

# CONSTRUCTION COMPLIANCE REPORT (PROGRESSIVE)

# REDCLIFFE PROJECT W6650/2022/1

9 September 2024

Version 1

### **Document Control**

Version	Date	Author	Reviewer	Approved	
1.0	14 September 2024	Genesis Minerals – Environmental Superintendent	Genesis Minerals - Superintendent Environmental	Genesis Minerals – Manager Environment	

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## 1. INTRODUCTION

This Environmental Compliance Report has been prepared by Genesis Minerals Limited to satisfy Condition 2 of the construction compliance reporting requirements associated with the installation of the Turkeys Nest in accordance with Works Approval W6650/2022/1 (the Works Approval).

#### 1.1 PRESCRIBED PREMISES CATEGORY

The Turkey's Nest infrastructure is not associated with a Prescribed Premise Category (Table 1).

**Table 1 Prescribed Premises Category** 

Prescribed Premises Category	Assessed production / throughput capacity.
N/A	N/A

#### 1.2 CONSTRUCTION AND INSTALLATION REQUIREMENTS

This report will demonstrate compliance with the construction and installation requirements of Works Approval Licence Condition (LC) 1, Table 1, Item 2 – Turkey's Nest/Dams for storage of dewatering effluent/RO Brine/Truck washdown water (Table 2). The infrastructure was constructed on 16 August 2024.

Table 2 Construction and installation requirements (W6650/2022/1; LC1, Table 1, Item 2).

Item	Infrastructure and / or equipment	Design and construction / installation requirements	Infrastructure Location
2	Turkey's nests/dams for the storage of dewater effluent/RO Brine/Truck washdown water	(a) HDPE lined; and (b) sized to contain a one in one hundred-year 72-hour ARI rainfall event	No location specified in Works Approval

# 2. CONSTRUCTION TO REQUIREMENTS EVIDENCE

#### 2.1 FACILITY SITING

No siting specification was conditioned within the Works Approval. The Turkey's Nest was constructed within the proposed premise boundary on tenement M37/1348, shown in Figure 1.



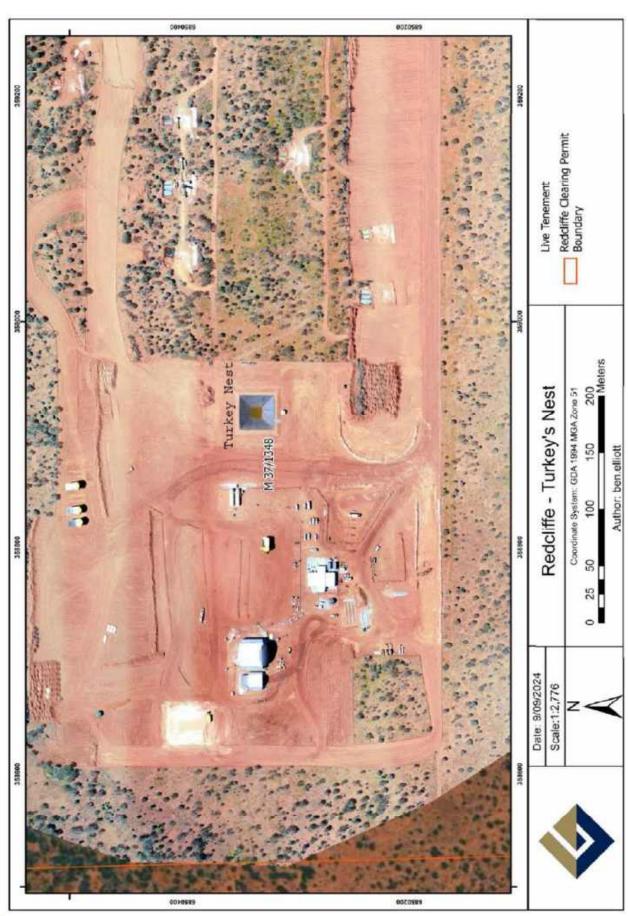


Figure 1: Redcliffe Turkey's Nest Location



#### 2.2 DESIGN

Table 3 indicates the design requirements and evidence supporting the design to specifications.

Table 3 Evidence of design to specifications.

Design Requirement	Summary	Evidence
a) HDPE Lined.	The Turkey's Nest was designed by Wishaw Engineering Consultants, with Earthworks undertaken by SRG Global and liner installation by KEnviro. The liner was designed to 1.0 mm specification, however, Genesis opted to install a 2.0 mm UV stabilised HDPE liner for improved durability.	As Built Drawing (Appendix 1) Liner Specification Sheet (Appendix 2) Photograph of Turkey's Nest (Appendix 3)
b) Sized to contain a one in one hundred- year 72-hour ARI rainfall event.	The Redcliffe one hundred year 72-hour ARI is calculated to be 201 mm.  All inflows to the Turkey's Nest are down-gradient, requiring pumping (not-free flowing catchment). Therefore the total catchment is representative of the Turkey's Nest at 82.8 m2. This requires a freeboard of approximately 200 mm, which is less than the 500 mm freeboard condition that Genesis will adhere to.	As Built Drawing (Appendix 1)  Redcliffe Gold Project Baseline Hydro- Meteorological and Surface Water Management Study, GRM 2021. (Available on Request)

# 3. COMPLIANCE SUMARY

A summary of compliance of relevant works approval conditions for the construction of the Hub Turkey's Nest facility is detailed in Table 4.

Table 4 Summary of compliance with relevant licence conditions to this report

Works Approval Condition	Licence Condition	Compliance Statement
1	The works approval holder must construct and/or install the infrastructure and/or equipment; (a) in accordance with the corresponding design and construction / installation requirements; and (b) at the corresponding infrastructure location; as set out in Table 1.	a) As evidenced in Table 3 b) Location presented in Figure 1 – not specified in Works Approval
2	The works approval holder must within 30 calendar days of an item of infrastructure or equipment required by condition 1 being constructed and/or installed:  a) undertake an audit of their compliance with the requirements of condition 1; and  (b) prepare and submit to the CEO an Environmental Compliance Report on that compliance.	This report represents the audit of compliance to condition 1.      Cut-off for submission within 30 days of construction completion date (16 August 2024) is 15 September 2024.



3

The works approval holder must ensure that the Environmental Compliance Report required by condition 2(b), includes as a minimum the following:

- (a) certification by a qualified civil or structural engineer that the items of infrastructure or component(s) thereof, as specified in condition 1, have been constructed in accordance with the relevant requirements specified in condition 1;
- (b) as constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure specified in condition 1.
- (c) a schematic diagram of the dewatering network that shows the elements of the dewatering network and how the network has been designed to incorporate movement of dewater effluent between the mining voids, turkey's nests/dams and the final disposal point/s; (d) photographs of each dewater effluent storage turkey's nests/dams and the pipelines that transport dewater effluent to and from the infrastructure:
- (e) photographs of the truck washdown facility oily water separator and the pipelines that transfer dewater to and from the infrastructure; and
- (f) be signed by a person authorised to represent the works approval holder and contains the printed name and position of that person.

#### Compliant

- a) Appendix 4
- b) Appendix 1, Figure 1
- c) Conceptual dewatering network Appendix 5
- d) The Turkey's Nest as constructed images, not no dewatering infrastructure has been installed and will be addressed in a separate construction compliance report, Appendix 3
- e) N/A
- Sign-off included as part of the CCR submission.

# 4. CONCLUSION

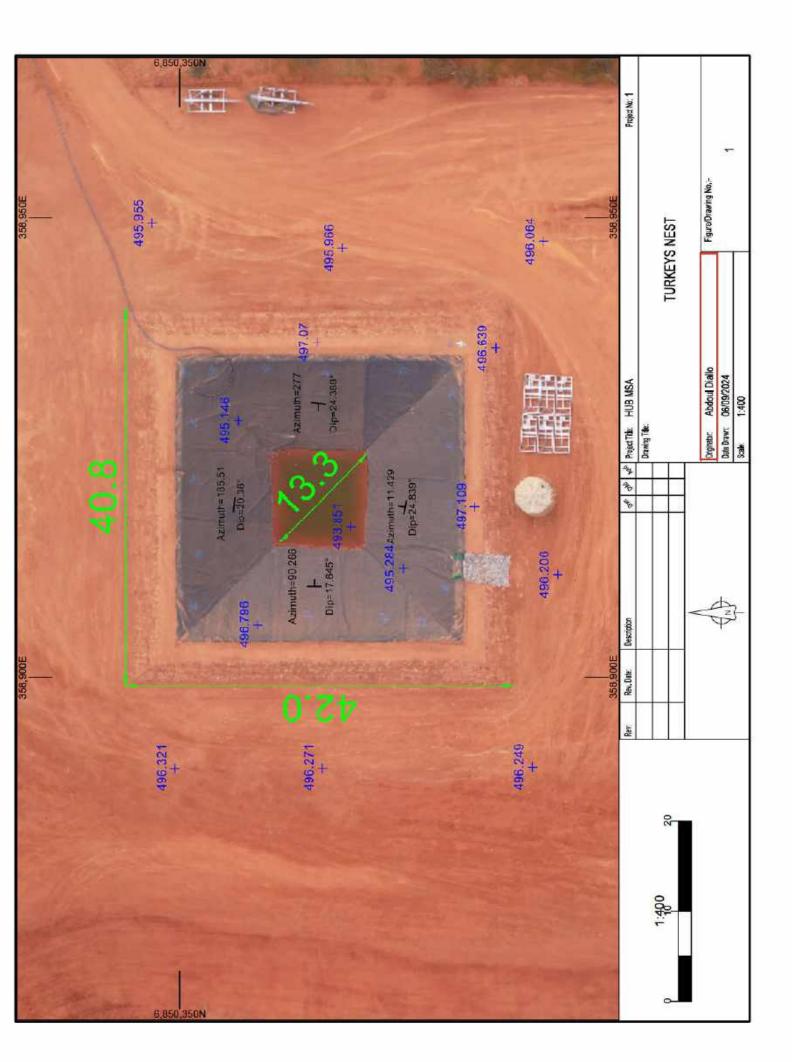
Genesis can confirm that the infrastructure and equipment for the Turkey's Nest meet the requirements set out in LC 1, Table 1, Item 2.

Sincerely,



General Manager - Genesis Minerals Leonora Operations.







# **APPENDIX 2 – LINER SPECIFICATION SHEET**

# MANUFACTURE DATA REPORT (MDR) - SUBMISSION

Nambi Road Realignment; Water Storage Dam; Geosynthetic Lining.









## TYPE:GMB HD 2.00MM B/B M EVO-B 7.5x105 GRI Roll nº: E3K137175R

### Roll Data

Length: 105 m ±2% Area: 787.50 m2 Weight: 1549 kg

Width: 7.50 m ±0.7% Nominal Thickness: 2 mm

### Geomembrane Characteristics

Properties		Test Method	Value	Unidades
Thickness		ASTM D 5199	2.08	mm
Lowest individual thickness		ASTM D 5199	2.00	mm
Geomembrane Density		ASTM D 792	0.944	g/cm3
Tensile Strength at Break	MD	ASTM D 6693 TYPE IV	71.1	N/mm
Tensile Strength at Break	CMD	ASTM D 6693 TYPE IV	77.3	N/mm
Elongation at Break, GL 50mm	MD	ASTM D 6693 TYPE IV	799	%
Elongation at Break, GL 50mm	CMD	ASTM D 6693 TYPE IV	855	%
Tensile Strength at Yield	MD	ASTM D 6693 TYPE IV	34.3	N/mm
Tensile Strength at Yield	CMD	ASTM D 6693 TYPE IV	35.0	N/mm
Yield Elongation GL 33 mm	MD	ASTM D 6693 TYPE IV	17	%
Yield Elongation GL 33 mm	CMD	ASTM D 6693 TYPE IV	17	%
Tear Resistance	MD	ASTM D 1004	298	N
Tear Resistance	CMD	ASTM D 1004	300	N
Puncture Resistance		ASTM D 4833	747	N
Dimensional Stability	MD	ASTM D 1204	-0.26	%
Dimensional Stability	CMD	ASTM D 1204	0.09	%
Carbon Black Content		ASTM D 4218	2.35	%
Carbon Black Dispersion		ASTM D 5596	10	views Cat1/2
Stress Crack Resistance/SP-NCTL		ASTM D 5397	>= 3,000	h
O.I.T. Standard		ASTM D 3895 ( 200 °C)	>= 120	min
High Pressure OIT		ASTM D 5885	>= 500	min
UV resistance (HP OIT, % retained)		ASTM D7238 & ASTM D5885	>= 75	%
Oven Aging at 85°C (HP OIT % retaine	d)	ASTM D5721 & ASTM D 5885	>= 80	%

### **Resin Characteristics**

Properties	Test Method	Value	Unidades	
Resin Material Density	ASTM D 792	>= 0.932	g/cm3	
Resin Melt Flow Index	ASTM D 1238 (190/2.16)	<= 0.40	gr/10 min	

MD=Machine Direction; CMD= Cross Direction;

Note: The dimensions of the roll are conditioned by the factory manufacturing environment and temperature, by dimensional stability and by productive dimensional tolerance. For conversion of N/mm2 to N/mm, kindly multiply by the thickness. This is system-generated document and it does not require original signature or stamp.

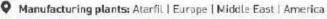
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## TYPE:GMB HD 2.00MM B/B M EVO-B 7.5x105 GRI Roll nº: E4K130220T

### Roll Data

Length: 105 m ±2% Area: 787.50 m2 Weight: 1525 kg

Width: 7.50 m ±0.7% Nominal Thickness: 2 mm

### Geomembrane Characteristics

Properties		Test Method	Value	UNITS
Thickness		ASTM D 5199	2.07	mm
Lowest individual thickness		ASTM D 5199	2.01	mm
Geomembrane Density		ASTM D 792	0.944	g/cm3
Tensile Strength at Break	MD	ASTM D 6693 TYPE IV	71.6	N/mm
Tensile Strength at Break	CMD	ASTM D 6693 TYPE IV	72.2	N/mm
Elongation at Break, GL 50mm	MD	ASTM D 6693 TYPE IV	805	%
Elongation at Break, GL 50mm	CMD	ASTM D 6693 TYPE IV	803	%
Tensile Strength at Yield	MD	ASTM D 6693 TYPE IV	32.4	N/mm
Tensile Strength at Yield	CMD	ASTM D 6693 TYPE IV	33.1	N/mm
Yield Elongation GL 33 mm	MD	ASTM D 6693 TYPE IV	>= 13	%
Yield Elongation GL 33 mm	CMD	ASTM D 6693 TYPE IV	>= 13	%
Tear Resistance	MD	ASTM D 1004	293	N
Tear Resistance	CMD	ASTM D 1004	292	N
Puncture Resistance		ASTM D 4833	713	N
Dimensional Stability	MD	ASTM D 1204	-0.35	%
Dimensional Stability	CMD	ASTM D 1204	0.18	%
Carbon Black Content		ASTM D 4218	2.18	%
Carbon Black Dispersion		ASTM D 5596	10	views Cat1/2
Stress Crack Resistance/SP-NCTL		ASTM D 5397	>= 3,000	h
O.I.T. Standard		ASTM D 8117	>= 120	min
High Pressure OIT		ASTM D 5885	>= 500	min
UV resistance (HP OIT, % retained)		ASTM D7238 & ASTM D5885	>= 75	%
Oven Aging at 85°C (Std OIT,% retaine	d)	ASTM D5721 & ASTM D8117	>= 55	%
Oven Aging at 85°C (HP OIT % retaine	d)	ASTM D5721 & ASTM D 5885	>= 80	%

### Resin Characteristics

Properties	Test Method	Value	UNITS	
Resin Material Density	ASTM D 792	>= 0.932	g/cm3	
Resin Melt Flow Index	ASTM D 1238 (190/2.16)	<= 0.40	gr/10 min	

MD=Machine Direction; CMD= Cross Direction;

Note: The dimensions of the roll are conditioned by the factory manufacturing environment and temperature, by dimensional stability and by productive dimensional tolerance. For conversion of N/mm2 to N/mm, kindly multiply by the thickness. This is system-generated document and it does not require original signature or stamp.

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# APPENDIX 4 – MEMO ENGINEER SIGN-OFF

### **MEMORANDUM**





Date: 9/9/2024

Subject: W6650/2022/1 Construction Compliance Report - Turkey's Nest

The intent of this memo is to satisfy Condition 3a of Works Approval W6650/2022/1 for the development of the Turkey's Nest Infrastructure (Condition 1, Table 1, Item 2), and support submission of the Construction Compliance Report to the Department of Water and Environmental Regulation (DWER).

#### Design and Construction / Installation Requirements

The Turkey's Nest has been constructed in accordance with the design requirements and in the location required by Condition 1, Table 1, summarised in the below

Table 1 Design and construction/installation requirements for W6650/2022/1

Item	Infrastructure and / or equipment	Design and construction / installation requirements	Infrastructure Location
2	Turkey's nests/dams for the storage of dewater effluent/RO Brine/Truck washdown water	(a) HDPE lined; and (b) sized to contain a one in one hundred-year 72-hour ARI rainfall event	No Location Specified

See Appendix 1 for photos of the completed construction of infrastructure.

Furter information is included in the construction compliance report.

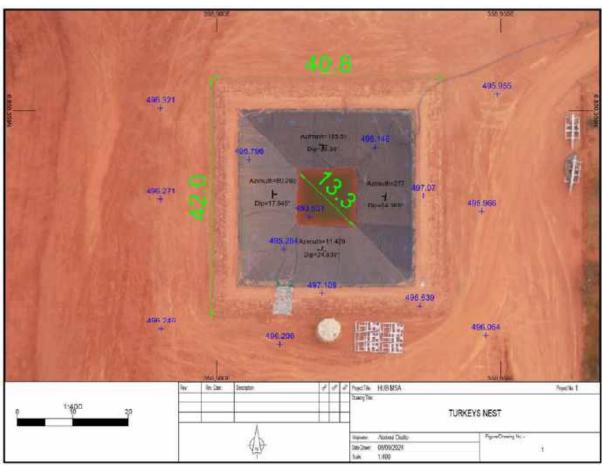
Yours Sincerely,



Genesis Minerals Limited

APPENDIX 1 - PHOTOS OF COMPLETED CONSTRUCTION OF INFRASTRUCTURE







# **APPENDIX 5 – WATER NETWORK SCHEMATIC**

