



Northern
Territory
Government

WASTE DISCHARGE LICENCE

(Pursuant to section 74 of the *Water Act 1992*)

Licensee	Lithium Developments (Grants NT) Pty Ltd
Licence Number:	WDL248-02
Registered Business Address:	Level 5, Flinders Street Adelaide SA 5000
ACN:	622 047 232
ABN:	70 622 047 232
Commencement Date:	25 July 2022
Amended on:	7 March 2023 20 December 2023
Expiry Date:	24 July 2025
Licensed Action:	Controlled discharge of wastewater from Mine Water Dam 1 (MWD1) through authorised discharge point (DP1) and into an unnamed ephemeral stream that feeds into West Arm, Darwin Harbour in accordance with Table 2 and subject to the conditions of this licence.

WASTE DISCHARGE LICENCE (WDL248-02)

Contents

Contents	2
INFORMATION ABOUT THIS LICENCE	3
Responsibilities of Licensee	3
Duration of licence	3
Amendment, Modification or Revocation of Licence	3
Transfer of Licence	4
Public Register	4
Water Quality Standards	4
Environmental Interests	4
Cultural Interests	5
SCHEDULE 1 - ITEMS	6
LICENCE CONDITIONS	8
RULES FOR INTERPRETING THE CONDITIONS OF THIS LICENCE	8
GENERAL	8
MONITORING INFORMATION	9
OPERATIONAL	9
DISCHARGES	10
MONITORING	11
NOTIFICATION AND REPORTING	12
END OF LICENCE CONDITIONS	14
DEFINITIONS	15
APPENDIX 1: Map of Discharge Point, Compliance Point and Monitoring Sites	17
APPENDIX 2 : Discharge Trigger Values	18
APPENDIX 3: Surface Water Monitoring Program	19
APPENDIX 4: Fluvial Sediment Monitoring Program	21
APPENDIX 5: Biota Monitoring Program	23
APPENDIX 6: Environmental Risk Mitigation 2022/23	24

WASTE DISCHARGE LICENCE (WDL248-02)

INFORMATION ABOUT THIS LICENCE

This waste discharge licence is granted pursuant to section 74 of the *Water Act 1992* (NT) (Water Act), which empowers the Controller of Water Resources to, in accordance with the Water Act, grant a licence to a person to carry out an action that would otherwise be an offence against this Act.

Responsibilities of Licensee

- In addition to the conditions set out in this licence, general responsibilities of licensees are set out in the *Waste Management and Pollution Control Act 1998* (NT) (**WMPC Act**), the Water Act and the *Water Regulations 1992* (NT) (**Water Regulations**).
- It is an offence under the Water Act, if the holder of a waste discharge licence contravene or cause, suffer or permit a person to contravene a term or condition to which the waste discharge licence is subject (s 76 Water Act).
- Except as expressly provided for in this licence or applicable law, it is an offence under section 16 of the Water Act to wilfully cause or cause, directly or indirectly:
 - waste to come into contact with water; or
 - water to be polluted.

Duration of licence

- This licence will remain in force until its Expiry Date, it is surrendered by the licensee, or until it is suspended or revoked by the Controller of Water Resources.
- A licensee may surrender its licence at any time (s 94 Water Act).
- If the licensee wishes to surrender its licence it should complete the notification form approved by the Controller of Water Resources and provide a copy of the completed form to the Administering Agency.
- The authority to allow waste to come into contact with water or water to be polluted ends once a licence is surrendered, and any such occurrence after a licence is surrendered is an offence pursuant to s 16 of the Water Act.

Amendment, Modification or Revocation of Licence

- As set out in section 93 of the Water Act, the Controller of Water Resources may, by notice served on the holder of the licence:
 - amend or modify the terms and conditions of a licence; or
 - where the Controller of Water Resources is satisfied that the holder of the licence has contravened or failed to comply with a term or condition of the licence or of any other licence previously held by the person for a similar purpose during the 12 months immediately preceding the grant of the first-mentioned licence, the Controller of Water Resources may:
 - revoke a licence; or
 - suspend a licence.

WASTE DISCHARGE LICENCE (WDL248-02)

Transfer of Licence

- Where a waste discharge licence is granted to a person in relation to the person's use of land and, during the period of this licence, the person's interest in the land is transferred to another person, the waste discharge licence shall be deemed to have also been transferred to the other person (s 92 Water Act).
- The licensee must ensure the contact details recorded with the Administering Agency for the licence are correct at all times in accordance with condition 6. Accordingly, it is recommended the transferee complete the Controller of Water Resources approved notification of transfer of a waste discharge licence form.

Public Register

- A copy of this Licence will be placed on the Register in accordance with section 95 of the Water Act.
- A copy of plans for environmental management, reports, submissions or documents provided at Schedule 1 Item 13 will be placed on the Register.
- The Register is freely available from the Northern Territory Environment Protection Authority (**NT EPA**) website.

Water Quality Standards

- The Administrator may declare, by notice in the *Gazette*, a beneficial use, quality standard, criteria or objectives which apply in relation to any waste or class of waste, or water or class of water (s 73 Water Act).
- A water or waste beneficial use, quality standard, criteria or objectives declared under s 73 of the Act and in force is an Environment Protection Objective for the purposes of the WMPC Act (s 18 WMPC Act).
- An Environment Protection Objective is a statutory instrument to establish principles on which:
 - Environmental quality is to be maintained, enhanced, managed or protected;
 - Pollution, or environmental harm resulting from pollution, is to be assessed, prevented, reduced, controlled, rectified or cleaned up; or
 - Effective waste management is to be implemented or evaluated.
- Schedule 1 Item 1 specifies the beneficial use, quality, standard, criteria or objective relevant to this licence at the date of issue.

Environmental Interests

- Environmentally sensitive or significant areas may be captured by and protected under the *Environment Protection Act 2019* (NT) and/or the *Environment Protection and Biodiversity Conservation Act 1999* (Cth). As such, and to best protect and regulate our waterways, waste discharge licences must identify the sensitivity of the environment surrounding the location of the Licensed Action.
- Schedule 1 Item 2 specifies the sites of conservation significance (if any) relevant to this licence at the date of issue.
- Schedule 1 Item 3 specifies the Ramsar wetlands (if any) relevant to this licence at the date of issue.

WASTE DISCHARGE LICENCE (WDL248-02)

Cultural Interests

- Under Commonwealth and Northern Territory laws it can be an offence to enter or remain on or damage a sacred site.
- Sites of Aboriginal significance including registered and recorded Aboriginal sacred sites may exist in the vicinity of the Licensed Action.
- It is the licensee's responsibility to contact the Aboriginal Areas Protection Authority, appropriate land council or other governing body and ensure that any Authority Certificates required as a result of conducting the Licensed Action are obtained and complied with.
- Further specific advice on any cultural requirement or implication of the licenced activity should be sought from the relevant land council and the Aboriginal Areas Protection Authority.

END NOTES

This licence is an amendment to WDL248-01.

WDL248-01 was an amendment, issued 7 March 2023.

WDL248 was issued 25 July 2022.

WASTE DISCHARGE LICENCE (WDL248-02)

SCHEDULE 1 - ITEMS

1. Beneficial uses (condition 20)	Beneficial Uses and Objectives for the Darwin Harbour Region (Gazette No. 27, 7 July 2010).	
2. Sites of conservation significance (condition 20)	SOCS No. 6 Darwin Harbour.	
3. Ramsar wetlands (condition 20)	Not applicable.	
4. Licence Documents (condition 13)	(a) Water Management Plan - Appendix K, Mine Management Plan Grants Lithium Project (approved 10 June 2021). (b) Emergency Response Plan - Appendix R, Mine Management Plan Grants Lithium Project (approved 28 June 2019). (c) Stakeholder Engagement Plan - Core Lithium Grants Lithium Project Stakeholder Engagement Plan (issued 7 June 2021).	
5. Authorised Discharge Point(s) (condition 23)	Discharge Point 1 (DP1) from Mine Water Dam 1 (MDW1) as shown on the plan at Appendix 1.	Zone: 52 L Easting: 693153 Northing: 8598441
6. Source(s) of waste (condition 26)	Pit water, direct rainfall, and mine influenced water collected from Mineral Lease 31726 that is captured and stored in sediment basins and Mine Water Dam 2 (MWD2) and pumped to MWD1. Waters discharged through DP1 are pumped over the wall of MWD1 and released by a tee valve into the flow path of an adjacent unnamed ephemeral stream as shown at Appendix 1.	
7. Trigger values (condition 26)	The limits for parameters listed in Appendix 2.	
8. Compliance point (condition 26)	Grants Downstream Surface Water 5 (GDS SW5) as shown on the plan at Appendix 1.	Zone: 52 L Easting: 693374 Northing: 8600709
9. Conditions on discharge (condition 26)	Any authorised discharge must: <ul style="list-style-type: none"> (a) Not include wastewater generated outside of Mineral Lease 31726; (b) Not include wastewater treated with polyacrylamide flocculants with more than 0.05% of the neuro-toxin acrylamide monomer; (c) Occur only when the stream gauge at the compliance point GDS SW5 shows there is a sufficient flow to achieve trigger values at the compliance point at Item 8; (d) In the event wastewater is treated, occurs only when the treatment process has finished, including allowing sufficient residence time for settlement of flocculants and target contaminants. 	
10. Monitoring Program (condition 30)	The Monitoring Program includes: <ul style="list-style-type: none"> (a) Surface water monitoring in accordance with Appendix 3. (b) Fluvial sediment monitoring in accordance with Appendix 4. (c) Biota monitoring in accordance with Appendix 5. 	

WASTE DISCHARGE LICENCE (WDL248-02)

11. Critical contaminants	Aluminium (Al), Arsenic (As), Copper (Cu), Iron (Fe), Lithium (Li), Zinc (Zn), Total Phosphorus (TP), Total Nitrogen (TN), Nitrate (NO ₃) and Ammonia (NH ₃).
12. Notifiable incidents (Conditions 41 -43)	Notifiable incidents include: <ul style="list-style-type: none"> (a) An exceedance of three or more times a trigger value specified in Item 7 at the compliance point in Item 8; (b) For physical and chemical stressors, an exceedance (or measurement outside the range) of a trigger value specified in Item 7 at the compliance point in Item 8, on three consecutive sampling occasions; (c) For toxicants, two or more exceedances of a trigger value specified in Item 7, at the compliance point in Item 8, during one annual reporting period ; (d) A discharge at a point not specified in Item 5; (e) A discharge from a source not specified in Item 6; (f) A failure to comply with condition 29; or (g) A failure to comply with condition 38.
13. Documents placed on Register (condition 13)	The following documents will be placed on the Register: <ul style="list-style-type: none"> (a) The Licence Documents at Item 4. (b) The Monitoring Report provided in accordance with condition 45. (c) The Annual Return.
14. Compliance with trigger values (condition 26)	For the annual reporting period, the trigger values at Item 7 shall be regarded as being complied with if: <ul style="list-style-type: none"> (a) For metals, hydrocarbons and other toxicants, not more than one measurement or, if more than 20 samples are collected, 5% of measured values, exceed the trigger values specified in Item 7; (b) For nutrients and physico-chemical parameters (DO, pH, EC, temperature), the median value of measurements does not exceed, or is not outside the range of, the trigger values specified in Item 7; and (c) For any other indicators, not more than 20% of samples exceed, or are outside the range of, the trigger values specified in Item 7.
15. Special conditions (condition 51)	By 31 January 2024 the licensee must <ul style="list-style-type: none"> (a) select an additional control site for inclusion in the water quality monitoring program that is representative of local background water quality and is not affected by activities conducted under the Mining Management Plan (b) Provide details of the location of the site and a justification for its suitability. (c) Commence monitoring the site at the same frequency and for the same parameters as listed in Appendix 3 for site GUS SW4.

WASTE DISCHARGE LICENCE (WDL248-02)

LICENCE CONDITIONS

RULES FOR INTERPRETING THE CONDITIONS OF THIS LICENCE

1. Where there is a discrepancy between the conditions of this licence and any plan, standard, guideline or other document referred to in this licence, the conditions of this licence prevail to the extent of the inconsistency.
2. Any reference to any standard, guideline or code of practice (Australian or international) in this licence means the relevant parts of the current version of that standard, guideline or code of practice.
3. In this licence, unless the contrary intention appears, words that are defined in the Water Act are intended to have the meaning given to them in that Act.
4. In this licence, unless a contrary intention appears, terms are defined in the Definitions at the end of this licence.
5. In this licence a reference to an Item is a reference to an Item in Schedule 1.

GENERAL

6. The licensee must ensure the contact details recorded with the Administering Agency for this licence are correct at all times.
7. The licensee must at all times have a 24-hour emergency contact.
8. The licensee must notify the Administering Agency prior to making any operational change that will cause, or is likely to cause, an increase in the potential for environmental harm.
9. The licensee must display clear and legible signage, in English, in a prominent location at each public entrance to the premises of the Licensed Action that includes the following details:
 - 9.1. waste discharge licence number issued under the Water Act; and
 - 9.2. 24-hour emergency contact details.
10. The licensee must cause a hard copy of this licence to be available for inspection, at the premises of the Licenced Action, by any person on request.
11. Unless otherwise specified, within 10 business days of a request, the licensee must provide to the Administering Agency a copy of any document, monitoring data or other information in relation to the Licensed Action in electronic form by emailing environmentalregulation@nt.gov.au.
12. All notices, reports, documents or other correspondence required to be provided as a condition of this licence, unless otherwise specified as a condition of this licence, must be provided in electronic form by emailing environmentalregulation@nt.gov.au.
13. The licensee must maintain, implement and comply with the current version of the documents listed in Item 4.
14. Within 10 business days of any amendment being made to a document listed in in Item 4, the licensee must provide the amended document to the Administering Agency, along with:
 - 14.1. a tabulated summary of the amendment(s) with document references;
 - 14.2. reasons for the amendment(s); and
 - 14.3. an assessment of environmental risk associated with the amendment(s).
15. The Administering Agency may require the licensee to revise or amend and resubmit any document provided in accordance with this licence. Where the Administering Agency requires any document to be revised or amended, the licensee must submit it to the Administering Agency by the date specified by the Administering Agency.
16. The licensee must operate and maintain a community feedback telephone number enabling members of the public to contact, at any time, a person or voice mail system that can accept, on behalf of the licensee, enquiries or complaints about the Licensed Action, and to which the licensee must respond. The community feedback telephone number must be displayed:

WASTE DISCHARGE LICENCE (WDL248-02)

- 16.1. where the licensee has a website, in a prominent location on the licensee's website;
 - 16.2. in the Stakeholder Engagement Plan; and
 - 16.3. in other publicly available documents relating to the Licensed Action.
17. The licensee must maintain a register of complaints that records the details of each complaint received in relation to the Licensed Action and provide a copy to the Administering Agency on request. Details of the complaint must (as is reasonably practicable) include, the following information:
- 17.1. the person to whom the complaint was made;
 - 17.2. the person responsible for managing the complaint;
 - 17.3. the date and time the complaint was reported;
 - 17.4. the date and time of the event(s) that led to the complaint;
 - 17.5. the contact details of the complainant if known, or where no details are provided a note to that effect;
 - 17.6. the nature of the complaint;
 - 17.7. the nature of event(s) giving rise to the complaint;
 - 17.8. prevailing weather conditions at the time (where relevant to the complaint);
 - 17.9. the action taken in relation to the complaint, including any follow-up contact with the complainant; and
 - 17.10. if no action was taken, why no action was taken.

MONITORING INFORMATION

18. If the licence expires or is otherwise surrendered, suspended or revoked and the licence contained a condition that the licensee provide a report, record or other information, including in accordance with a monitoring program pursuant to section 77 of the Water Act, the licensee must provide any report, record, information or data available to the licensee up to and including the date the licence expired or was surrendered, suspended or revoked.

OPERATIONAL

19. Without limiting the conditions of this licence, in conducting the Licensed Action, the licensee must do all things reasonable and practicable to:
- 19.1. prevent or minimise the likelihood of pollution occurring as a result of, or in connection with, the Licensed Action;
 - 19.2. prevent or minimise the likelihood of environmental harm occurring as a result, or in connection with, the Licensed Action;
 - 19.3. effectively respond to pollution and the risk of pollution occurring as a result of, or in connection with, the Licensed Action;
 - 19.4. effectively respond to environmental harm and the risk of environmental harm occurring as a result of or in connection with the Licensed Action; and
 - 19.5. apply the principles of ecologically sustainable development.
20. The licensee must, without limiting any other condition of this licence, in conducting the Licensed Action do all things reasonable and practicable to ensure the Licensed Action does not adversely affect any:
- 20.1. declared beneficial use, quality, standard or objectives declared under section 73 of the Water Act;
 - 20.2. sites of conservation significance; or
 - 20.3. designated Ramsar wetlands,

WASTE DISCHARGE LICENCE (WDL248-02)

including, but not limited to, those listed at Items 1, 2 and 3.

21. The licensee must ensure any plant and equipment used by the licensee in conducting the Licensed Action:
 - 21.1. is reasonably fit for the purpose and use to which it is put;
 - 21.2. is maintained and operational; and
 - 21.3. is operated by a person trained to use the plant and equipment.
22. No change, replacement or alteration of plant and equipment is permitted if the change, replacement or alteration increases the risk of environmental harm for the Licensed Action, unless approved by the Administering Agency.

DISCHARGES

23. The Licensee must only discharge waste to water from the authorised discharge points specified in Item 5.
24. Where the Administering Agency directs the licensee to cease discharge from an authorised discharge point identified in Item 5, the licensee must immediately cease the discharge.
25. A direction to cease discharge may be verbal or written, but a verbal direction from the Administering Agency will be provided in writing within 48 hours of the verbal direction. A failure to provide a written direction does not affect the requirement to comply with a verbal direction.
26. The licensee must ensure that discharge from each authorised discharge point:
 - 26.1. consists only of waste from the source(s) as specified in Item 6;
 - 26.2. does not cause a non-compliance with the conditions specified at Item 14 at the compliance point at Item 8;
 - 26.3. meets the conditions at Item 9.
27. Following any exceedance of a trigger value limit specified in Item 7 at the compliance point specified in Item 8, the Licensee must:
 - 27.1. investigate the exceedance, including undertaking targeted monitoring, in addition to routine monitoring; and
 - 27.2. take corrective action to mitigate any environmental harm and ensure the exceedance does not reoccur; and
 - 27.3. make a record of:
 - 27.3.1. when the exceedance was detected and by whom;
 - 27.3.2. the date and time of the exceedance;
 - 27.3.3. the actual and potential causes and contributing factors to the exceedance;
 - 27.3.4. the risk of environmental harm arising from the exceedance;
 - 27.3.5. exceedances and details of the investigation and corrective action taken; and
 - 27.3.6. if no action was taken, why no action was taken.
28. The licensee must, for each authorised discharge point, install, operate and maintain a device to measure and record, for each discharge event:
 - 28.1. the time the discharge commenced and the duration of the discharge;
 - 28.2. the discharge rate of flow; and
 - 28.3. the discharge volume.
29. The licensee must ensure that the discharge from all discharge events at each authorised discharge point does not:

WASTE DISCHARGE LICENCE (WDL248-02)

- 29.1. contain any floating debris, oil, grease, petroleum hydrocarbon sheen, scum, litter or other objectionable matter;
- 29.2. cause or generate odours which would adversely affect the use and amenity of surrounding waters;
- 29.3. cause algal blooms in the receiving water;
- 29.4. pollute groundwater;
- 29.5. cause visible change in the behaviour of fish or other aquatic organisms in the receiving water;
- 29.6. cause mortality of fish or other aquatic organisms;
- 29.7. cause erosion or degradation to the beds and banks of a watercourse; or
- 29.8. cause adverse impacts on plants or animals.

MONITORING

30. From the Commencement Date of this licence, the licensee must implement and comply with the Monitoring Program specified in Item 10.
31. The licensee must ensure that the Monitoring Program is designed, maintained and implemented in accordance with the following principles:
 - 31.1. the need to monitor loads upstream and downstream, including in-stream decay in loads downstream, of authorised discharge points;
 - 31.2. the need for event-based monitoring, in addition to routine monitoring, including revisiting sampling points as soon as practicable when samples cannot be collected at frequencies set in the Monitoring Program;
 - 31.3. the need for special studies to better described in-stream physical, chemical and biological processes;
 - 31.4. the need to target the possible critical contaminants listed at Item 11;
 - 31.5. the need to select sampling points that provided representative (well mixed) samples;
 - 31.6. the need to collect samples that are representative of discharge conditions, including taking samples from sampling points on the same day as discharge and consecutively from upstream to downstream; and
 - 31.7. the need to adopt a range of biological surveys to assess the health of the system.
32. The licensee must ensure that all samples and field environmental data are collected in accordance with recognised Australian Standards and guidelines (such as AS/NZS 5667.1 1998, ANZG (2018), as updated from time to time).
33. For the parameters that require analysis at a laboratory, the licensee must ensure that all samples are analysed at a laboratory with current NATA accreditation or equivalent.
34. The licensee must ensure any samples collected in accordance with the Monitoring Program or in connection with the Licensed Action or this licence, are obtained by, or under the supervision of a qualified sampler.
35. The licensee must ensure that, for each sample collected in accordance with the Monitoring Program or the Licensed Action, the following information must be recorded and retained:
 - 35.1. the date on which the sample was collected;
 - 35.2. the time at which the sample was collected;
 - 35.3. the location at which the sample was collected;
 - 35.4. the name of the person who collected the sample;
 - 35.5. the chain of custody forms relating to the sample;
 - 35.6. the field measurements (if any) and analytical results (if any) relating to the sample; and

WASTE DISCHARGE LICENCE (WDL248-02)

- 35.7. laboratory quality assurance and quality control documentation.
36. The licensee must for all land based monitoring points specified in the Monitoring Program:
- 36.1. install and maintain appropriate identification signage so that they are reasonably identifiable at all times; and
 - 36.2. maintain safe access and egress, as is reasonably practicable.
37. The licensee must ensure that any proposed revisions to the Monitoring Program (other than typographical changes or revisions to formatting or referencing) are:
- 37.1. reviewed by a Qualified Person, who must produce a written report about their review;
 - 37.2. submitted to the Administering Agency with justification for revisions; and
 - 37.3. submitted to the Administering Agency, in both hard copy and electronic form (with a complete copy of the Qualified Person's written review), 20 business days prior to the proposed implementation date.

NOTIFICATION AND REPORTING

38. The licensee must keep records of all exceedances of trigger values of parameters specified in Item 7, including those that are not notifiable incidents listed at Item 12, and provide a copy on request of the Administering Agency.
39. The Licensee must keep records of all contraventions with this licence. These records must be adequate to enable the licensee to comply with the non-compliance notification conditions of this licence.
40. *This condition has been removed*
41. The licensee must notify the Administering Agency of any notifiable incident listed at Item 12 or non-compliance with this licence, by emailing environmentalregulation@nt.gov.au, as soon as practicable after (and in any case within 24 hours after) first becoming aware of the non-compliance.
42. The licensee must include in the notification of the notifiable incident at Item 12 or non-compliance, the following information:
- 42.1. when the incident or non-compliance was detected and by whom;
 - 42.2. the date and time of the incident or non-compliance;
 - 42.3. whether discharge was occurring at the time of the incident or non-compliance and the source of the discharge;
 - 42.4. whether non-compliant discharge is still occurring; and
 - 42.5. a date (within 10 business days of the incident or non-compliance) when an investigation report will be submitted to the Administering Agency.
43. Within 10 business days of notifying the Administering Agency of any notifiable incident at Item 12 or non-compliance, the licensee must provide the Administering Agency an investigation report that includes:
- 43.1. when the incident or non-compliance was detected and by whom;
 - 43.2. the date and time of the incident or non-compliance;
 - 43.3. whether discharge was occurring at the time of the incident or non-compliance and the source of the discharge;
 - 43.4. the actual and potential causes and contributing factors to the incident or non-compliance;
 - 43.5. monitoring data of the discharge, and upstream and downstream water of the authorised discharge point, collected for the date the incident or non-compliance was detected and three sampling rounds prior;

WASTE DISCHARGE LICENCE (WDL248-02)

- 43.6. available flow rates to demonstrate any influence streams and rivers may have had on the exceedance of trigger values;
 - 43.7. rainfall recorded at the site prior to the exceedance of trigger values and incident or non-compliance;
 - 43.8. the risk of environmental harm arising from the incident or non-compliance;
 - 43.9. the action(s) that have or will be undertaken to mitigate any environmental harm arising from the incident or non-compliance;
 - 43.10. corrective actions that have or will be undertaken to ensure the incident or non-compliance does not reoccur; and
 - 43.11. if no action was taken, why no action was taken.
44. The licensee must submit a completed Annual Return, by emailing environmentalregulation@nt.gov.au, within 10 business days after each Anniversary Date of this licence, which report relates to the preceding 12 month period. The report must
- 44.1. be in the approved form; and
 - 44.2. contain details of all notifiable incidents and non-compliances with this licence during the reporting period.
45. The licensee must complete and provide to the Administering Agency an annual report of data and information obtained through the implementation and performance of the Monitoring Program (the Monitoring Report), as prescribed by this licence, within 10 business days after each Anniversary Date of this licence.
46. The licensee must ensure that each Monitoring Report:
- 46.1. is prepared in accordance with the requirements of the Administering Agency 'Guideline for Reporting on Environmental Monitoring' (or any other guideline as adopted by the Administering Agency from time to time);
 - 46.2. includes a tabulation of all monitoring data required as a condition of this licence (data must be provided electronically in Microsoft® Excel® format);
 - 46.3. includes a tabulation of monthly and annual contaminant loads discharged from the authorised discharge point listed at Item 5. Contaminant loads must be calculated for total metals, total metalloids, total nutrients and other parameters (excluding field parameters) listed in Appendix 3. The calculations must be based on the daily discharge volume and the concentration of contaminant present in the discharge on that day. On the days when a sample was not taken then the concentration of the contaminant must be estimated using Linear Interpolation methodology;
 - 46.4. includes long term trend analysis of monitoring data to demonstrate any environmental impact associated with the Licensed Action over a minimum period of three years (where the data is available
 - 46.5. includes the actions taken and results of investigation for all incidents when a trigger value was exceeded as specified in condition 27; and
 - 46.6. includes an assessment of environmental impact from the Licensed Action.
47. A copy of the documents listed at Item 13 will be placed on the Register.

PERFORMANCE IMPROVEMENT

48. *This condition has been removed*
49. *This condition has been removed*
50. *This condition has been removed*
51. The Licensee must comply with the conditions specified in Item 15.

WASTE DISCHARGE LICENCE (WDL248-02)

END OF LICENCE CONDITIONS

This licence is not valid unless signed below:

A handwritten signature in blue ink that reads "Amy Dennis". The signature is written in a cursive style.

For the Controller of Water Resources

Date: 19 February 2024

WASTE DISCHARGE LICENCE (WDL248-02)

DEFINITIONS

In this licence, unless a contrary intention appears:

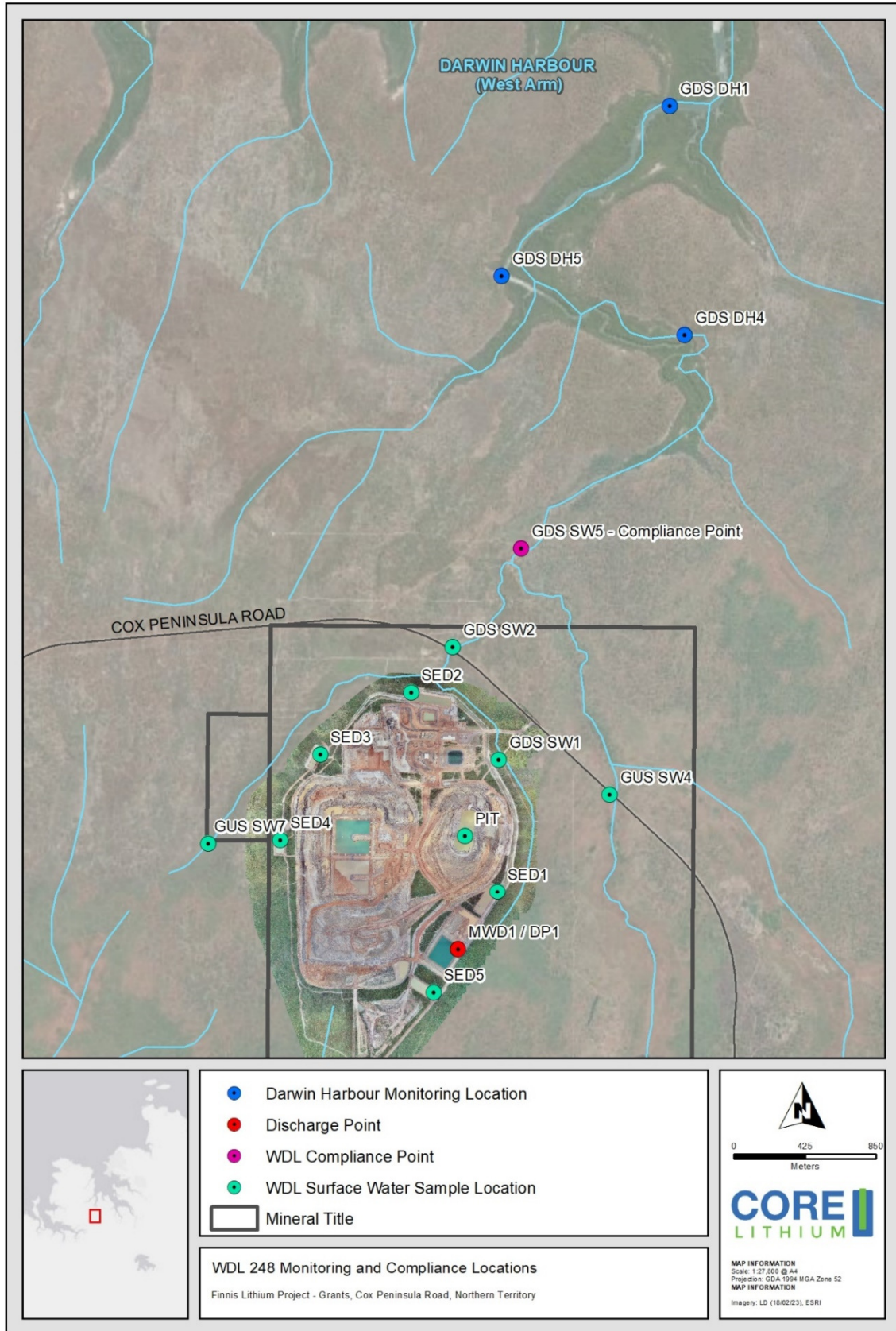
Term	Definition
24 hour emergency contact	the phone number of a person who can be contacted at any time and be capable of responding to and providing information about any incident associated with the Licensed Action.
Administering Agency	means the NT Government Department with responsibility for administering the Water Act.
AMD	acid and metalliferous drainage
Anniversary Date	annual anniversary of the Commencement Date.
Annual Return	an Administering Agency prescribed format for demonstrating and reporting compliance with the conditions of this licence.
ANZG (2018)	Australian and New Zealand Guidelines for Fresh and Marine Water Quality. Australian and New Zealand Governments and Australian state and territory governments, Canberra ACT, Australia. Available at www.waterquality.gov.au/anz-guidelines .
Authority Certificate	a certificate issued under s 22(1) of the <i>Northern Territory Aboriginal Sacred Sites Act 1989</i> (NT). An Authority Certificate permits a licensee to carry out work on land with or within the vicinity of a sacred site.
business days	a day not Saturday, Sunday or a public holiday, in Darwin, Northern Territory.
Consultation and Communication Plan	a written plan documenting proposed consultation and communications for the Licensed Action before, during and after the Licensed Action which includes a strategy for communicating with members of the public who are likely to have a real interest in, or be affected by, the Licensed Action.
contact details	includes the 24 hour emergency contact, and name, position title and phone number of a representative of the licensee who can be contacted about the licence and Licensed Action.
contaminant	has the meaning given in section 4 of the WMPC Act.
discharge	releasing or allowing a liquid, gas or other substance to flow out from where it has been confined.
Dry season	means 1 May to 31 October.
Emergency Response Plan	a written plan documenting the licensee's procedures for responding to emergencies caused by, resulting from or associated with the Licensed Action and that may cause environmental harm.
land	includes water and air on, above or under land.
Licensed Action	the Licensed Action as described on the covering page of this licence.
Linear Interpolation	a method to construct new data points within the range of known data points. $y = y1 + ((x - x1) * ((y2 - y1) / (x2 - x1)))$ <p>y in the unknown concentration between known concentrations y1 and y2 y1 in the first known concentration y2 is the second known concentration x is the day of the unknown concentration y x1 is the day of the first known concentration y1</p>

WASTE DISCHARGE LICENCE (WDL248-02)

	x2 is the day of the second known concentration y2
litter	litter, garbage, rubbish, refuse or waste matter, and includes the body of a dead animal.
Maintain	kept in a manner that it does not present or cause a risk of environmental harm or a hazard to persons or property or, for the purposes of documents including plans, a process of reviewing and amending documentation to ensure it is relevant.
NATA	National Association of Testing Authorities, Australia.
Incident and non-compliance notification	an Administering Agency prescribed format for notifying the Administering Agency of a non-compliance.
plant and equipment	all material items used in association with the Licensed Action, including (but not limited to) storage vessels and containers, pipe work and hosing, vehicles (including vessels), tools, and measuring equipment.
pollution	has the meaning given in section 4 of the WMPC Act.
public entrance	access to the licensed premises that is utilised by the public.
Qualified Person	a person registered under Section 68 of the WMPC Act.
qualified sampler	a person who has training and experience in obtaining samples from the relevant environmental medium.
Register	the register available at the website of the Northern Territory Environment Protection Authority (NT EPA).
waste	takes its meaning from the term in the WMPC Act.
wastewater	water that contains a contaminant or waste.
Water Act	<i>Water Act</i> (NT)
Wet season	means 1 November to 30 April and for the purposes of Appendix 3 includes any part of the Dry Season that discharge is occurring.
WMPC Act	<i>Waste Management and Pollution Control Act 1998</i> (NT)

WASTE DISCHARGE LICENCE (WDL248-02)

APPENDIX 1: Map of Discharge Point, Compliance Point and Monitoring Sites



WASTE DISCHARGE LICENCE (WDL248-02)

APPENDIX 2 : Discharge Trigger Values

				Sampling Points	Compliance Point
				Site Code	GDS SW5
				Easting	693374
				Northing	8600709
PARAMETER	Abbrev.	Units	Analysis	Trigger Values	
Environmental Field Data					
pH	pH	pH	In situ	5.2-6.6 ²	
Electrical conductivity	EC	µS/cm		250 ¹	
Turbidity	NTU	NTU		12 ³	
Dissolved oxygen	DO	% sat.		50-100 ²	
Nutrients					
Total Nitrogen	TN	µg/L	Unfiltered	400 ³	
Total Phosphorus	TP			10 ³	
Metals and Metalloids⁵					
Aluminium	Al	µg/L	Total and Filtered (0.45 µm)	70 ³	
Arsenic	As			13 ¹	
Cadmium	Cd			0.2 ¹	
Chromium	Cr			1 ¹	
Copper	Cu			1.4 ¹	
Iron	Fe			110 ³	
Lead	Pb			3.4 ¹	
Lithium	Li			430 ⁴	
Mercury	Hg			0.6 ¹	
Nickel	Ni			11 ¹	
Zinc	Zn			8 ¹	

Key:

- ¹ ANGZ (2018) 95% species protection, freshwater.
- ² 20th and 80th percentile of background data for surface water quality as detailed at paragraph 6.2 of the Water Management Plan and data provided in support of amendment application 20 September 2023.
- ³ 80th percentile of background data for surface water quality as detailed at paragraph 6.2 of the Water Management Plan and data provided in support of amendment application 20 September 2023.
- ⁴ Ecotoxicity Assessment, sections 8.3 and 8.4 of the Water Management Plan.
- ⁵ SSTVs for metals and metalloids apply to filtered samples only

WASTE DISCHARGE LICENCE (WDL248-02)

APPENDIX 3: Surface Water Monitoring Program

				Grants Downstream Surface Water 1	Grants Downstream Surface Water 2	Grants Upstream Surface Water 4	Grants Downstream Surface Water 5	Grants Upstream Surface Water 7	Sediment Basins 1-5					Discharge Point	Mine Pit Sump	Grants Downstream Darwin Harbour 1	
				GDS SW1	GDS SW2	GUS SW4	GDS SW5	GUS SW7	Sed1	Sed2	Sed3	Sed4	Sed5	MWD1 ¹	Pit	GDS DH1	
				693239	692989	693903	693374	691498	693167	692657	692155	691928	692775	693030	693037	694262	
				8599446	8600073	8599235	8600709	8598943	6598623	8599847	8599446	8598961	8598072	8598504	8598990	8603365	
PARAMETER	Abbrev.	Units	Analysis	FREQUENCY													
Field Parameters																	
Flow	-	kL/day	In situ	D	D	D	C	D	N/A	N/A	N/A	N/A	N/A	C	N/A	N/A	
Water Level	-	measure		D	D	D	C	D	N/A	N/A	N/A	N/A	N/A	N/A	P, W	N/A	N/A
pH	pH	pH		D	D	D	D	D	D	F	F	F	F	F	P, D	M	M ³
Electrical conductivity	EC	µS/cm		D	D	D	D	D	D	F	F	F	F	F	P, D	M	M ³
Turbidity	NTU	NTU		D	D	D	D	D	D	F	F	F	F	F	P, D	M	M ³
Temperature	Temp	°C		D	D	D	D	D	D	F	F	F	F	F	P, D	M	M ³
Oxidation Reduction Potential	OR	mV		D	D	D	D	D	D	F	F	F	F	F	P, D	M	M ³
Dissolved oxygen	DO	% sat.		D	D	D	D	D	D	F	F	F	F	F	P, D	M	M ³
Nutrients																	
Ammonia	NH ₃	µg/L	Unfiltered (excluding FRP)	W	W	W	W	W	F	F	F	F	F	P, W	M	M ³	
Oxides of Nitrogen	NO _x			W	W	W	W	W	W	F	F	F	F	F	P, W	M	M ³
Nitrate	NO ₃			W	W	W	W	W	W	F	F	F	F	F	P, W	M	M ³
Total Nitrogen	TN			W	W	W	W	W	W	F	F	F	F	F	P, W	M	M ³
Total Phosphorus	TP			W	W	W	W	W	W	F	F	F	F	F	P, W	M	M ³
Filterable Reactive Phosphorus	FRP			W	W	W	W	W	W	F	F	F	F	F	P, W	M	M ³
Chlorophyll a	Chl-a			W	W	W	W	W	N/A	N/A	N/A	N/A	N/A	N/A	N/A	M ³	
Metals and Metalloids																	
Aluminium	Al	µg/L	Total and Filtered (0.45 µm)	W	W	W	W	W	F	F	F	F	F	P, W	M	M ³	
Arsenic	As			W	W	W	W	W	W	F	F	F	F	F	P, W	M	M ³
Cadmium	Cd			W	W	W	W	W	W	F	F	F	F	F	P, W	M	M ³
Chromium	Cr			W	W	W	W	W	W	F	F	F	F	F	P, W	M	M ³
Copper	Cu			W	W	W	W	W	W	F	F	F	F	F	P, W	M	M ³
Iron	Fe			W	W	W	W	W	W	F	F	F	F	F	P, W	M	M ³
Lead	Pb			W	W	W	W	W	W	F	F	F	F	F	P, W	M	M ³
Lithium	Li			W	W	W	W	W	W	F	F	F	F	F	P, W	M	M ³
Mercury	Hg			W	W	W	W	W	W	F	F	F	F	F	P, W	M	M ³
Nickel	Ni			W	W	W	W	W	W	F	F	F	F	F	P, W	M	M ³

WASTE DISCHARGE LICENCE (WDL248-02)

Sampling Points				Grants Downstream Surface Water 1	Grants Downstream Surface Water 2	Grants Upstream Surface Water 4	Grants Downstream Surface Water 5	Grants Upstream Surface Water 7	Sediment Basins 1-5					Discharge Point	Mine Pit Sump	Grants Downstream Darwin Harbour 1
				GDS SW1	GDS SW2	GUS SW4	GDS SW5	GUS SW7	Sed1	Sed2	Sed3	Sed4	Sed5	MWD1 ¹	Pit	GDS DH1
Site Code																
Easting				693239	692989	693903	693374	691498	693167	692657	692155	691928	692775	693030	693037	694262
Northing				8599446	8600073	8599235	8600709	8598943	6598623	8599847	8599446	8598961	8598072	8598504	8598990	8603365
PARAMETER	Abbrev.	Units	Analysis	FREQUENCY												
Zinc	Zn			W	W	W	W	W	F	F	F	F	F	P, W	M	M ³
Full elemental scan	-			A	A	A	A	A	A	A	A	A	A	A	A	A
Treatment reagents (Item 9 Error! Reference source not found.)																
Acrylamide ²	C ₃ H ₅ NO	µg/L	Total and Filtered (0.45 µm)	W	W	W	W	W	F	F	F	F	F	P, W	M	M ³
Other																
Sulphate	SO ₄	mg/L	Filtered (0.45 µm)	W	W	W	W	W	F	F	F	F	F	P, W	M	N/A
Calcium	Ca			W	W	W	W	W	F	F	F	F	F	P, W	M	N/A
Chloride	Cl			W	W	W	W	W	F	F	F	F	F	P, W	M	N/A
Sodium	Na			W	W	W	W	W	F	F	F	F	F	P, W	M	N/A
Potassium	K			W	W	W	W	W	F	F	F	F	F	P, W	M	N/A
Magnesium	Mg			W	W	W	W	W	F	F	F	F	F	P, W	M	N/A
Carbonate	CO ₃ ²⁻			W	W	W	W	W	F	F	F	F	F	P, W	M	N/A
Bicarbonate	HCO ₃			W	W	W	W	W	F	F	F	F	F	P, W	M	N/A
Total Dissolved Solids	TDS			W	W	W	W	W	F	F	F	F	F	P, W	M	N/A
Total Suspended Solids	TSS			Unfiltered	W	W	W	W	W	F	F	F	F	F	P, W	M

Key:

P = prior to discharge.

C = continuous

D = within 24 hours of commencement of discharge **and** daily during discharge. When no discharge is occurring monitoring will be on a weekly basis.

W = within 24 hours of discharge **and** weekly during discharge. When no discharge is occurring monitoring will be on a monthly basis.

F = weekly whilst discharging from sediment basins, Monthly during Wet season irrespective of discharge.

M = monthly.

A = Annually, at end of Wet season on recessional flows.

N/A = not applicable.

¹ The sampling point in MWD1 will be located close to DP1 to ensure it is representative of discharge water quality.

² This sampling is only required where the licensee has conducted water treatment onsite using flocculants containing Acrylamide.

³ During Wet season only

WASTE DISCHARGE LICENCE (WDL248-02)

APPENDIX 4: Fluvial Sediment Monitoring Program

				Grants Downstream Surface Water 1	Grants Upstream Surface Water 2	Grants Upstream Surface Water 4	Grants Downstream Surface Water 5	Grants Downstream Surface Water 7	Grants Downstream Surface Water 8	Discharge Point	Grants Downstream Darwin Harbour 1
Sampling Points											
Site Code				GDS SW1	GDS SW2	GUS SW4	GDS SW5	GDS SW7	GDS SW8	MWD1	GDS DH1
Easting				693239	692989	693903	693374	691498	692465	693030	694262
Northing				8599446	8600073	8599235	8600709	8598943	8599942	8598504	8603365
PARAMETER	Abbrev.	Units	Analysis	FREQUENCY							
Environmental Field Data											
pH	pH	pH		A	A	A	A	A	A	A	A
Electrical conductivity	EC	µS/cm		A	A	A	A	A	A	A	A
Moisture content		%		A	A	A	A	A	A	A	A
Particle size distribution	PSD	%	<63µm ≥63µm & <=2mm >2mm	A	A	A	A	A	A	A	A
Aluminium	Al	mg/kg	<63µm sediment fraction	A	A	A	A	A	A	A	A
Arsenic	As			A	A	A	A	A	A	A	A
Cadmium	Cd			A	A	A	A	A	A	A	A
Chromium	Cr			A	A	A	A	A	A	A	A
Copper	Cu			A	A	A	A	A	A	A	A
Iron	Fe			A	A	A	A	A	A	A	A
Lead	Pb			A	A	A	A	A	A	A	A
Lithium	Li			A	A	A	A	A	A	A	A
Mercury	Hg			A	A	A	A	A	A	A	A

WASTE DISCHARGE LICENCE (WDL248-02)

				Grants Downstream Surface Water 1	Grants Upstream Surface Water 2	Grants Upstream Surface Water 4	Grants Downstream Surface Water 5	Grants Downstream Surface Water 7	Grants Downstream Surface Water 8	Discharge Point	Grants Downstream Darwin Harbour 1
Sampling Points											
Site Code				GDS SW1	GDS SW2	GUS SW4	GDS SW5	GDS SW7	GDS SW8	MWD1	GDS DH1
Easting				693239	692989	693903	693374	691498	692465	693030	694262
Northing				8599446	8600073	8599235	8600709	8598943	8599942	8598504	8603365
PARAMETER	Abbrev.	Units	Analysis	FREQUENCY							
Nickel	Ni			A	A	A	A	A	A	A	A
Zinc	Zn			A	A	A	A	A	A	A	A
Other											
Sulphate	SO ₄	mg/kg	Soluble ion extract	A	A	A	A	A	A	A	A
Calcium	Ca			A	A	A	A	A	A	A	A
Chloride	Cl			A	A	A	A	A	A	A	A
Sodium	Na			A	A	A	A	A	A	A	A
Potassium	K			A	A	A	A	A	A	A	A
Magnesium	Mg			A	A	A	A	A	A	A	A

Key:

A = Annually during recessional flow (late Wet season/early Dry season)

WASTE DISCHARGE LICENCE (WDL248-02)

APPENDIX 5: Biota Monitoring Program

Project Name	Locations	Project Description	Report Frequency
Seagrass assessment	West Arm, Darwin Harbour	Seagrass monitoring to determine whether any observed change in seagrass distribution or composition has occurred in the marine waters of West Arm, Darwin Harbour. Monitoring should aim to determine whether any change identified is naturally occurring or related to mine operations.	Annually
Vegetation monitoring	Areas downstream of ML 31726	Monitoring of vegetation downstream of ML 31726 to determine if mining activities are impacting riparian vegetation communities.	Annually
Macroinvertebrate study	Darwin Harbour and Areas downstream of ML 31726	Survey of macro-invertebrate abundance and diversity in aquatic ecosystems. Data is used to monitor potential impacts from mine operations.	Annually during recessional flow (late Wet season/early Dry season)

WASTE DISCHARGE LICENCE (WDL248-02)

APPENDIX 6: Environmental Risk Mitigation 2022/23

3.2 Environmental Risk Mitigation

LDGNT are committed to best practice environmental management and to minimising impacts associated with mining. LDGNT propose to undertake the following to further investigate potential impacts and provide further data on any impacts associated with a change to monitoring and compliance of TN:

- WDL 248 requires monitoring from one site in Darwin Harbour (GDS DH1) monthly during discharge. LDGNT Propose to temporarily increase the frequency of sampling at the proposed temporary mixing zone compliance point (GDS DH1) to weekly to provide additional supporting information of appropriate mixing within the harbour and to bring monitoring requirements in line with existing compliance location, GDS SW5.
- Additional sample locations within the mixing zone have been proposed (DH4 and DH5 in Figure 1) to provide additional information the appropriate dilution of TN as it moves downstream through the mixing zone.
- Monthly water quality monitoring at two additional locations (GDS DH2 and GDS DH3) in the West Arm of Darwin Harbour during the wet season (when mine site discharges will occur) will be collected in accordance with the existing EcOz (2022) WDL 248 Monitoring Program (Attachment A). LDGNT will continue to collect water quality samples at these locations to provide a better understanding of the water quality in the West Arm region, and allow for comparison of water quality across West Arm.
- LDGNT will also undertake marine macroinvertebrate sampling at those same three Darwin Harbour water quality monitoring sites once per year, to assess whether mine site discharges are impacting on benthic infauna in West Arm. Again, this is additional monitoring to that required in WDL 248.
- LDGNT are planning to undertake additional ecotoxicity assessments of mine site water, to provide additional site specific ecotox data on a range of parameters. Currently, ecotoxicity assessment has been undertaken to develop a site-specific trigger value for lithium. Additional ecotox assessment will be undertaken in 2023

to further refine and investigate site specific trigger values, and data can be interpreted to investigate potential impacts from turbidity.

- In May 2022, LDGNT engaged consultants to undertake baseline freshwater macroinvertebrate sampling in freshwater streams downstream of GLP, as well as one reference (control) site. LDGNT now have two rounds of baseline macroinvertebrate data that can be used as a baseline for future 'impact' macroinvertebrate monitoring rounds. This data will allow assessment of potential impacts of mine site water and wastewater discharges on aquatic ecosystems downstream. LDGNT will ensure that future macroinvertebrate data analysis considers macroinvertebrate species that are susceptible to toxicity (e.g. from metals) and also turbidity.
- LDGNT will irrigate mine wastewater as much as possible, with discharge as a last resort. LDGNT are developing an Irrigation Management Plan which will include nutrient load balance and limits, salinity/sodicity assessment, management procedures for irrigation and grass/vegetation management in the irrigation area, and monitoring requirements. Irrigation of wastewater at GLP is approved under the Mining Management Plan, however, LDGNT are developing the Irrigation Management Plan as an additional strategy to ensure irrigation is undertaken with minimal potential for environmental impacts.

(Source: Core Lithium – Waste Discharge Licence Amendment - Supporting Information, February 2023. NTEPA2021/0155-005~0001)