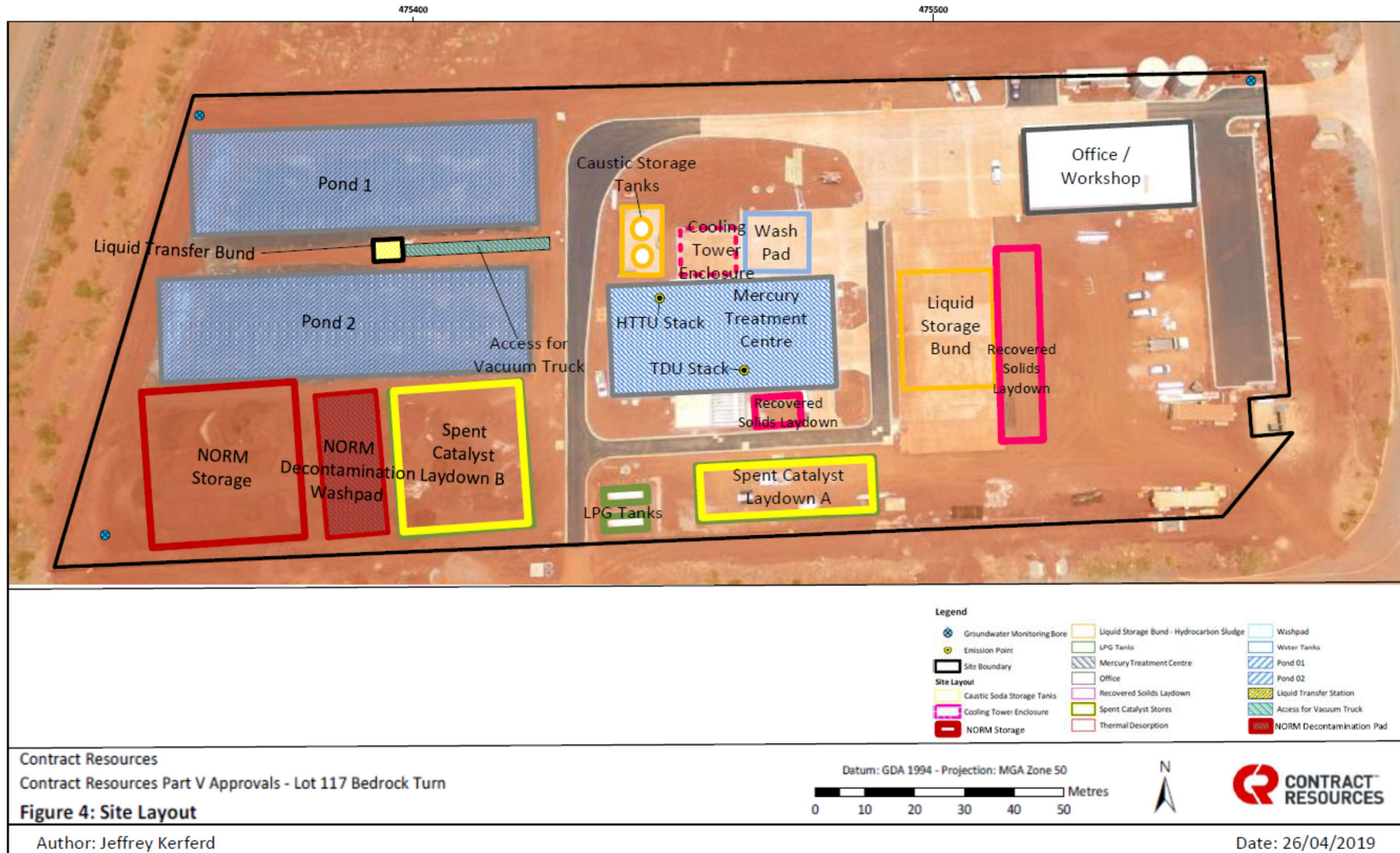
non-compliance occurring again; and

- (f) what action will be taken and the date by which it will be taken to prevent the non-compliance occurring again.

## Schedule 1: Maps

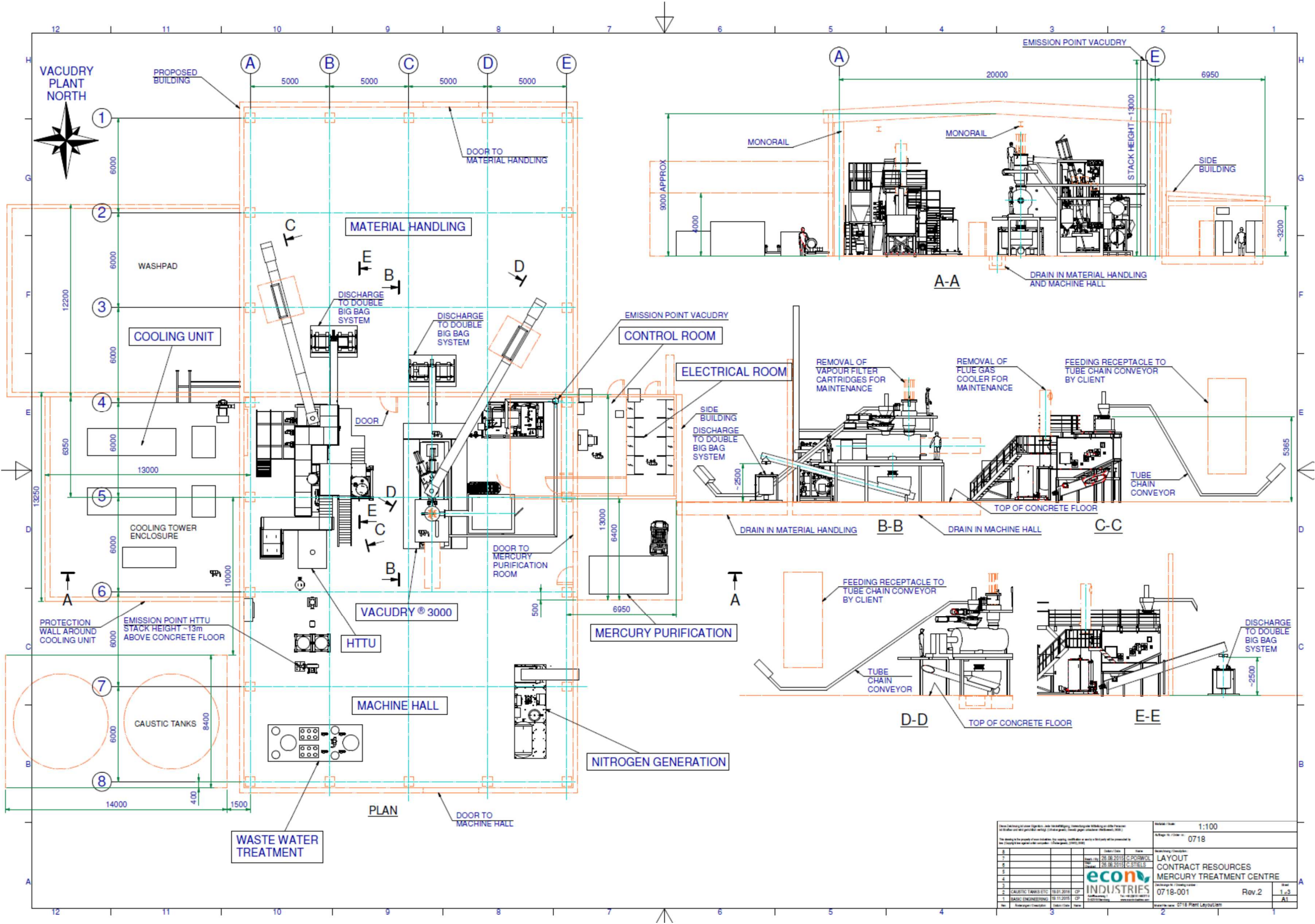
### Premises map

The Premises are shown in the map below.

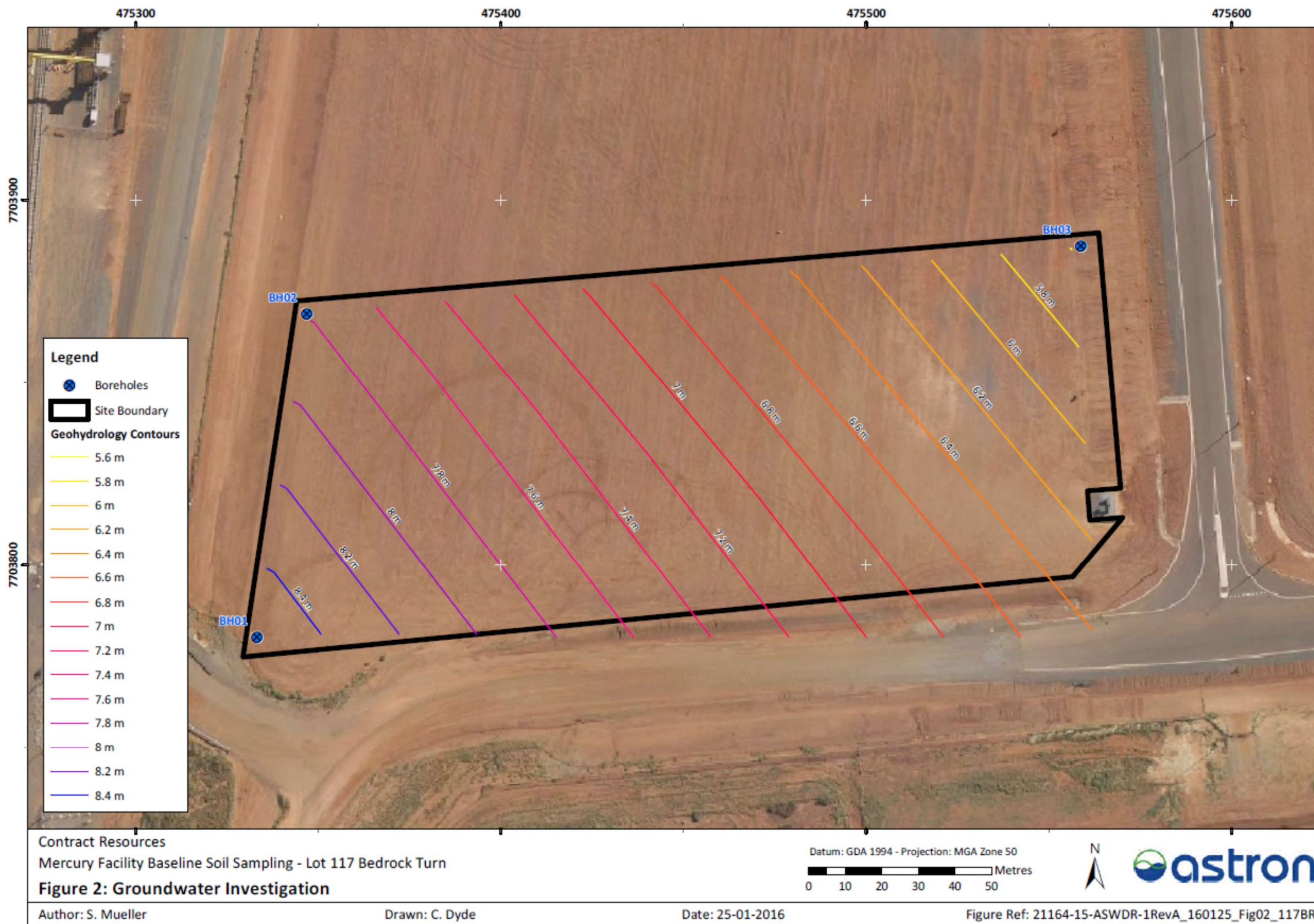


# Process Warehouse (Mercury Treatment Centre) Layout

The location of the HTTU, TDU and Mercury Purification Unit within the Process Warehouse (Mercury Treatment Centre) is shown in the diagram below.



## Map of groundwater monitoring points



## Premises boundary

The Premises boundary is defined by the coordinates in Table 13.

**Table 13: Premises boundary coordinates**

| Easting | Northing |
|---------|----------|
| 475344  | 7703872  |
| 475564  | 7703891  |
| 475570  | 7703821  |
| 475561  | 7703820  |
| 475561  | 7703812  |
| 475570  | 7703813  |
| 475557  | 7703797  |
| 475329  | 7703775  |

## Schedule 2: Primary Activities

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

The Primary Activities are listed in Table 14:

**Table 14: Primary Activities**

| Primary Activity                                                                                                                                                                                  | Premises production or design capacity      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| Category 39 – Chemical or oil recycling: premises on which waste liquid hydrocarbons or chemicals are refined, purified, reformed, separated or processed                                         | Not more than 1000 tonnes per annual period |
| Category 61 – Liquid waste facility: premises on which liquid waste produced on other premises (other than sewerage waste) is stored, reprocessed, treated, or discharged onto land.              | Not more than 3500 tonnes per annual period |
| Category 61A - Solid waste facility: premises (other than premises within category 67A) on which solid waste produced on other premises is stored, reprocessed, treated, or discharged onto land. | Not more than 3500 tonnes per annual period |

## Infrastructure and equipment

The Primary Activity infrastructure and equipment situated on the Premises is listed in Condition 6.

## Site layout

The Primary Activity infrastructure and equipment is set out on the Premises in accordance with the site layout specified on the Premises map and Process Warehouse (Mercury Treatment Centre) Layout in Schedule 1.