

Amendment Report

| Licence Number | L8664/2012/1 |
|-----------------------|--|
| Licence Holder ACN | Lanfranchi Nickel Mines Pty Ltd 110 078 263 |
| File Number: | 2012/002931-1 |
| Premises | Lanfranchi Nickel Mines Pty Ltd Mineral Lease ML15/346, ML15/347, ML15/377 ML 15/385, ML 15/386, ML 15/387, ML 15/388 ML 15/486, ML 15/487, ML 15/493 and ML 15/473 KAMBALDA WA 6429 |
| Date of Report | 29 November 2019 |

1. Definitions and interpretation

Definitions

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

Table 1: Definitions

| Term | Definition |
|-------------------------------|---|
| ACN | Australian Company Number |
| Amendment Report | refers to this document |
| Category/ Categories/ Cat. | categories of Prescribed Premises as set out in Schedule 1 of the EP Regulations |
| CEO | means Chief Executive Officer. |
| | CEO for the purposes of notification means: |
| | Director General Department Administering the <i>Environmental Protection Act</i> <i>1986</i> Locked Bag 10 |
| | JOONDALUP DC WA 6027 |
| | info@dwer.wa.gov.au |
| Delegated Officer | an officer under section 20 of the EP Act |
| 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. |
| DWER | Department of Water and Environmental Regulation |
| EP Act | Environmental Protection Act 1986 (WA) |
| EP Regulations | Environmental Protection Regulations 1987 (WA) |
| Existing Licence | The Licence issued under Part V, Division 3 of the EP Act and in force prior to the commencement of and during this Review |
| Licence Holder | Lanfranchi Nickel Mines Pty Ltd |
| Prescribed Premises | has the same meaning given to that term under the EP Act. |
| Premises | refers to the premises to which this Amendment Report applies, as specified at the front of this Amendment Report. |
| Revised Licence | the amended Licence issued under Part V, Division 3 of the EP Act, with changes that correspond to the assessment outlined in this Amendment Report. |

| Term | Definition |
|------------|---|
| Risk Event | as described in Guidance Statement: Risk Assessment |

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2. Amendment Description

The following guidance statements have informed the assessment and decision outlined in this Amendment Report.

- Guidance Statement: Setting Conditions (October 2015)
- Guidance Statement: Decision Making (June 2019)
- Guidance Statement: Risk Assessment (February 2017)
- Guidance Statement: Environmental Siting (November 2016)

2.1. Purpose and scope of assessment

DWER received an application for a licence (L8664/2012/1) amendment on 13 September 2019 to relocate the putrescible landfill located within a waste rock dump (WRD) to another site within the same waste rock dump area. The application details that the current Lanfranchi landfill trench which is located at the base of the northern face of the waste rock dump is nearing capacity and is proposed to be decommissioned. The new landfill trench will be located on the actual surface of the same waste rock dump. The new landfill will continue to receive inert waste type 1, and putrescible waste from the Lanfranchi accommodation village and the mine. The proposed trench will be managed in accordance with L8664/2012/1 and will be of the same capacity as the current cell (50m long x 5m wide x 6m deep).

Table 2 lists the documents and information provided with the amendment application and submitted as part of the assessment process.

Table 2: Licence amendments

| Document/information description | Date received |
|---|----------------------|
| DWER Application Form (Amendment) signed by HSE Coordinator and following supporting documentation. | 12 September 2019 |

2.2. CEO Initiated amendment

In applying the above requested amendment The CEO has also

- updated the expiry date to align with the 2016 amended expiry date;
- included the new registered business address for the Premises on the front page of the Licence;
- updated the definitions in the Licence
- updated the style and appearance of the Licence;
- updated licence conditions to reflect wording in current licence template. The word "Licensee" was removed from the licence and the word "Licence Holder" was added to the licence instead;
- removed the word "target" from condition 3.5.1 and the word "limit" added instead as targets have been removed from the licence in accordance with DWER licensing protocol;
- included an updated map showing the location of the proposed landfill trench; and
- deleted the redundant AACR form set out in attachment 2 of the previous licence and advise the Licensee to obtain the form from the Department's website.

3. Amendment history

Table 3 provides the amendment history for L8128/2006/2.

Table 3: Licence amendments

| Instrument | Issued | Amendment |
|--------------|------------|--|
| L8664/2012/1 | 20/06/2014 | Licence converted to REFIRE format |
| L8664/2012/1 | 4/06/2015 | Amendment to increase the maximum approved throughput at the landfill |
| L8664/2012/1 | 29/04/2016 | Notice of Amendment: to extend the expiry date of the Licence |
| L8664/2012/1 | 1/03/2019 | Notice of Amendment to update the registered office and contact details for the premises |
| L8664/2012/1 | 26/11/2019 | Amendment to relocate the putrescible landfill to another site within the waste rock dump area and update registered address details. |
| | | Amendment was granted in the form of a revised licence, including consolidation of amendment notice issued on 1 March 2019. |

4. Location and receptors

Table 4 below lists the relevant sensitive land uses currently in the vicinity of the Prescribed Premises which may be receptors relevant to the proposed amendment.

Table 4: Receptors and distance from activity boundary

| Residential and sensitive premises | Distance from Prescribed Premises | | |
|------------------------------------|--|--|--|
| Residential premises | No sensitive receptors in close proximity | | |
| Widgiemooltha township | Located approximately 25 km from the property boundary | | |

Table 5 below lists the relevant environmental receptors in the vicinity of the Prescribed Premises which may be receptors relevant to the proposed amendment.

| Environmental receptors | Distance from Prescribed Premises |
|-------------------------|---|
| Lake Lefroy catchment | The Lanfranchi Project is located in the Lake Lefroy catchment and is 13.5 km from Lake Lefroy. |
| Surface water | Surface water resources are located in shallow ephemeral lakes and are generally saline or hypersaline. |
| Watercourse | There are no permanent watercourses in the general region and water supplies for pastoral activities are stored in earthen dams. |
| Groundwater | The Lanfranchi Project is located in the Goldfields Groundwater Area within the Lake Lefroy catchment. Regional groundwater flows are generally towards paleo-drainage lines where the water table approaches the surface and salt crusts can develop in drainage sinks. Identified water resources in this region are located in shallow |

| | ephemeral lakes or uncovered aquifers and are generally saline or hyper-saline. Recharge is low because of the low rainfall, high evaporation, heavy soils, local internal drainage zones and well developed vegetation cover. | | | | |
|--|--|--|--|--|--|
| | Groundwater in the Kambalda mining region is typically encountered at the saprolitic interface with fresh rock at around 50 metres below surface. Below the base of oxidation, bedrock permeability is generally very low and groundwater inflows into mines are usually small. | | | | |
| Threatened Ecological Communities or Declared Rare Flora | No Threatened Ecological Communities or Declared Rare Flora are listed for this location. | | | | |
| Public Drinking Water Source Area | The premises is not located within a Public Drinking Water Source Area or in an area covered by any Environmental Protection Policies. | | | | |

5. Risk assessment

Tables 6 and 7 below describe the Risk Events associated with the amendment consistent with the Guidance Statement: Risk Assessments. Both tables identify whether the emissions present a material risk to public health or the environment, requiring regulatory controls.

| | | | | Regulatory controls (refer to | | | | |
|-------------------|--|---|--|--|---|--|--|--|
| Source/Activities | | Potential emissions | Potential Potential a | | Potential adverse impacts | Applicant controls | Reasoning | conditions of the granted instrument) |
| Construction | Vehicle movements on unsealed access roads | Noise | ise pro- clc Th Wi tov loc ap 25 Air / wind La | town site is located approximately 25 km from the Lanfranchi | Amenity | Activities are estimated to take 2 weeks to complete; Operating 07:00 and 17:30 on weekdays and 07:00 and 12:00 on Saturdays only; | With no sensitive receptors in the near vicinity, the Delegated Officer considers that if any noise impacts arise, management under the <i>Environmental Protection (Noise)</i> <i>Regulations 1997</i> will be adequate. No further risk assessment is required. | No receptor present Noise Regulations apply. |
| | | Vehicle movements on unsealed access roads Air / wind dispersion located approximately 25 km from the Lanfranchi project area. Impacts impacts Dust Air / wind dispersion Potential to be deposited on vegetation prevent photosynthe | | | impacts | impacts Water spray cart to prevent dust lift off during construction time. | Given this dust management control, the Delegated Officer considers dust emissions are not likely to leave the Premises and combined with a separation distance of over 25km will not significantly impact upon the amenity of residents. No further risk assessment is required. | Existing Licence Condition 2.6.1 and 2.6.2 |
| | | | vegetation and may prevent photosynthe sis and plant | Water spray cart to prevent dust lift off during construction time. | The Delegated Officer considers the minor amount of dust potentially generated will not cause vegetation impacts. There are also no Declared Rare Flora, Threatened Ecological Communities or Priority Ecological Communities in the close proximity. No further risk assessment is required. | Existing Licence Condition 2.6.1 and 2.6.2 | | |

Table 6: Risk assessment for proposed amendments during construction

| | | | | Regulatory | | | | |
|--------------------------------------|--|---------------------|--------------------------|--|---|--|---|---|
| Source/Activities | | Potential emissions | ial Potential Potential | | Potential adverse impacts | Applicant controls | Reasoning | controls (refer to conditions of the granted instrument) |
| Cat 64: Landfilling operations | Vehicle | Noise | | No residential premises in close proximity. The Widgiemoolth | emises in ose oximity. ie idgiemoolth town site is cated oproximately i km from e Lanfranchi | Daytime operation only | With no sensitive receptors in the near vicinity, the Delegated Officer considers that if any noise impacts arise, management under the <i>Environmental Protection (Noise)</i> <i>Regulations 1997</i> will be adequate. No further risk assessment is required. | No receptor present Noise Regulations apply. |
| | movements on unsealed access roads and and movement of waste materials during landfilling operations | | Air / wind dispersion | a town site is located approximately 25 km from the Lanfranchi project area. | | Water spray cart to prevent dust lift off during construction time. | Given this dust management control, the Delegated Officer considers dust emissions are not likely to leave the Premises and combined with a separation distance of over 25km will not significantly impact upon the amenity of residents. No further risk assessment is required. | Existing Licence Condition 2.6.1 and 2.6.2 |
| | | | | Flora and vegetation | Potential to be deposited on vegetation and may prevent photosynthe sis and plant respiration | Water spray cart to prevent dust lift off during construction time. | The Delegated Officer considers the minor amount of dust potentially generated will not cause vegetation impacts. There are also no Declared Rare Flora, Threatened Ecological Communities or Priority Ecological Communities in the close proximity. No further risk assessment is required. | Existing Licence Condition 2.6.1 and 2.6.2 |
| | Landfilling of putrescible wastes | Odour | Air / wind dispersion | No residential premises in close proximity. The Widgiemoolth a town site is located approximately 25 km from the Lanfranchi project area | None | Cover is applied to waste in accordance with the current license condition Only one active tipping face will be exposed during active operations and the surface area will be kept as small as possible. | The Delegated Officer considers that the provisions of the existing licence and Section 49 of the Environmental Protection Act 1986 are sufficient to regulate odour emissions during operation; therefore the risk is considered low and does not require any further regulatory controls. No further risk assessment is required. | Existing Licence Condition 1.3.13 and 2.7.1 |
| Cat 64: | Landfilling of | Leachate | Seepage | Ground- | None | According to the Licence holder | The Delegated Officer does not | Licence condition |

Table 7: Risk assessment for proposed amendments during operation

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| Landfilling operations | putrescible wastes | through soil and transport through ground- water | water 50mbgl | the landfill is situated within the WRD and leachates unlikely to be emitted. Groundwater is saline. | consider that a direct pathway exists given the landfill is situated within the WRD and the depth to groundwater is over 30m. No further risk assessment is required. | 1.3.11 which requires a separation distance of 2m between the base of the landfill and the highest groundwater level; and |
|---------------------------|-----------------------|---|-----------------|--|---|--|
| | | | | | | the disposal of waste within the WRD |

6. Conclusion

Based on the assessment in this Amendment Report, the Delegated Officer has determined that a licence amendment will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements. These conditions include:

- Infrastructure requirements;
- Waste acceptance requirements;
- Processing requirements;
- Containment infrastructure maintenance;
- Cover requirements;
- Dust managements;
- Odour requirement;
- Monitoring requirements; and
- Record keeping requirements

6.1. Summary of amendments

Table 7 provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the Revised Licence as part of the amendment process.

| Condition No. | Proposed amendments |
|--|---|
| NA | Updated the format and appearance of the Licence. |
| Front page | Updated the expiry date to align with the 2016 amended expiry date and the registered business address. |
| Definitions | Definitions updated to reflect department name changes and add some new definitions. |
| 1.2.2 – 1.3.14, 2.1.1, 2.5.1, 2.6.1- 2.7.1, 3.1.1- 3.1.2, 3.5.1 - 3.6.1 and 5.1.2 -5.2.1 | Licence conditions updated to reflect wording in current licence template. The word "Licensee" has been removed and the word "licence holder" was added instead to the licence. |
| 3.5.1 | Word targets have been removed and added the word limit instead to the licence in accordance with DWER licensing protocol |
| Schedule 1 | Updated map showing the location of the proposed landfill trench |
| Attachment 2 | Deleted the redundant AACR form. |

Table 7 Licence amendments

6.2. Licence Holder comments

The Licence Holder was provided with the draft amendment on 7 November 2019 for review and comment. The Licence Holder advised on 28 November 2019 that they have no further comments on the draft amendment

STEPHEN CHECKER MANAGER WASTE INDUSTRIES REGULATORY SERVICES

An officer delegated by the CEO under section 20 of the EP Act

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Appendix 1: Key documents

| | Document title | In text ref | Availability |
|-----|---|-------------------------------------|---------------------------------------|
| 1. | Licence L8664/2012/1 | L8664/2012/1 | Accessed at <u>www.dwer.wa.gov.au</u> |
| 2. | Category 89 Licence amendment application Form, Lanfranchi Nickel Mine Waste Facility, Application Form (Amendment) signed by HSE Coordinator and attached supporting documentation signed 12/09/19. | Licence amendment application | DWER record (DWERDT200491) |
| 3. | DER, July 2015. <i>Guidance Statement:</i> <i>Regulatory principles.</i> Department of Environment Regulation, Perth. | DER 2015a | |
| 4. | DER, October 2015. <i>Guidance Statement:</i> <i>Setting conditions.</i> Department of Environment Regulation, Perth. | DER 2015b | |
| 5. | DER, May 2016. <i>Guidance Statement:</i> <i>Publication of Annual Audit Compliance</i> <i>Reports</i> . Department of Environment Regulation, Perth. | DER 2016a | |
| 6. | DER, August 2016. <i>Guidance Statement:</i> <i>Licence duration.</i> Department of Environment Regulation, Perth. | DER 2016b |] |
| 7. | DER, September 2016. <i>Guidance</i> <i>Statement: Environmental Standards</i> . Department of Environment Regulation, Perth. | DER 2016c | Accessed at <u>www.dwer.wa.gov.au</u> |
| 8. | DER, November 2016. <i>Guidance</i> <i>Statement: Environmental Siting</i> . Department of Environment Regulation, Perth. | DER 2016d | Accessed at <u>www.dwer.wa.gov.au</u> |
| 9. | DER, February 2017. <i>Guidance</i> <i>Statement: Land Use Planning.</i> Department of Environment Regulation, Perth. | DER 2017a | |
| 10. | DER, February 2017. <i>Guidance</i> <i>Statement: Risk Assessments.</i> Department of Environment Regulation, Perth. | DER 2017b | |
| 11. | DWER, June 2019. <i>Guideline: Decision Making.</i> Department of Water and Environmental Regulation, Perth. | DWER 2019a | |
| 12. | DWER, June 2019. <i>Guideline: Industry</i> <i>Regulation Guide to Licensing.</i> | DWER 2019b | |

| | Department of Water and Environmental Regulation, Perth. | |
|-----|---|------------|
| 13. | DWER, June 2019. <i>Guideline: Odour</i> <i>emissions.</i> Department of Water and Environmental Regulation, Perth. | DWER 2019c |

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