2024

2024 Annual Review

TOMINGLEY GOLD OPERATIONS

ENVIRONMENTAL PERFORMANCE

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Definitions / Acronyms

Term	Definition
CCC	Community Consultative Committee
EEC	Endangered ecological community
EC	Electrical Conductivity
EPA	Environment Protection Authority
EP&A	*Environment Planning and Assessment Act 1979*
EPL	Environment Protection Licence
DPHI	Department of Planning Housing and Infrastructure (formerly DPE)
ha	Hectares
HVAS	High volume air sampler
LFA	Landscape function analysis
MEG	Mining, Exploration and Geoscience (MEG) – A Division of the Department of Regional NSW
Mining Act	*Mining Act 1992*
MOP	Mining Operations Plan
ML	Mining Lease
NSC	Narromine Shire Council
NOW	NSW Office of Water
OEH	Former NSW Office of Environment and Heritage
PM10	Particulate matter
TEOM	Tapered Element Oscillating Microbalance
TGO	Tomingley Gold Operations
TSP	Total suspended particulates
WAD	Weak acid dissociable cyanide
WAL	Water access licence
WHS	*Work Health & Safety Act 2011*
WRE	Waste rock emplacement

Title Block

Table 1: Annual Review Title Block

Name of operation	Tomingley Gold Operations
Name of operator	Tomingley Gold Operations Pty Ltd
Development consent I project approval #	PA 09_0155 (MOD 7) SSD 9176045 (Mod)
Name of holder of development consent I project approval	Alkane Resources Ltd
Mining lease #	ML 1684, ML 1821, ML1858
Name of holder of mining lease	Tomingley Gold Operations Pty Ltd
Water license #	WAL20270; WAL28643; WAL29266
Name of holder of water license	Alkane Resources Ltd
RMP start date	2 July 2022
RMP end date	11 February 2034
Annual Review start date	1 January 2024
Annual Review end date	31 December 2024

I, David Pritchard, certify that this audit report is a true and accurate record of the compliance status of Tomingley Gold Operations for the period 1 January to 31 December 2024 and that I am authorised to make this statement on behalf of Alkane Resources Pty Ltd.

Note.

a) The Annual Review is an 'environmental audit' for the purposes of section 122B(2) of the *Environmental Planning and Assessment Act 1979.* Section 122E provides that a person must not include false or misleading information (or provide information for inclusion in) an audit report produced to the Minister in connection with an environmental audit if the person knows that the information is false or misleading in a material respect. The maximum penalty is, in the case of a corporation, $1 million and for an individual, $250,000.

b) The Crimes Act 1900 contains other offences relating to false and misleading information : section 192G (Intention to defraud by false or misleading statement- maximum penalty 5 years imprisonment); sections 307A, 307B and 307C (False or misleading applications/information/documents- maximum penalty 2 years imprisonment or $22,000, or both).

Name of authorised reporting officer	David Pritchard
Title of authorised reporting officer	Environment and Community Manager
Signature of authorised reporting officer	
Date	28/03/2025

1 Statement of Compliance

Table 2 provides a statement of compliance status for Tomingley Gold Operations Pty Ltd (TGO) with its project approval (PA) and mining lease (ML), as at the end of the reporting period.

Table 2: Statement of Compliance

Were all conditions of the following approvals complied with?	
PA 09_0155	No
SSD 9176045	No
EPL 20169	No
ML 1684	Yes
ML 1821	Yes
ML 1851	Yes

Table 3 provides a summary of approval conditions not complied with as at the end of the reporting period.

Table 3: Non-compliances

Relevant approval	Condition #	Condition description (summary)	Compliance status	Comment	Relevant Section
PA 09_0155 SSD 9176045	17 B29	Requirement to ensure that PM10 emissions on site do not exceed 50 µg/m3 over a 24 hour period	Administrative Non-compliance	PM10 emissions exceeded the limit of 50 µg/m3 over a 24 hour period on two occasions. Weather records at the time suggest this was due to dust from town rather than from the mine.	5.3.2
SSD 9176045	B29	Requirement to ensure that PM2.5 emissions on site do not exceed 25 µg/m3 over a 24 hour period	Administrative Non-Compliance	PM2.5 emissions exceeded the limit of 25 µg/m3 over a 24 hour period on one occasion. The two nearby monitors (~20 metres distance) did not record any elevated results, suggesting equipment error. The monitors have been reviewed post this event.	5.3.3

EPL 20169	M2	Requirement to conduct quarterly samples on listed groundwater bores	Administrative Non-compliance	One of the sample sites has been rendered inaccessible due to erosion and is unable to be monitored. The EPA were contacted in relation to this issue and TGO is investigating opportunities to remove or replace this monitoring bore.	6.7.1

Compliance status key for Table 3		
Risk level	**Colour Code**	**Description**
High	Non-compliant	Non-compliance with potential for significant environmental consequences, regardless of the likelihood of occurrence
Medium	Non-compliant	Non-compliance with: • potential for serious environmental consequences, but is unlikely to occur; or • potential for moderate environmental consequences, but is likely to occur
Low	Non-compliant	Non-compliance with: • potential for moderate environmental consequences, but is unlikely to occur; or • potential for low environmental consequences, but is likely to occur
Administrative non-compliance	Non-compliant	Only to be applied where the non-compliance does not result in any risk of environmental harm (e.g. submitting a report to government later than required under approval conditions)

2 Introduction

2.1 Tomingley Gold Mine

This Annual Review reports on the environmental management activities undertaken at Tomingley Gold Operations Pty Ltd (TGO) during the calendar year 2024, and provides details on activities proposed for 2025. The report has been produced in accordance with the *Post-approval requirements for State significant mining developments. Annual Review Guideline* (DP&E, October 2015) to meet the annual reporting requirements conditioned in the TGO Mining Leases (ML 1684, ML 1821 and ML 1858) and the Project Approval (PA09_0155 and SSD9176045). TGO is a wholly owned subsidiary of Alkane Resources Ltd. An additional

The Tomingley area has a long history of gold mining and exploration, with gold first discovered and mined from the Tomingley Goldfield in the 1880s. Numerous underground mining operations were subsequently located in the McPhail area, immediately south of the TGO minesite. The last economic 'mining' activities were completed in the late 1990s and involved the re-treatment of tailings from the McPhail Mine.

TGO's process plant, with associated residue facilities were commissioned between December 2013 and February 2014.

In January 2019 the Tomingley Mine commenced development for underground mining with the establishment of 2 portals from the base of Wyoming 1 open cut pit. Development and processing of stope material continued throughout 2022.

In June 2022, the now Department of Planning and Environment approved Modification 6 to PA 09_0155 to allow an increase in capacity for RSF1 and a 2m increase in the approved maximum elevation of Cell 2 of RSF1.

In December 2022, the Department of Planning and Environment approved Modification 7 to PA 09_0155 which approved the construction of a new access ramp (Northern Ramp) for the Wyoming 1 Open Cut, and allows for minor changes to the approved final landform.

In February 2023, the Department of Planning and Environment approved SSD 9176045 for the development of the SAR mine (both open cut and underground) and associated infrastructure (sed ponds, haul road, water storage dams, pastefill plant and offices). The expansion area is referred to as the Tomingley Gold Extension Project (TGEP).

A Condition included in SSD 9176045 requires the surrender of MP 09_0155 and this was submitted to the Department of Planning, Housing and Infrastructure (DPHI) prior to an approved extension date of 31st March 2025. As a result, this will be the last Annual Review for MP 09_0155 with the annual review date for SSD 9716045 changing to the finacial year. Submission of future annual reviews will be in September of each year and an annual review for SSD 9176045 will be submitted in September 2025.

In August 2023, the Department of Planning and Environment approved Modificiation 1 to SSD 9176045 which approved the temporary relocation of the pastefill plant and several other minor changes. Since approval, work has commenced on the construction of the pastefill plant and minor infrastructure for TGEP.

A number of projects were completed in 2024 at the existing TGO site. Construction of cell 2 RSF2 has been completed and is now active. In addition, the construction and comissioning of the mill fine grind circuit and the pastefill plant were both completed in 2024. Construction of the access road extending from TGO to TGEP began in 2024, with works ongoing into 2025.

Waste rock from the operations are disposed of according to approved site plans, while ore was transported to the existing ROM pad for processing at the processing plant.

Other operations on site during the reporting period included the ongoing completion of regular site monitoring and maintenance activities in accordance with the Project Approval and site management plans.

TGO hosted four Community Consultative Committee (CCC) meetings during the calendar year.

2.2 Mine Contacts

The primary contacts for the TGO during the review period are detailed in Table 4.

Table 4: Tomingley Gold Operations Key Contacts

Key Contact	Position	Contact Details
Rod Griffith	General Manager Operations	**PO Box 59 Peak Hill, NSW, 2869 Phone: (02) 6867 9780**
Andrew Brown	Underground Manager	
Daniel Short	Open Cut Manager	
David Pritchard	Environment and Community Manager	
Varun Patel	Processing Manager	
Community Information Line		**(02) 6865 6116**

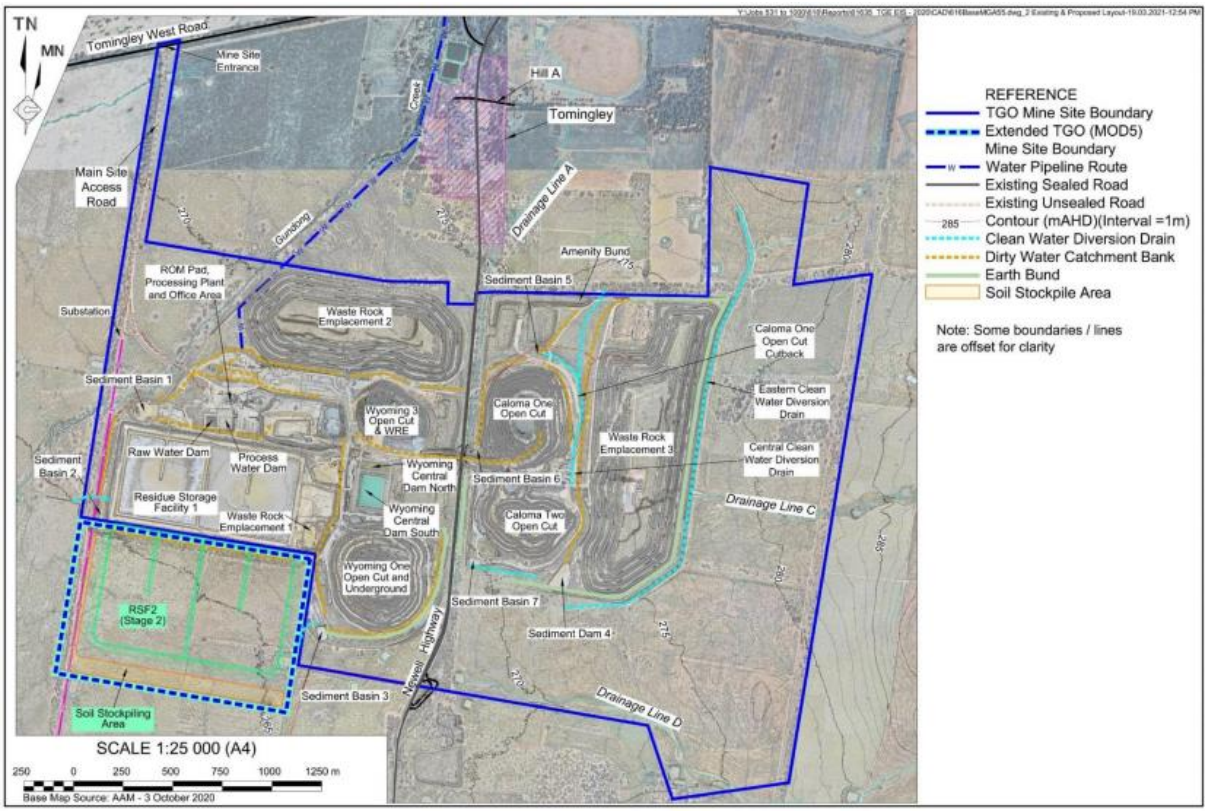


Figure 1 – Tomingley Gold Operations Site Layout

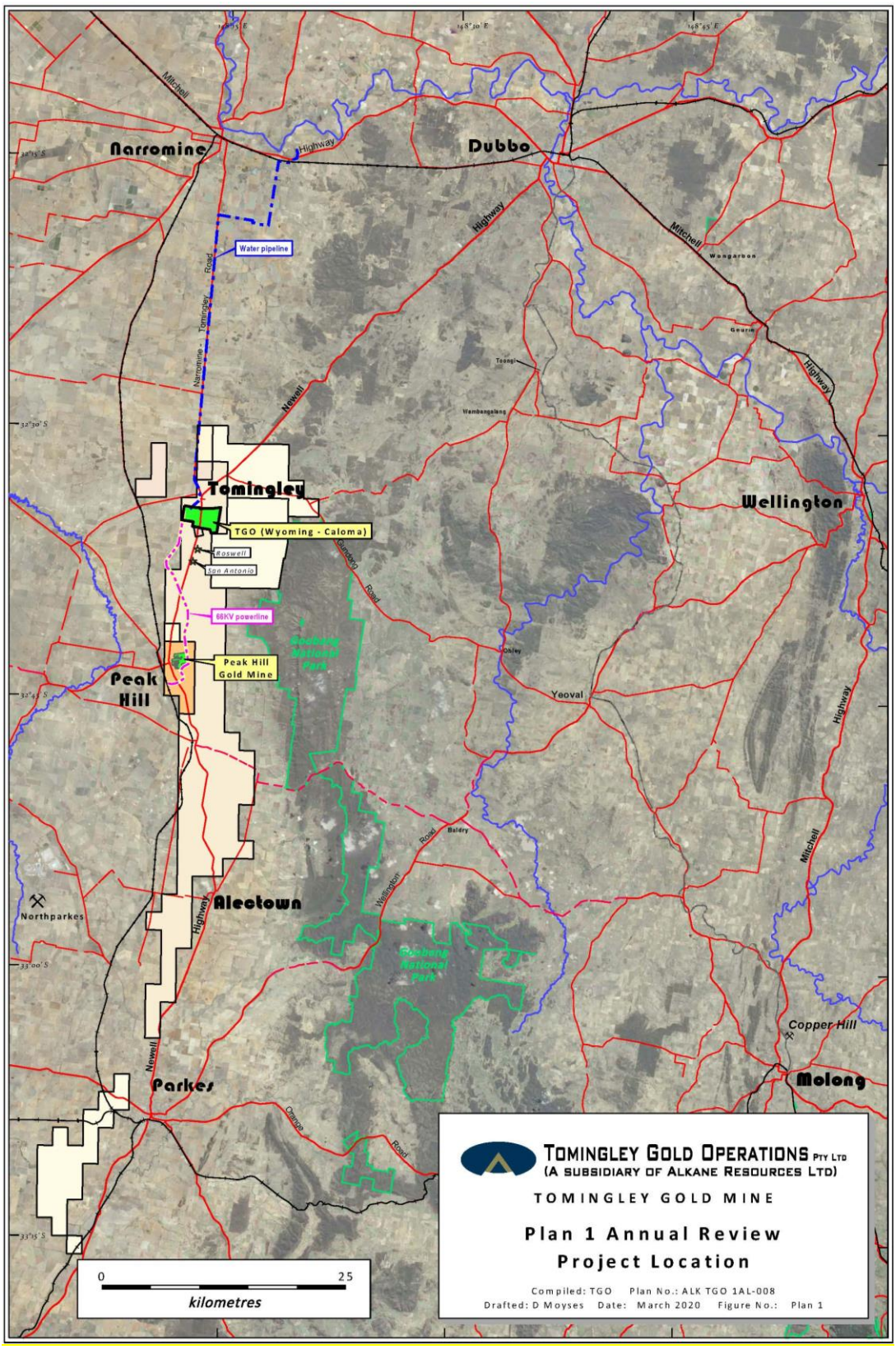


Figure 2 – Tomingley Gold Operations Regional Setting

Figure 3 – Tomingley Gold Operations Environmental Monitoring Locations

3 Approvals

TGO operates under the environmental consents, leases and licences specified in Table 5.

Table 5: Consents, Leases and Licences

Title	Legislation	Regulatory Authority	Approval Duration/ Expiry
Project approval 09_0155 (MOD 1 – 24 July 2012) (MOD 2 – 13 May 2015) (MOD 3 – 5 July 2016) (MOD 4 - 25 May 2020) (MOD 5 – April 2021) (MOD 6 – June 2022) (MOD 7 – December 2022)	Environmental Planning & Assessment (EP&A) Act 1979	Department of Planning, Housing and Infrastructure (DPHI)	31 December 2025
SSD 9176045 (MOD 1 – 8 September 2023)	Environmental Planning & Assessment (EP&A) Act 1979	Department of Planning, Housing and Infrastructure (DPHI)	31 December 2032
Mining Lease 1684	Mining Act 1992	Regional NSW – Mining, Exploration and Geoscience (MEG)	11 February 2034
Mining Lease 1821	Mining Act 1992	Regional NSW – Mining, Exploration and Geoscience (MEG)	11 February 2034
Mining Lease 1858	Mining Act 1992	Regional NSW – Mining, Exploration and Geoscience (MEG)	19 July 2044
Environment Protection Licence (EPL) 20169	Protection of the Environment Operations (POEO) Act 1997	NSW Environment Protection Authority (EPA)	Ongoing until surrendered
Flood Works Approval 80FW723901 (Gundong Creek levy)	Water Management Act 2000	NSW Office of Water (NOW)	2 January 2028
Groundwater licences WAL20270, WAL28643 and WAL29266	Water Management Act 2000	NSW Office of Water (NOW)	N/A
Notification of Dangerous Goods NDG200150	Work Health & Safety Act (WHS) 2011	WorkCover NSW	N/A

4 Operations Summary

4.1 Mining

Underground mining continued with the extraction of the Wyoming 1 and Caloma ore bodies through open stoping. The development of additional levels at Caloma and Wyoming has continued. TGO completed the development of the San Antonio / Roswell exploration drive and began stoping in these orebodies in 2024.

Waste was hauled in-pit and some to temporary surface dumps. Waste was also used to backfill stope voids and this material was taken from surface and in-pit dumps. Ore was transported to the existing ROM pad for processing at the processing plant.

Allowing for replacement plant and temporary introduction of additional plant for short projects, the TGO mobile plant fleet remained generally consistent with the indicative mining fleet presented in *'MOD 3 Environmental Assessment'* (RW Corkery, 2015) (EA) during the reporting period.

During 2024, the existing four underground loaders were replaced with four new Caterpillar 2900 XE underground loaders. These are diesel hybrid loaders and were purchased due to their improved diesel use and emission reductions.

No open cut mining has occurred in 2024.

A summary of production during the last calendar year is provided in Table 6.

Table 6: Production Summary

Material		Approved Limit (specify limit)	Previous Reporting period (actual) (CY 2022)	This reporting period (actual) (CY 2023)	Next reporting period (forecast) (CY 2024)
Waste Rock (t)	Underground	-	52,700	467,334	301,164
	Open Cut	-	62,000	0[1]	0[1]
Ore (t)	Underground	1.5 million tonnes	827,000	1,047,033	1,211,672
	Open Cut		45,000	0[1]	0[1]
Process Residue (tailings) (t)		-	1,123,840	1,101,317	1,108,223
Saleable Product (Oz)		-	61,501	62,779	70,720
Note: No coarse process waste produced at TGO					
[1] No open cut mining occurred in 2024 or is expected to occur in 2025. Topsoil and overburden has been moved, but no waste rock.					

Total material processed did not exceed the limit of 1.5 million tonnes as described by Schedule 2 Condition 6.

4.2 Next Reporting Period

During the next reporting period, underground mining will continue with further development and mining of stopes in Wyoming 1, Caloma and Roswell orebodies on a 24/7 basis.

Processing of ore will continue on a 24-hour roster.

The relocation of the Newell Highway will commence.

Rehabilitation elsewhere will likely be minimal as remaining disturbed areas are still required for ongoing operations.

Further resource defintion underground will continue in the San Antonio / Roswell ore bodies.

4.3 Actions Required from Previous Annual Review

The NSW Department of Planning, and Environment (DPE) approved the 2023 Annual Review in its correspondence dated 15 April 2024. No additional actions were required from this correspondence.

5 Environmental Performance

5.1 Noise Management

5.1.1 Statutory Attended Monitoring

Statutory attended noise monitoring to meet the requirements of EPL 20169 Condition M4.1, PA 09_0155 Schedule 3 Condition 3A and SSD9176045 Condition B1 was completed over three consecutive day, evening and night periods between 4-7 November 2024 (available on the companies website at https://www.alkane.com.au/projects/tomingley-gold-project/tomingley-gold-operations/tgo-reports/environmental-reports/). The monitoring indicated noise generated by TGO complies with noise limits at all six monitored locations as shown in **Error! Reference source not found.**.

To address Condition 6 of Schedule 3 of PA 09_0155, and Condition B10 of SSD9176045 a program to calibrate and validate the real-time noise monitoring results with the attended monitoring results has been completed. The validation compares monthly attended monitoring results against the closest assessed unattended monitoring location.

TGO has one unattended real-time monitoring terminal installed at the Brooklands property (nearest to R23). Figure identifies the location of the monitor which is situated 600m west of the attended noise monitoring location R23, therefore, background (LA90) noise levels are significantly lower due to offset distance to highway traffic.

Muller Acoustic Consulting Pty Ltd (MAC) states that a comparison of mine noise contributions between attended and unattended noise monitoring demonstrates a general consistency between attended and unattended results (available on the companies website at https://www.alkane.com.au/projects/tomingley-gold-project/tomingley-gold-operations/tgo-reports/environmental-reports/).

Table 7: Attended Noise Monitoring Summary 2024

Noise Receiver Locations	DAY Approval criteria[1] LAeq 15 min (dBA)	DAY Results (dBA)	EVENING Approval criteria[1] LAeq 15 min (dBA)	EVENING Results (dBA)	NIGHT Approval criteria[1] LAeq 15 min (dBA)	NIGHT Results (dBA)	Key management implications
R2	36	33	35	33	35	32	Compliance with PA 09_0155/SSD 9176045 and EPL 1684 noise limits
R3/29	40	35	35	33	35	35	
R4	35	[2]	35	[2]	35	[2]	
R5	35	[2]	35	[2]	35	[2]	
R6	35	[2]	35	[2]	35	34	
R23	40	37	38	[2]	36	[2]	

Notes:

1. Approval Criteria from Schedule 3 Condition 3A of PA 09_0155 and Condition B6 from SSD 9176045. Where limits differ between the two, the more stringent requirement has been taken.
2. Mine inaudible. See full report available on the companies website at https://www.alkane.com.au/projects/tomingley-gold-project/tomingley-gold-operations/tgo-reports/environmental-reports/.

5.1.2 Supplementary Attended Monitoring

As required by PA 09_0155 and SSD9176045 supplementary attended monitoring is undertaken for the 11 months each year that statutory EPL attended monitoring does not

occur (see TGO web page for all reports) https://www.alkane.com.au/projects/tomingley-gold-project/tomingley-gold-operations/tgo-reports/environmental-reports/.

All months showed no exceedances of noise criteria during this supplementary monitoring.

TGO's noise consultant also reviews real time monitoring data on a weekly basis to monitor compliance. Whilst this is only an indicator due to not being able to validate data in the field, nil exceedances were recorded during the reporting period.

Whilst TGO does not consider the number of complaints to be a measure of compliance, TGO received nil noise related complaints for the reporting period (available on the companies website at https://www.alkane.com.au/projects/tomingley-gold-project/tomingley-gold-operations/tgo-reports/environmental-reports/).

5.1.3 Proposed Improvements

Due to the changing disturbance area from the TGEP expansion, the monitoring locations will be reviewed in 2025 to ensure they best represent noise levels at surrounding levels and compliance is maintained.

TGO will continue to monitor noise levels however it is not envisaged that any additional improvements will be required to maintain compliance.

5.1.4 EA Predictions

TGO's night time noise levels were consistent with and/or below those predicted in both the original TGO Environmental Assessment and EIS for TGEP.

5.2 Blasting

Blasting at TGO is managed in accordance with the TGO Blast Management Plan (BMP), which was prepared to meet relevant conditions of EPL 20169, PA 09_0155 and SSD 9176045.

During the reporting period TGO fired both production and development blasts underground. All blasts were below the prescribed levels for over pressure and vibration (PA 09_0155, Schedule 3, Condition 7 and SSD 9176045 Condition B13) as presented in Table 8.

Table 8: Blasting Criteria

Location	*Airblast Overpressure (dB(Lin Peak))*	*Ground Vibration (mm/s)*	*Allowable Exceedance*	Exceedances during reporting period
Residence on privately-owned land	*120*	*10*	*0%*	0
	115	*5*	*5% of total blasts over any 12 month period*	0
All Public Infrastructure	-	*50, or alternatively, a specific limit determined to the satisfaction of the Secretary by the structural design methodology in AS 2187.2-2006, or its latest version*	*0%*	0
RSF 1 and RSF 2 embankments		*49*	*0%*	0

*Approval Criteria from PA 09_0155, Schedule 3, Condition 7.

With regards to blast timing, TGO complied with Condition L5.6 of EPL 20169 for all underground blasting which states that underground blasting is permitted at anytime.

No surface blasts were undertaken in 2024.

5.2.1 Management Measures

Blasts are designed and scheduled to ensure air blast overpressure and ground vibration levels remain within PA and SSD blast criteria. Weather conditions are also monitored to avoid blasting in conditions that will enhance offsite impacts, such as south westerly winds and low cloud cover. These management measures have been successful in the prevention of any exceedances during 2024.

5.2.2 Proposed Improvements

TGO will continue to monitor and record blast results. No exceedance of blast limits was recorded, and no futher open cut blasts are expected in 2025. Accordingly TGO is not considering any further improvements.

Whilst TGO does not consider the number of complaints to be a measure of compliance, TGO received nil blast related complaints for the reporting period (available on the companies website at https://www.alkane.com.au/projects/tomingley-gold-project/tomingley-gold-operations/tgo-reports/environmental-reports/).

5.2.3 EA Predictions

TGO's over pressure and vibration levels are consistent with and/or below those predicted in the TGO EA and TGEP EIS.

5.3 Air Quality

The TGO Air Quality and Greenhouse Gas Management Plan (AQGGMP) was prepared to describe dust control and monitoring measures at TGO and meet Schedule 3, Condition 19 of PA 09_0155 and SSD 9176045 Condition B33.

Air quality monitoring results for the reporting year are available on the companies website at https://www.alkane.com.au/projects/tomingley-gold-project/tomingley-gold-operations/tgo-reports/environmental-reports/

During the reporting period, TGO did not receive any complaints relating to dust.

5.3.1 Depositional Dust

The AQGGMP includes five depositional dust gauges used for compliance monitoring: DDG1, DDG2, DDG3, DDG4, and DDG5. DDG-4 was removed in June 2024 due to consistent damage to the gauge.

All depositional dust gauges were below the annual average criteria of 4g/m^2/month.

The maximum increase in deposited dust levels was below the criteria of 2g/m^2/month for the five depositional gauges.

5.3.2 PM10

As at 31 December 2024, the rolling annual average PM_{10} measured at the RTA1 TEOM was 14.9 ug/m^3 which was under the annual average criteria for PM_{10} of 25 ug/m^3. This was a slight increase from the previous years value of 13.8 ug/m^3.

During the reporting period, two results measured at the RTA1 TEOM exceeded the PM_{10} 24 hour average criteria of 50 ug/m^3. These occurred on the 13th March and the 17th November with respective values of 62.98 and 76.34 ug/m^3. On both occasions, northeasterly winds were being blown from Tomingley town over the respective monitors. While these two events were investigated internally, they were not reported as incidents as the occurance was unrelated to any site activities. They are also adressed in the respectively monthly reports on the TGO website.

It has been noted on several occasions that false positives are recorded due to the number of unsealed surfaces in town and the volume of trucks that use these as parking. TGO is aware that Narromine Shire Council has budgeted sealing works for these locations in the future, which should reduce the likelihood of these events occuring.

The previous reporting period, in comparison recorded 1 exceedance, similarly believed to be caused by dust in Tomingley town. On average, dust is again low for the reporting period, partly due to a lack of open cut mining and an abundance of groundcover in the region.

PM_{10} results for January to December 2024 are shown in Figure .

5.3.3 PM2.5

$PM_{2.5}$ is also required to be monitored in line with Condition B29 of SSD 9176045. A series of eSamplers were installed in 2024 to allow monitoring in line with the consent. Unfortunately, there was a delay with the monitors arriving in Australia which resulted in their installation also being delayed. There was a single exceedance on the 22nd December (33.83 ug/m^3), which appears to be a result of monitor faults at that time as no similar results were recorded in the two adjacent monitors. The eSamplers were having issues at this point in time, with one being replaced due to issues. This was not reported as an incident as the delay was out of control of TGO and unrelated to site activities. $PM_{2.5}$ results will be documented in a graph in the next reporting period.

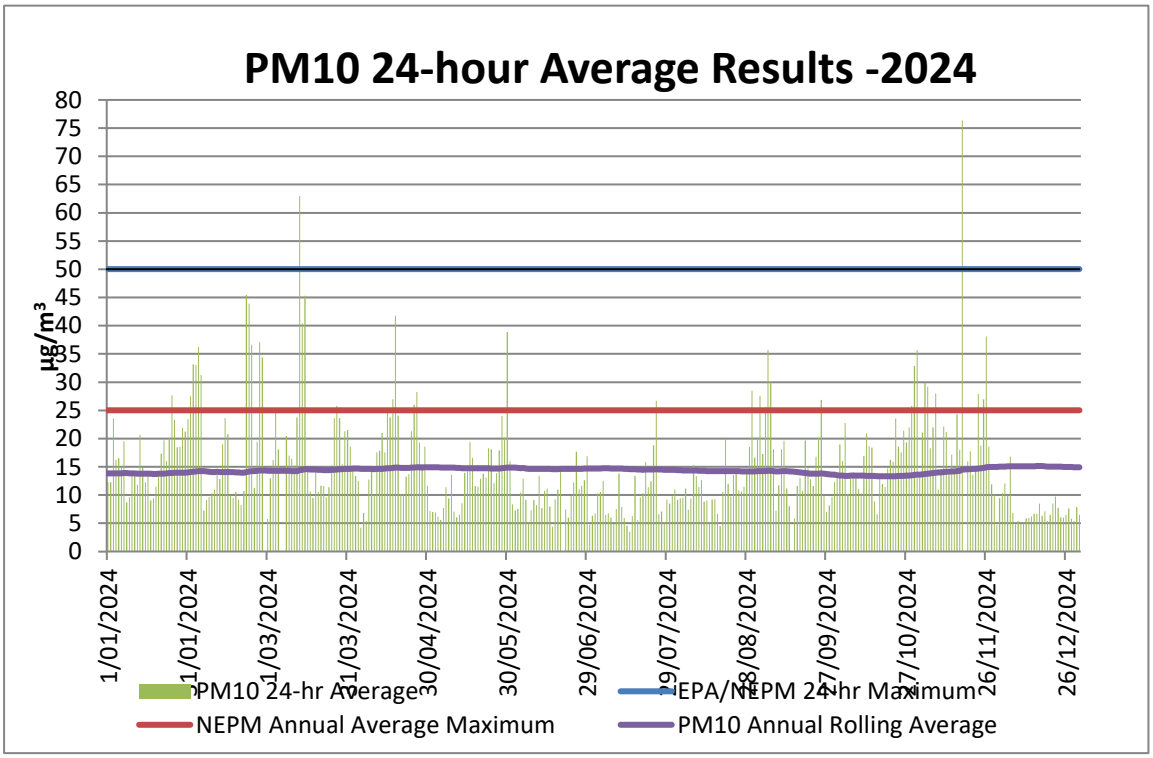


Figure 4 – PM10 RTA1 TEOM 24hr Results Jan-Dec 2023

5.3.4 TSP

Total Suspended Patrticulates (TSP) are measured at one high volume air sampler (HVAS) HVAS1, and are compared with the annual average criteria of 90 µg/m^3.

The annual average for TSP for 2024 was 43.78 µg/m^3 which is below the annual average criteria though slightly higher than the previous reporting periods.

The annual average for TSP in 2023 was 40.10 µg/m^3, 2022 was 24.88 µg/m^3, 2021 was 42.94 µg/m^3, 2020 was 69.84 µg/m^3, 2019 was 89.96 µg/m^3, 57 µg/m^3 in 2018, 58 µg/m^3 in 2017, 38 µg/m^3 in 2016 and 59 µg/m^3 in 2015.

5.3.5 Management Measures

As is described in the Dust Site Specific Procedure (SSP), Shift supervisors, and the mining production team are provided with forecasts of high dust risk weather (such as hot, dry south westerly winds) in pre-shift meetings, sourced from the TGO Weatherzone portal.

During these conditions, PM_{10} levels measured at RTA1 are monitored online and, where required, modifications are made to mining operations until conditions improve. Such modifications include the:

- Reduction, cessation or relocation of dust generating activities;
- Increased watering of the operational footprint.

5.3.6 Proposed Improvements

TGO will continue with its current dust management systems so as to maintain its ongoing level of compliance. It is not proposed that there will be any changes to the Dust SSP unless there is a new issue identified. One additional dust monitor remains on order as part of the TGEP expansion to be installed early 2025.

5.3.7 EA Predictions

TGO's performance in relation to dust emissions is consistent with and/or below those predicted in the EA for the initial Project Approval and the EIS for TGEP.

5.4 Biodiversity

Biodiversity at TGO is managed under the Biodiversity Management Plan (BMP), completed in accordance with Schedule 3, Condition 37 of PA 09_0155 and Condition B62 of SSD 9176045. The BMP details the actions implemented at TGO to mitigate impacts on native fauna and vegetation from mining related activities such as storage of potentially hazardous process residue and the clearing of native vegetation.

Along with mitigation of mining impacts, the major biodiversity enhancement measure at TGO is the establishment, management and long-term protection of biodiversity offset areas in accordance with Schedule 3, Conditions 33 and 34 of PA 09_0155 and Conditions B53 to B58 of SSD917 6045.

To facilitate long-term security for the offset areas, a Property Vegetation Plan (PVP) was agreed to by TGO and approved by Local Land Services NSW in April 2015. The BMP incorporates measures and activities to manage and enhance TGO biodiversity offset areas, as required by the PVP. Additional security for new offsets under TGEP is still in progress.

5.4.1 Management Measures

5.4.1.1 Clearing Management

Scattered light clearning of Native Vegetation occurred during 2024 as part of the TGEP extension. All clearing was conducted in line with the currently approved TGO Biodiversity Management Plan.

5.4.1.2 Offset Management

In accordance with the authorised activities and management actions required by the PVP, the offset areas continued to be managed to enhance and maintain their biodiversity values during the reporting period.

Specific management measures within the biodiversity offset areas included:

- Spraying of African boxthorn (Lycium ferocissimum) and other common pasture weeds such as Bathurst Burr (Xanthium spinosum);
- Maintenance and repair of fencing to separate offset areas from cropping/grazing;
- Exclusion of grazing livestock and native herbivores where possible to reduce potential impacts on replanted native vegetation.
- Exclusion of grazing livestock to increase natural regeneration, and
- Regular inspections to monitor overall condition of all offset areas.

5.4.2 Biodiversity and Rehabilitation Monitoring

TGO biodiversity and rehabiltation monitoring was completed by DnA Environmental to assess the condition and development of remnant and re-established native vegetation communities (DnA Report) during the report year.

The DnA Report presents tables for the performance of the woodland biodiversity monitoring sites and pasture monitoring sites against “Primary Performance Indicators”.

The monitoring methodology is based on Landscape Function Analyses (LFA) and ecosystem diversity / habitat value measurements adapted from the Biometric Assessment Methodology (BAM).

Monitoring sites have been established (year established), consisting of:

- Six remnant woodlands sites (2014): Poplar1, Belah1, Belah2, Grey1, Grey2 and Fuzzy1;
- Two EEC woodland revegetation sites (2014): Reveg 1 and Reveg 2;
- Two riparian woodland sites along Gundong Creek (2014): Creek1 and Creek2;
- Two pasture reference sites (2014): Pasture1 and Pasture2;
- Two pasture rehabilitation sites (2017): WRE2-1; and WRE3-1;
- One rehabilitation monitoring site (2016): Noise Bund1;
- Three pasture rehabiltation site (2020 and 2024): WRE3-2; and
- Two woodland rehabiltation site (2020 and 2024): WRE2-2.

Biodiversity and rehabilitation monitoring has been undertaken during August in all monitoring years and was completed from 5th to 8th August 2024.

Key observations from the DnA Report are summarised below. Broad information has been included on each reference site in previous years, however, as the number of reference sites

grows, it is becoming more difficult to summarise these in a concise manner. As such, only a short summary is provided.

5.4.2.1 General Observation

Data indicates that the various biodiversity monitoring sites are different in structure and function and have recovered to varying degrees from a long hostory of disturbance largely associated with clearing, grazing and cultivation. Sites with intact woodland typically occur along the roadsides and within farm laneways as well as sections along Gundong Creek with most of these sites recovering relatively well following the removal of grazing livestock. During 2017 – 2019 prolonged drought conditions combined with the simultaneous increase in grazing and disturbance by wildlife, typically caused a decline in ecological function in all monitoring sites. Since 2020 however, improved seasonal conditions resulted in an abundance of annual and perennial ground covers and overall ecological function has typically improved, although this has fluctuated slightly in line with the environmental conditions of each year.

5.4.3 Fauna Monitoring

TGO has previously engaged AREA Environmental & Heritage Consultants to complete its biannual field survey for the fauna monitoring program. The most recent survey was conducted between 19th to 22nd March 2024. The fauna survey in 2011 recorded 134 vertebrate species, a substantially higher number than recorded in the following survey years. The 2011 survey however was conducted under a much higher degree of survey over a broader study area to meet project approvals. The 2016 proceeded to record 41 species showing a declining trend of fauna from 2011. The 2019 survey recorded 38 and followed three years of below average rainfall. The 2021 survey which was conducted during a high volume of rain fall throughout NSW and recorded 39 species. A total of 55 species were recorded in the 2024 survey.

Of the 55 species recorded in 2024, 40 were birds, 11 were mammals, three were frogs and one was a reptile.

Two threatened species were recorded. The Grey Crowned Babler and the Little Pied Bat. Both have previously been reported around site. The Fat-tailed Dunnart was not recorded in the area.

The 2021 survey of bat species positively identified ten species with a further species unable to be positively identified.

Many Eastern Grey Kangaroos were sighted along Gundong creek and around site. Pest species sighted included Hares, Foxs and Cats.

Three amphibian species were detected along Gundong Creek, despite a lack of rainfall preceeding the survey period.

The survey indicated there is still a moderate diversity of fauna within the mine site which is on par with previous assessments. The trend is likely linked to environmental conditions rather than disturbance.

Cyanide does not appear to be significantly affecting fauna. Fauna observations on and around the RSF are recorded twice daily.

5.4.4 Proposed Improvements

During the next reporting period, TGO will continue to implement the biodiversity conservation and enhancement measures outlined in the BMP.

Management actions, such as livestock exclusion in the areas to the east and feral animal/weed controls will be continued.

5.5 Heritage

The Aboriginal Culrural Heritage Management Plan (ACHMP) and Historical Heritage Management Plan (HHMP) outlines measures to manage Aboriginal and Non-Aboriginal heritage sites respectively at TGO.

Both plans have been developed from the TGO EA and TGEP EIS which identified numerous Aboriginal sites and Non-Aboriginal heritage features.

5.5.1 Management Measures

In preparation for the highway realignment, several archaeological salvages were conducted in 2024. The collected artefacts are being stored securely and will be reburied in a location agreed to by the Peak Hill Local Aboriginal Land Council (PHLALC) once earthworks have been completed.

The management of existing sites consisted of weed control and ensuring approriate signage and demarcation remains in place.

5.5.2 Proposed Improvements

No improvements to the management of cultural heritage sites and items is proposed in the next reporting period.

5.6 Contaminated Land

TGO utilises compliant bunding structures and the risk of site contamination remains relatively low.

One bulk diesel spill has occurred since TGO's commencement and this occurred in 2021 and was documented in the 2022 Annual Review. The spill occurred adjacent to the TGO bulk diesel storage tanks while a fuel contractor was unloading a bulk diesel delivery.The remediation of hydocarbon contaminated soil was carried by a remediation specialist engaged by the fuel contractor with 657 tonnes of contaminated soil material removed and transported to a licenced waste facility in Dubbo. Approximately 300t of saprolite and 300t of road base were used to backfill the excavated area.

There has also been three minor hydrocarbon spills in 2018, seven minor hydrocarbon spills in 2017, six hydrocarbon spills in 2016, and four minor hydrocarbon spills in 2015.

There was a minor spill in December 2023, though all the material was contained directly where it spilt and posed no contaimination risk to site.

No spills occurred in 2024.

5.6.1 Management Measures

Following the previous diesel spills, reviews of processes took place with TGO implementing more controls to manage the risk of spills on site.

The safe and responsible storage and handling of hazardous materials remains the key strategy to preventing, and therefore managing land contamination.

All chemical and hydrocarbon storage at TGO has been designed and constructed in accordance with the relevant Australian Standard, including:

- AS/NZS 4452: The Storage and Handling of Toxic Substances; and

- AS 1940-2004: The storage and handling of flammable and combustible liquids

Vehicle washdown and re-fuelling facilities were upgraded in 2017, which have assisted in the prevention of land contamination.

The workshop area was expanded in late 2024 with additional bunding incorporated to limit the potential of oil spills.

5.6.2 Proposed Improvements

No improvements to the management of contaminated sites is proposed in the next reporting period.

5.7 Waste Management

As part of TGOs waste management practices, TGO aims to minimise the volume of waste generated by reusing and recycling where possible. Waste generated on site is appropriately stored until it is collected by a licenced contractor for disposal.

The total waste removed from site during the reporting period is listed below. It was higher in 2024 than previous years due to the amount of construction that occurred throughout the year. Waste volumes are likely to drop in 2025. For reporting purposes, waste is split into the following categories;

- Approximately 62000 kg of Hazardous Recycling (waste oil, oily water, waste coolant, oil filters, waste grease, empty drums, etc)
- Approximately 11310 kg of Non Hazardous Recycling (paper and cardboard, scrap steel, etc)
- Approximately 16738 kg of Hazardous Disposal (hydraulic hoses, etc)
- Approximately 453110 kg of Non Hazardous Disposal (mixed solid waste)
- Approximately 80,000kg of Tyres.

5.7.1 Proposed improvements

TGO will continue to reduce waste and recycle where possible.

6 Water Management

The approved Water Management Plan details how TGO will manage site water to comply with the *Water Performance Measures* contained in Schedule 3, Condition 27 of PA 09_0155 and Condition B48 of SSD9176045. **Error! Reference source not found.** presents these measures.

Table 9: Water Performance Measures (Condition B48, SSD 9176045)

Feature	Performance measure
Water management – General	Maintain separation between clean dirty (i.e. sediment laden) and mine water management systems.
	Minimise the use of clean and potable water on the site.
	Maximise water recycling, reuse and sharing opportunities.
	Minimise the need for make-up water from external supplies.
	Design, install, operate, and maintain water management infrastructure in a proper and efficient manner.
	Minimise risks to the receiving environment and downstream water users.
Clean water diversions and storage infrastructure	Design, install and maintain the clean water system to capture and/or convey the 100-year ARI flood event.
	Maximise, as far as reasonable, the diversion of clean water around disturbed areas on the site.
Residue Storage Facility	Ensure that the capacity of the residue storage facilities (RSF1 and RSF2) and associated collection pond are designed to meet the requirements of the Australian National Committee on Large Dams' Guidelines on Tailings Dams – Planning, Design and Construction, Operation and Closure (July 2019) or its latest version.
	Designed, constructed, and operated in accordance with the requirements of the Dams Safety Act 2015 and Dams Safety Regulation 2019.
	Ensure that the floor and walls are lined to achieve a permeability standard equivalent to 1,000 mm clay of permeability of at least 1 x 10-9 m/s, unless otherwise agreed by the EPA and the Planning Secretary.
Mine water management system, excluding the residue storage facility	Design, install and maintain mine water storage infrastructure to ensure no unlicensed or uncontrolled discharge of mine water offsite (except in accordance with condition B388).
	Ensure that all water storages on site, except open cut pit voids, that receive chemical or salt laden water, including the dewatering ponds, raw water dams and process water dams are lined to achieve a permeability standard equivalent to 1,000 mm clay of permeability of at least 1 x 10-9 m/s, unless otherwise agreed by the EPA and the Planning Secretary.
	Maintain adequate freeboard (i.e. minimum 200 mm) in all process water and raw water storages at all times.
Erosion and sediment control works – including dams	Design, install and maintain erosion and sediment controls in accordance with the best management practice guidance series Managing Urban Stormwater: Soils and Construction – Volume 1 (Landcom, 2004) and 2E Mines and Quarries (DECC, 2008).
	Design, install and maintain any new infrastructure within 40 metres of watercourses in accordance with the guidance series for Controlled Activities on Waterfront Land (DPI Water, 2012) or latest versions and Guideline for fish habitat conservation and management – Chapter 4 (DPI 2013), or its latest version.
Aquifers	Negligible impacts to fractured rock aquifers caused by the development beyond those predicted in the EIS, including: Negligible change in groundwater levels beyond those predicted. Negligible change in water quality beyond those predicted. Negligible impact to other groundwater users.

Feature	Performance measure
	No exceedance of the minimal impact considerations in the NSW Aquifer Interference Policy.
Waste Rock Emplacement	Minimise the potential for acid mine drainage
	Design, install and maintain emplacements to encapsulate and prevent migration of acid forming and potentially acid forming materials.
Flood mitigation	Negligible change to off-site flood regime (including flows, levels, storage capacity or velocities) as a result of the development, beyond those predicted in the EIS.
	Realigned Newell Highway to be designed and constructed to achieve the same or greater flood immunity as the redundant section of highway.
Chemical and hydrocarbon storage	Chemical and hydrocarbon products to be stored in bunded areas in accordance with the relevant Australian Standard.
Aquatic and riparian ecosystems (including Gundong Creek)	Negligible environmental consequences beyond those predicted in the document/s listed in condition A2A2(c).
	Maintain or improve baseline channel stability.
	Develop site-specific in-stream water quality objectives in accordance with the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC & ARMCANZ, 2000) and Using the ANZECC Guidelines and Water Quality Objectives in NSW (DEC, 2006).

6.1 Water Supply

The principal source of water for TGO is a licensed production bore located approximately 7km east of Narromine, with water transported to the TGO site Raw Water Dam via the Narromine water pipeline.

Maximum Harvestable Rights Dams Capacity (MHRDC) is the volume of water landholders are entitled to capture and use without need for licencing. Landholders are permitted to intercept and store a proportion of runoff from their property without a licence under the *Water Management Act 2000*. In addition, no licence is required for water stored within dams that:

- Control or are used for the prevention of soil erosion.
- Capture, contain and recirculate drainage.
- Have no catchment (i.e. “turkey’s nests”).

The existing surface water storages that are part of TGO all fall into one of the above categories and therefore do not require licensing. In addition there were no new water storages constructed during the reporting period.

Processing water (including RSF decant) is recovered and pumped to the Process Water Dam for re-use in processing. During the year, it is estimated that approximately 500 ML was recycled process/decant water, significantly reducing the volume of water needing to be imported.

An onsite water treatment plant is used to produce potable water onsite, eliminating the requirement to import potable water.

Table 70: Water Supply

Water Licence	Water sharing plan, source and management zone (as applicable)	Entitlement (ML)	Passive take / inflows	Active pumping (ML)	TOTAL (ML)
WAL20270	Lower Macquarie Zone 6 Groundwater	1,000	nil	452	485

(Narromine Pipeline)	Source				
WAL28643 & WAL29266 (open cut)	NSW Murray Darling Basin Fractured Rock Aquifer	220	Negligible (not measurable)	nil	Negligible
N/A	Direct rainfall and catchment runoff captured under harvestable rights	N/A	0	nil	0
WAL 34968 (Peak Hill Gold Mine)	Upper Bogan River Water Source/ Macquarie Bogan Unregulated and Alluvial Water Sources 2012	300	nil	nil	nil

* Direct rainfall and catchment runoff volume based on modelled in WB.

6.2 Water Balance

The current water balance indicates that TGO is dependent on raw water supplied from the licensed "Woodlands" bore and conveyed to site via the Narromine pipeline.

The water balance indicates that approximately 50% of TGO's water supply is sourced from the borefield with the remaining 50% sourced from recycled water from processing and water captured and retained on site from sediment ponds.

6.3 Clean Water Management (Surface)

For reporting purposes, clean water management is divided into:

- Site Water; and
- Gundong Creek

6.3.1 Site Water

Clean water consists of through-flow from offsite and water from onsite non-mine disturbed catchments. This water is diverted away from contamination sources (mine disturbance and infrastructure) and directed offsite.

Management includes the construction of drains and bunds to collect and divert surface water flow past, or away from, mining disturbed catchments. Mangement of site drains and sediment basins is discussed in **Section 6.4**.

6.3.2 Gundong Creek

Gundong Creek is an ephemeral watercourse which flows along the northern and western boundaries of the TGO site. TGO sample the creek weekly during any flow, which is over and above the requirements prescribed in condition M2 of EPL 20169, which requires sampling on discharge.

Gundong Creek did not flow at all during 2024 and was unable to be sampled.

6.4 Dirty Water Management

Dirty water runoff is intercepted and managed by a series of dirty water drains and sediment basins to allow for treatment and reuse on site for various activities such as dust suppression.

6.4.1 Sediment Basins

Water collected in the sediment basins may be pumped into the partially backfilled Wyoming Three void and subsequently to the north cell of the Wyoming Central Dam for reuse in dust suppression and as process water make up.

6.4.2 Offsite Discharge

TGO has traditionally operated as a "nil discharge" site with all water captured in the site's sediment basins being retained on site and pumped to the Wyoming 3 (WY3) open pit for storage and reuse on site. No discharges from site occurred in 2024 in accordance with this goal.

6.4.3 EA Predictions

More frequent discharges were predicted in the original EA, with the suggested processes for managing discharges in the original EA proven to be not practical in the operational environment.

6.5 Mine Water Management

Water which has been impacted by mining operations, is considered to be not suitable for offsite discharge and requires onsite managment or treatment (mine water). This includes:

Open cut pit water – water collected in the Wyoming 1, Caloma 1 and Caloma 2 voids is pumped to the Wyoming 3 void and re-used for site operations;

Process water – recycled for re-use via decant from the RSF, the raw water dam and process water dam;

Oily water – treated at onsite oily water separator, with clean discharge to a site drain that reports eventually to Sediment Basin 1; and

Onsite sewerage - treated at an onsite treatment plant and used to irrigate site revegetation adjacent to the mine acces road.

Decant water from the RSF was sampled twice daily during the reporting period for Weak Acid Dissociable (WAD) Cyanide, with no WAD Cyanide concentrations above the limit of 30 mg/L.

TGO is currently revising the site water balance model to better reflect changes in the development. Stored water volumes are likely to be more accurate once these changes are complete.

6.6 Erosion and Sediment Control

Inspections of drains and sediment basins were conducted throughout the reporting period, with all sediment basins being inspected every quarter. Following heavy rain and/or dewatering, sediment basins were inspected and, when water levels allowed, sampled for reference purposes.

There were no desilting works undertaken during the reporting period and no works were required on any of the sediment ponds or associated water control structures.

6.7 Groundwater

Sampling and inspection of local district groundwater bores and RSF monitoring piezometers continued during the reporting period.

Any groundwater inflows into the open cut pits could be best described as seepage and intermitent. Ground water inflows are not measurable. This is due to the nature of the factured rock zone that the ground water is captured in. There is no water table present at TGO.

6.7.1 Depth

As shown in Table 11, four of the seven bores recorded relatively steady groundwater levels during the reporting period (i.e. less than 1 m range). WYMB 01 had a range of 5.08m, WYMB02 had a range of 1.43m, and WYBM06 had a range of 5.16m. Quarterly groundwater levels since 2019 are shown in Figure .

EPL 20169 requires the seven bores listed below to be monitored on a quaterly basis, unfortunately due to erosion at the edge of the pit, one of these bores (WYMB 02 / EPA10) is now inaccessible. TGO is commited to identifying a solution to ensure adequate data is still being measured around the pit and the EPA were contacted in relation to this.

The onsite meteorological station recorded 665 mm of rainfall in 2024 (apprximately equal to the annual average).

WYMB02 is a deep bore located adjacent to the Wyoming 1 Open Cut. During the previous reporting period TGO water levels in the bore had increased by 31 metres due to high rainfall on site. The new water level has persisted due to continual high rainfall this reporting period.

WYMB01 and WYMB06 are to the south of site and are influenced from rainfall and surface water inflows into the historic McPhails underground workings. Levels and water quality are not influenced by site activities.

WYMB03, WYMB04 and WYMB10 are deep bores around the perimeter of the mine and show very little movement in depth consistent with each being located in a fractured rock aquifer.

GDCMB01 is located in the shallow Gundong creek aquifer and any variations in levels are dependant on rainfall.

A summary of water chemistry results is provided in Appendix 1.

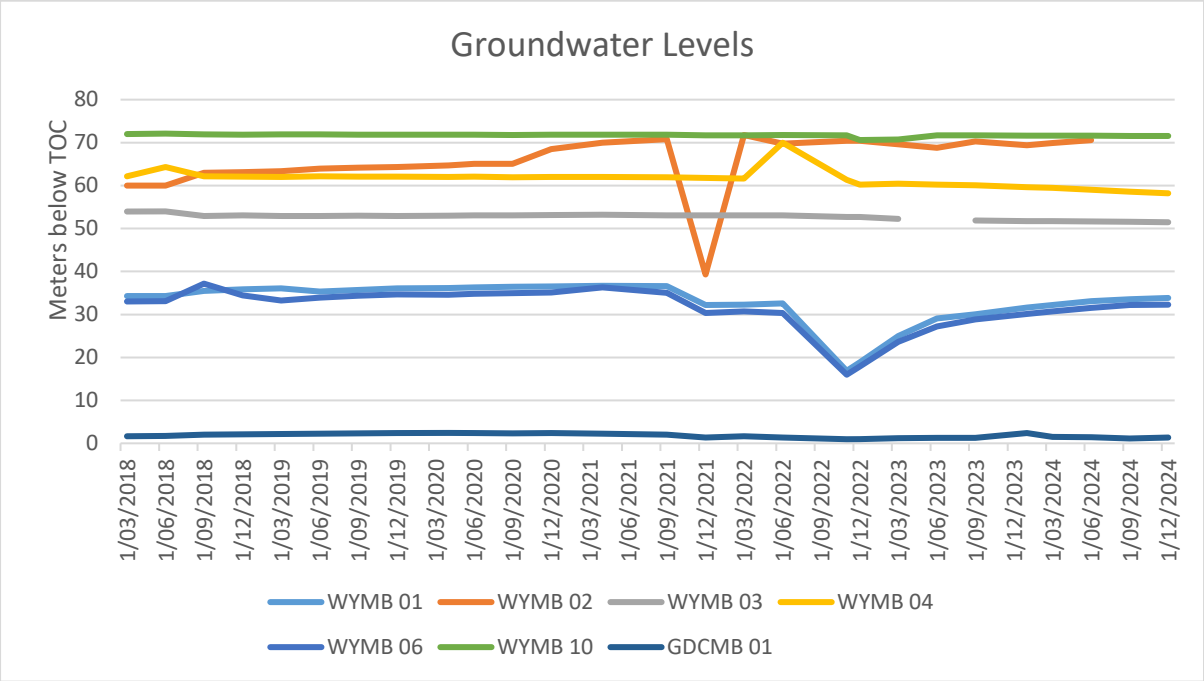
Table 81: Groundwater Bore Water Levels

Period	Groundwater level (- metres below Top of Casing)						
	WYMB 01 (EPA09)	WYMB 02 (EPA10)	WYMB 03 (EPA11)	WYMB 04 (EPA12)	WYMB 06 (EPA13)	WYMB 10 (EPA14)	GDCMB 01 (EPA15)
16/12/2024	*33.82*	[1]	*51.46*	*58.2*	*32.26*	*71.58*	*1.34*
16/09/2024	*33.51*	[1]	*51.57*	*58.59*	*32.18*	*71.57*	*1.14*
24/06/2024	*33.06*	*70.55*	*51.64*	*59*	*31.54*	*71.63*	*1.45*
4/03/2024	*32.19*	*69.88*	*51.69*	*59.44*	*30.69*	*71.64*	*1.49*
8/01/2024	*31.61*	*69.42*	*51.7*	*59.61*	*30.11*	*71.63*	*2.36*
Range (2024)	*2.21*	*1.13*	*0.24*	*1.41*	*2.15*	*0.07*	*1.22*

Range (2023)	*5.08*	*1.43*	*0.40*	*0.39*	*5.16*	*1.00*	*0.07*
Range (2022)	*15.72*	*2.04*	*0.41*	*9.73*	*14.77*	*1.16*	*0.68*
Range (2021)	*4.48*	*31.49*	*0.11*	*0.23*	*5.95*	*0.11*	*0.89*
Range (2020)	*0.40*	*3.80*	*0.10*	*0.10*	*0.50*	*0.10*	*0.10*

*Due to equipment failure, the depth of the bore was not established.
[1]Bore was inaccessible at these points.

Figure 5 – Groundwater Levels (2018-2023)



6.7.2 RSF Piezometers

During the reporting period the RSF monitoring piezometers were monitored on a monthly basis. The depth from Top of Casing (TOC) to water is recorded and water samples are taken where possible. During the reporting period, water samples were taken from piezometers RSFMP03A, RSFMP07, RSFMP08, and RSFMP11.

Piezometer RSFMP05 was decommissioned and buried in 2022 as part of further operational development. RSFMB01, RSFMB02, RSFMP03, RSFMP09 and RSFMP10 were decomissioned and buried in previous years as part of operational development.

RSFMP02, RSFMP04, RSFMP06, RSFMP09, and RSFMP10 were dry throughout the reporting period with no samples being able to be collected.

TGO is planning to install several new piezometers around the perimeter of RSF1 and RSF2.

Results continue to show that water chemistry is consistant with the water coming from existing shallow aquifers that were intercepted during the RSF construction.

6.8 EA Predictions

6.8.1 Ground Water

The initial ground water modelling and assessment that accompanied the EA predicted some groundwater drawdown and ground water production in the pits. This has not occurred.

7 Rehabilitation

During the previous reporting period, new standard rehabilitation conditions on mining leases came into effect through an amendment to the Regulation under the Mining Act 1992. These include:

- Rehabilitation Risk Assessment,
- Rehabilitation Management Plan,
- Rehabilitation Objectives Statement,
- Rehabilitation Completion Criteria Statement,
- Final Landforms and Rehabilitation Plan,
- Forward Program, and
- Annual Rehabilitation Report

A copy of the Rehabilitation Management Plan (RMP) can be found on the company's website at (https://www.alkane.com.au/projects/tomingley-gold-project/tomingley-gold-operations/tgo-reports/environmental-reports/).

7.1 Rehabilitation During Reporting Period

During the reporting period, rehabilitation and land management activities comprised of ongoing monitoring and maintenance of the extensive rehabilitation work that was completed on WRE2 and 3. The majority of the site is still operational and as such opportunities for rehabilitation activities were quite limited. Approximately 4.5 Ha of the northern and western buttresses of RSF1 were sown with a seed mix incorporated in hydromulch during 2023. The application of the hydromulch was successful which has resulted in an extensive ground cover now being established on this area. No additional rehabilitation has taken place since 2023. In 2025, several amentiy and diversion bunds will be revegtated upon completion. This is likely to be the only rehabilitation done for the year.

On the TGO website (https://alkane.com.au/projects/tomingley-gold-project/tomingley-document-hub/), a range of documentation around the Rehabilitation Management Plan (RMP), Forward Mine Program and Annual Rehabilitation Report is now present which details completed acitivites and future plans in greater depth.

7.2 Post Rehabilitation Land use

The approved post rehabilitation areas proposed at TGO consist of the following land uses:

- Infrastructure - entrance roads and void safety berms;
- Water Management Areas - water bodies on floor of final voids;
- Grasslands – rehabilitated WRE outside batters;
- Woodlands - rehabilitated WRE outside batters;
- Rural Land – existing open buffer land;
- Final Void – residual open cut voids; and
- Conservation and Biodiversity Offset – registered offset areas under PVP.

These post-rehabilitation land uses are described in detail in the RMP and are shown in Figure 6.

7.3 Buildings, Infrastructure, and other Rehabilitation

All buildings and infrastructure were still operational during the reporting period and no decommissioning, removal or demolition was undertaken.

7.4 Completed Rehabilitation

No areas of final rehabilitation have received formal relinquishment sign-off from Regional NSW -MEG. Nor are any areas anticipated to do so in the next reporting period.

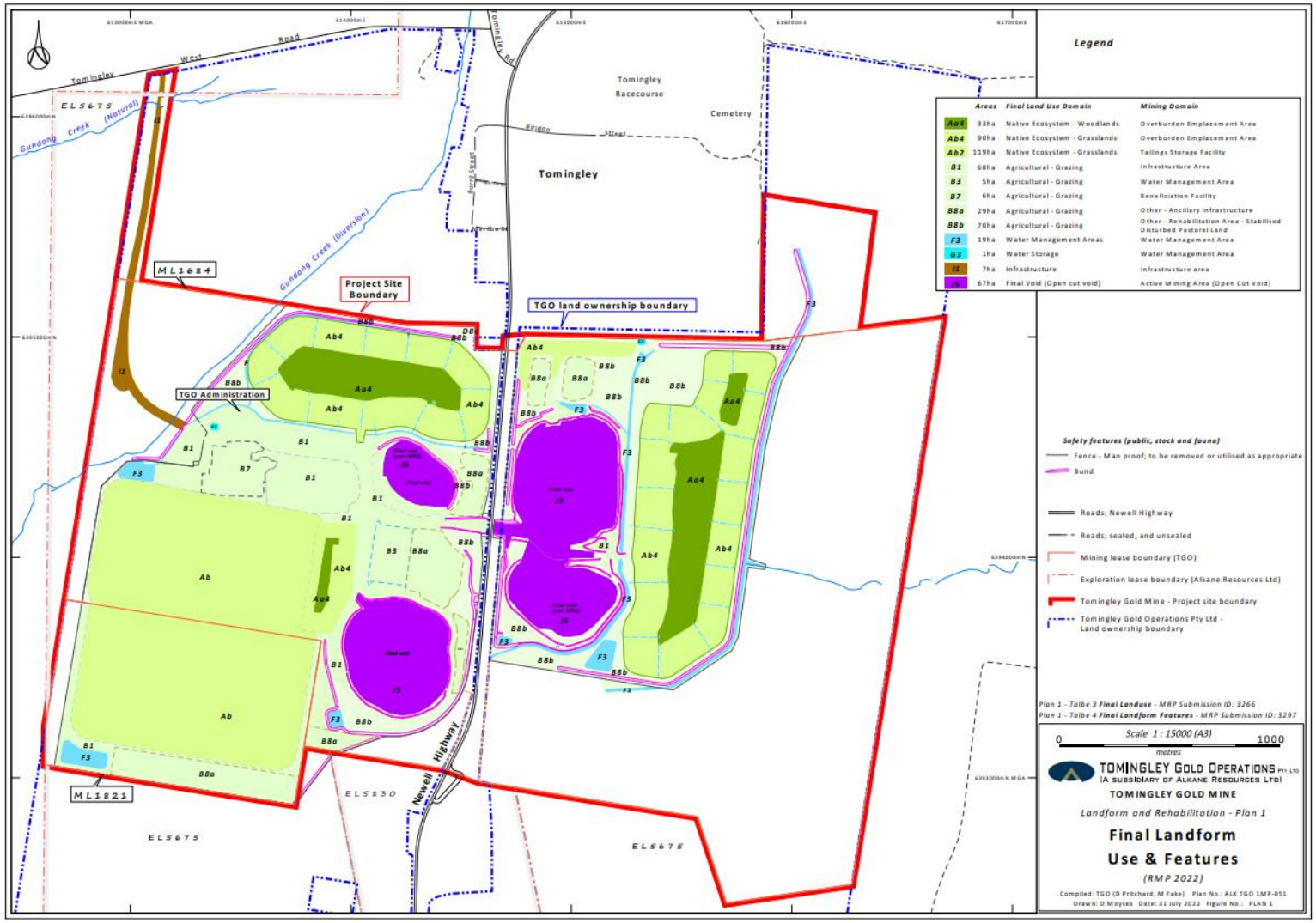


Figure 6 –Final land uses at TGO

7.5 Trials, Monitoring and Research

TGO invested significant time and resources in 2015 and 2016 to ensure the final landform design is constructed to protect the dispersive waste material and ameliorate the sodic topsoil used for vegetation establishment. TGO has continued to engage with soil and waste dump specialists from various consultancies with site visits during the 2020 reporting period to review vegetation establishment.

As WRE landform areas are rehabilitated, monitoring plots are established and incorporated into the biodiversity monitoring program (see Section 5.4.2 for details).

During 2016 biodiversity monitoring, the first rehabilitation monitoring plots were established and monitored, along with two pasture reference sites. Two additional pasture montoring sites were established in 2017. In 2020 an additional pasture and woodland rehabilitation monitoring site was established on new areas of rehabilitation completed in February 2019 on WRE3 and WRE2 respectively. In 2024, new survey areas were added with the intent to expand coverage of site given that additional rehabilitation will be required due to the TGEP disturbances.

Monitoring has been carried out annually by DNA Environmental with a comprehensive report tracking progress over time summarised in Section 5.4.2.

The Geotechnical Stability and Erosion Trial (GSET) had been established on the side of the Wyoming 1 ramp in accordance with the conditions of PA 09_0155 (MOD 7) and SSD9 176045. No new works were undertaken on the trial site in 2024. The annual survey was conducted in late 2024, though was heavily delayed due to access issues. The data analysis was due in late 2024, but has been delayed to 2025 due to a number of reasons. Correspondence detailing this was submitted to the DPHI. As the trial has only been running for 12 months the amount of data available is limited but will increase over time as the trial progresses.

7.6 Actions for Next Reporting Period

Routine maintenance will continue to control noxious weeds such as African Boxthorn in rehabilitated areas. The GSET Trial data from the first survey will be analysed and assessed to provide insight to erosion rates. This data will also be used to compile the first Trial Evaluation Report which will be submitted to the Department of Planning, Housing and Infrastructure (DPHI) as required under SSD 9176045.

8 Community

8.1 Consultation

The key strategy to ensure an effective passage of information between TGO and the surrounding community is the Community Consultative Committee (CCC). The CCC is an independently chaired eight member committee representing TGO, the local community, and the Aboriginal community. During the reporting period, the CCC met in:

- February
- May
- August and
- November

At CCC meetings, members are updated by TGO personnel on the progress of current and proposed mining operations and projects. Community representatives are given the opportunity to raise concerns regarding the project and to offer advice regarding TGO's consultation with the community. CCC meeting minutes are available via the Alkane Resources website (www.alkane.com.au). TGO will continue with quarterly meetings moving forward.

In addition to the CCC, TGO utilised a number of methods of communication/consultation with the community during the reporting period including;

- Making relevant information regarding mine approvals, operations and environmental monitoring available to the public on the Alkane Resources website;
- Distributing a community newsletter 3 times a year, to provide the Tomingley community with information on TGO operations;
- Providing a 24 hour community information line; and

These methods of community consultation will continue during the next reporting period.

8.2 Support

As per TGO's planning agreement in SSD9 176045, Appendix 7, the following contributions to Narromine Shire Council are made annually.

- $75,000/annum to the Community Fund;
- $85,000/annum for general council expenses including road and infrastructure maintenance.

The Tomingley Gold Project Community Fund has been established to support projects within the Narromine Shire that promote the long term economic growth, community connectivity, education and training, or community infrastructure.

Allocation of funds is decided by a fund panel, consisting of two TGO representatives and staff and Councilors from NSC. TGO contributions for 2024 are publicly listed on its webpage. https://www.alkane.com.au/projects/tomingley-gold-project/tomingley-gold-operations/community-resources/tgo-community-fund/

Additional funding is made available through donations on a case by case basis, and can vary year to year.

8.2.1 Tomingley Village Water Supply

During the reporting period,TGO continued to provide raw water to the Narromine Shire Council (NSC) water supply dams for the Tomingley Village via the previously installed valves and pipe line. Upon mine closure the entire system will be handed over to the NSC.

8.3 Complaints and Enquiries

TGO manage complaints in accordance with the protocols and procedures contained in the EMS.

During the reporting period, zero (0) complaints were received via the community information line, other Alkane/TGO phone lines, or other method. TGO complaint history for the previous 5 years is presented in Table 12.

A register of complaints and enquiries received from the community is maintained by TGO. A modified version of this register (excluding personal details of complainants) is published on the Alkane Resources website at https://www.alkane.com.au/projects/tomingley-gold-project/tomingley-gold-operations/tgo-reports/complaints-register/.

Table 92: TGO Complaint History

Year	Number of complaints	Complaint Type				
		Dust	Noise	Blasting	Traffic/ Road Safety	Other
2024	0	0	0	0	0	0
2023	0	0	0	0	0	0
2022	0	0	0	0	0	0
2021	0	0	0	0	0	0
2020	0	0	0	0	0	0

9 Independent Audit

The current Independent Environment Audit (IEA) period for the TGO is 2021 to 2024, and as a result the IEA was conducted late in 2024.

The IEA identified several minor non compliances against conditions of PA09_0155 MOD7 and SSD 9176045. TGO has submitted an action plan for adressing these non-compliances.

The IEA report also provided a series of recommendations arising from a review of site documentation and identified non-compliances.

TGO will continue to address the non-compliances and recommendations ahead of the next IEA.

The full audit report and responses to the recommendations are available on the TGO's website at http://www.alkane.com.au/operations/tomingley-gold-operations/ .

The next Independent Environmental Audit of the TGO is scheduled to be undertaken in 2027.

10 Incidents and non-compliances during reporting period

This section lists the incidents and non-compliances reported in Section 1.

There were no other official regulatory interactions that occurred during the reporting period.

10.1 Two PM_{10} exceedance over a 24 hour averaging period

These exceedances have previously been discussed in section 5.3.2.

10.1.1 $PM_{2.5}$ Monitoring Delay and exceedance over a 24 hour averaging period.

The delay experienced with installing the $PM_{2.5}$ eSampler monitor and anomalous exceedance have been discussed in section 5.3.3.

10.2 EPL Groundwater monitoring

This has been discussed in detail in section 6.7.1.

11 Activities to be Completed in Next Reporting Period

Environmental activities and initiatives to be implemented in the next reporting period will focus on continuity of the TGO monitoring program for noise, dust, vibration and water quality, continued management of all biodiversity offset areas, and monitoring of revegetation on WRE 2 and WRE3.

Details on these activities are shown in **Error! Reference source not found.**3.

Table 103: Environmental Management Activities proposed for 2023

Proposed Activities	Location	Proposed Completion Date
Pest control program	TGO site & biodiversity offset areas	Ongoing
Expansion and maintenance of offset areas	TGO biodiversity offset areas	Ongoing
Weed management	TGO site & biodiversity offset areas	Ongoing
Regular monitoring of site water management structures for erosion and stability	TGO site	Ongoing
Continue monitoring and maintenance program for WRE 2 and WRE3 including progress of revegetation	Waste rock emplacements	Ongoing
Noise, air quality, blasting and water quality monitoring in accordance with EPL and PA.	TGO site and district	Ongoing

Appendix 1 Groundwater Bore Summary

			Field ID	GDCMB01 (EPA15)	GDCMB01 (EPA15)	GDCMB01 (EPA15)	GDCMB01 (EPA15)	GDCMB01 (EPA15)	WYMB01 (EPA9)	WYMB01 (EPA9)
			Location Code	GDCMB01(EPA15)	GDCMB01(EPA15)	GDCMB01(EPA15)	GDCMB01(EPA15)	GDCMB01(EPA15)	WYMB01(EPA9)	WYMB01(EPA9)
			Date	08 Jan 2024	04 Mar 2024	24 Jun 2024	17 Sep 2024	16 Dec 2024	09 Jan 2024	05 Mar 2024
	Unit	EQL								
Cyanides										
Cyanide (WAD)	mg/L	0.004		<0.004	<0.004	<0.004	<0.004	<0.004	0.010	<0.004
Inorganics										
Reactive Phosphorus (Orthophosphate)	mg/L	0.01		0.24	0.15	0.24	0.28	0.21	0.24	0.21
Sulfate as SO4 - Turbidimetric (filtered)	mg/L	1		9	6	9	8	6	965	870
Nitrite + Nitrate as N	mg/L	0.01		<0.01	<0.01	0.04	0.01	0.02	0.01	0.01
Alkalinity (Bicarbonate as CaCO3)	mg/L	1		104	101	102	101	102	429	427
Alkalinity (Carbonate as	mg/L	1		<1	<1	<1	<1	<1	<1	<1
Alkalinity (Hydroxide) as	mg/L	1		<1	<1	<1	<1	<1	<1	<1
Alkalinity (total) as CaCO3	mg/L	1		104	101	102	101	102	429	427
Ammonia as N	mg/L	0.01		0.04	0.08	0.06	<0.01	0.01	0.74	0.66
Anions Total	meq/L	0.01		3.22	3.16	3.52	3.31	3.23	132	124
Cations Total	meq/L	0.01		3.35	3.35	3.45	3.77	3.19	126	135
Chloride	mg/L	1		34	36	46	40	38	3,670	3,460
Cyanide (Free)	mg/L	0.004		<0.004	<0.004	<0.004	<0.004	<0.004	0.005	<0.004
Cyanide Total	mg/L	0.004		<0.004	<0.004	<0.004	<0.004	<0.004	0.015	0.013
Electrical Conductivity	µS/cm	1		292	316	343	348	328	12,200	12,600
Fluoride	mg/L	0.1		0.3	0.3	0.3	0.1	0.2	0.1	0.1
Ionic Balance	%	0.01		1.97	3.00	1.08	6.45	0.68	2.36	4.00
Nitrate (as N)	mg/L	0.01		<0.01	<0.01	0.03	0.01	0.02	<0.01	0.01
Nitrite (as N)	mg/L	0.01		<0.01	<0.01	0.01	<0.01	<0.01	0.01	<0.01
pH (Lab)	-	0.01		6.83	6.87	6.84	6.86	6.81	7.19	7.13
Reactive Phosphorus as P (Orthophosphate as P)	mg/L	0.01		0.08	0.05	0.08	0.09	0.07	0.08	0.07
Sodium (filtered)	mg/L	1		71	71	72	80	68	2,110	2,200
Total Dissolved Solids	mg/L	10		571	556	514	648	496	8,300	8,130
Hardness as CaCO3	mg/L	1		11	11	13	13	9	1,710	1,940
Total Suspended Solids	mg/L	5		277	888	366	195	82	8	15
Metals										
Arsenic	mg/L	0.001		0.003	0.004	0.002	0.005	0.003	0.005	0.004
Cadmium	mg/L	0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium (filtered)	mg/L	1		1	1	2	2	2	264	338
Chromium (III+VI)	mg/L	0.001		0.015	0.002	0.009	0.021	0.016	0.001	<0.001
Copper	mg/L	0.001		0.009	0.011	0.012	0.017	0.014	0.005	0.005
Iron	mg/L	0.05		12.2	2.56	7.54	17.2	12.6	0.73	0.68
Lead	mg/L	0.001		0.006	0.013	0.006	0.018	0.010	0.013	0.019
Magnesium (filtered)	mg/L	1		2	2	2	2	1	255	266
Mercury	mg/L	0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Nickel	mg/L	0.001		0.009	0.006	0.012	0.016	0.011	0.002	0.002
Potassium (filtered)	mg/L	1		2	2	2	1	2	6	6
Zinc	mg/L	0.005		0.029	0.054	0.059	0.105	0.050	0.025	0.015

			Field ID	WYMB01 (EPA9)	WYMB01 (EPA9)	WYMB01 (EPA9)	WYMB02 (EPA10)	WYMB02 (EPA10)	WYMB02 (EPA10)	WYMB03 (EPA11)	WYMB03 (EPA11)
			Location Code	WYMB01(EPA9)	WYMB01(EPA9)	WYMB01(EPA9)	WYMB02(EPA10)	WYMB02(EPA10)	WYMB02(EPA10)	WYMB03(EPA11)	WYMB03(EPA11)
			Date	25 Jun 2024	17 Sep 2024	17 Dec 2024	08 Jan 2024	04 Mar 2024	24 Jun 2024	09 Jan 2024	05 Mar 2024
	Unit	EQL									
Cyanides											
Cyanide (WAD)	mg/L	0.004		<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Inorganics											
Reactive Phosphorus (Orthophosphate)	mg/L	0.01		0.15	0.18	0.15	0.49	0.43	0.52	0.24	0.24
Sulfate as SO4 - Turbidimetric (filtered)	mg/L	1		986	937	928	1,840	1,890	2,090	1,980	2,180
Nitrite + Nitrate as N	mg/L	0.01		0.02	<0.01	<0.01	0.72	0.69	0.64	81.8	0.34
Alkalinity (Bicarbonate as CaCO3)	mg/L	1		402	396	428	1,150	1,140	1,060	1,320	1,330
Alkalinity (Carbonate as	mg/L	1		<1	<1	<1	<1	<1	<1	<1	<1
Alkalinity (Hydroxide) as	mg/L	1		<1	<1	<1	<1	<1	<1	<1	<1
Alkalinity (total) as CaCO3	mg/L	1		402	396	428	1,150	1,140	1,060	1,320	1,330
Ammonia as N	mg/L	0.01		0.69	0.63	1.17	0.08	0.04	0.02	0.76	0.02
Anions Total	meq/L	0.01		142	134	140	250	236	270	250	239
Cations Total	meq/L	0.01		126	140	125	242	245	230	250	242
Chloride	mg/L	1		4,020	3,780	3,980	6,700	6,170	7,270	6,460	5,920
Cyanide (Free)	mg/L	0.004		<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Cyanide Total	mg/L	0.004		0.008	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Electrical Conductivity	µS/cm	1		12,700	12,700	12,600	21,900	22,200	23,100	21,600	22,100
Fluoride	mg/L	0.1		0.1	0.1	0.1	0.6	0.6	0.5	0.6	0.6
Ionic Balance	%	0.01		6.10	2.20	5.54	1.70	1.78	7.86	0.03	0.55
Nitrate (as N)	mg/L	0.01		0.02	<0.01	<0.01	0.70	0.69	0.62	81.8	0.34
Nitrite (as N)	mg/L	0.01		<0.01	0.02	<0.01	0.02	<0.01	0.02	<0.01	<0.01
pH (Lab)	-	0.01		7.25	7.12	7.21	7.21	7.19	7.19	7.06	7.09
Reactive Phosphorus as P (Orthophosphate as P)	mg/L	0.01		0.05	0.06	0.05	0.16	0.14	0.17	0.08	0.08
Sodium (filtered)	mg/L	1		2,060	2,310	2,070	4,560	4,590	4,320	4,440	4,370
Total Dissolved Solids	mg/L	10		7,480	8,100	7,670	15,700	15,800	14,200	14,400	15,800
Hardness as CaCO3	mg/L	1		1,800	1,970	1,760	2,160	2,240	2,120	2,820	2,560
Total Suspended Solids	mg/L	5		10	40	20	7	<5	16	6	<5
Metals											
Arsenic	mg/L	0.001		0.004	0.004	0.004	0.002	0.002	0.001	0.002	0.002
Cadmium	mg/L	0.0001		<0.0001	<0.0001	<0.0001	0.0003	0.0004	<0.0001	<0.0001	0.0002
Calcium (filtered)	mg/L	1		294	345	279	150	178	154	198	122
Chromium (III+VI)	mg/L	0.001		<0.001	0.001	0.001	0.001	<0.001	0.002	0.004	0.001
Copper	mg/L	0.001		0.004	0.007	0.006	0.028	0.019	0.009	0.007	0.007
Iron	mg/L	0.05		0.60	0.44	0.88	0.31	0.10	0.12	0.38	0.08
Lead	mg/L	0.001		0.022	0.031	0.018	0.011	0.007	0.005	0.008	0.009
Magnesium (filtered)	mg/L	1		258	270	259	435	437	421	566	547
Mercury	mg/L	0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0002	<0.0001
Nickel	mg/L	0.001		0.002	0.002	0.002	0.003	0.003	0.003	0.003	0.003
Potassium (filtered)	mg/L	1		5	6	6	10	10	9	15	16
Zinc	mg/L	0.005		0.022	0.019	0.014	0.070	0.054	0.025	0.021	0.019

	Field ID		WYMB03 (EPA11)	WYMB03 (EPA11)	WYMB03 (EPA11)	WYMB04 (EPA12)	WYMB04 (EPA12)	WYMB04 (EPA12)	WYMB04 (EPA12)	WYMB04 (EPA12)
	Location Code		WYMB03(EPA11)	WYMB03(EPA11)	WYMB03(EPA11)	WYMB04(EPA12)	WYMB04(EPA12)	WYMB04(EPA12)	WYMB04(EPA12)	WYMB04(EPA12)
	Date		24 Jun 2024	17 Sep 2024	17 Dec 2024	08 Jan 2024	04 Mar 2024	24 Jun 2024	17 Sep 2024	16 Dec 2024
	Unit	EQL								
Cyanides										
Cyanide (WAD)	mg/L	0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Inorganics										
Reactive Phosphorus (Orthophosphate)	mg/L	0.01	0.15	0.18	0.18	0.03	<0.10	<0.10	<0.10	<0.10
Sulfate as SO4 - Turbidimetric (filtered)	mg/L	1	2,200	2,140	1,920	2,720	2,510	2,720	2,580	2,440
Nitrite + Nitrate as N	mg/L	0.01	0.34	0.37	0.34	0.30	0.25	0.32	0.27	0.30
Alkalinity (Bicarbonate as CaCO3)	mg/L	1	1,240	1,240	1,320	1,080	1,140	1,060	1,060	1,130
Alkalinity (Carbonate as	mg/L	1	<1	<1	<1	<1	<1	<1	<1	<1
Alkalinity (Hydroxide) as	mg/L	1	<1	<1	<1	<1	<1	<1	<1	<1
Alkalinity (total) as CaCO3	mg/L	1	1,240	1,240	1,320	1,080	1,140	1,060	1,060	1,130
Ammonia as N	mg/L	0.01	0.02	0.02	<0.01	0.02	0.06	0.03	<0.01	0.04
Anions Total	meq/L	0.01	268	252	257	313	294	331	306	325
Cations Total	meq/L	0.01	229	248	222	303	304	290	306	281
Chloride	mg/L	1	7,010	6,460	6,770	8,320	7,770	8,370	8,190	8,310
Cyanide (Free)	mg/L	0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Cyanide Total	mg/L	0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Electrical Conductivity	µS/cm	1	22,600	22,800	22,400	26,700	27,200	27,800	29,200	28,600
Fluoride	mg/L	0.1	0.6	0.5	0.6	1.7	1.8	1.7	1.3	1.7
Ionic Balance	%	0.01	7.95	0.80	7.34	1.63	1.67	6.66	<0.01	7.13
Nitrate (as N)	mg/L	0.01	0.34	0.36	0.34	0.30	0.25	0.32	0.26	0.25
Nitrite (as N)	mg/L	0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.05
pH (Lab)	-	0.01	6.98	7.08	6.99	7.00	7.00	7.05	7.03	7.03
Reactive Phosphorus as P (Orthophosphate as P)	mg/L	0.01	0.05	0.06	0.06	0.01	0.02	<0.01	0.02	<0.01
Sodium (filtered)	mg/L	1	4,020	4,360	3,920	5,260	5,410	4,970	5,320	4,860
Total Dissolved Solids	mg/L	10	14,200	15,200	13,900	20,600	20,000	19,000	20,100	18,900
Hardness as CaCO3	mg/L	1	2,680	2,880	2,560	3,680	3,420	3,650	3,710	3,480
Total Suspended Solids	mg/L	5	13	21	16	339	1,020	557	430	203
Metals										
Arsenic	mg/L	0.001	0.002	0.002	0.002	0.002	0.002	0.001	0.006	0.001
Cadmium	mg/L	0.0001	0.0001	<0.0001	0.0001	0.0001	0.0001	<0.0001	<0.0001	<0.0001
Calcium (filtered)	mg/L	1	206	214	200	290	182	322	317	314
Chromium (III+VI)	mg/L	0.001	0.004	0.002	0.003	0.009	0.012	0.004	0.036	0.001
Copper	mg/L	0.001	0.006	0.012	0.007	0.014	0.011	0.007	0.024	0.009
Iron	mg/L	0.05	2.20	0.36	0.42	8.51	12.0	4.26	45.4	0.95
Lead	mg/L	0.001	0.010	0.020	0.016	0.011	0.015	0.005	0.020	0.002
Magnesium (filtered)	mg/L	1	526	569	501	719	721	691	708	656
Mercury	mg/L	0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Nickel	mg/L	0.001	0.004	0.003	0.002	0.010	0.014	0.006	0.026	0.003
Potassium (filtered)	mg/L	1	14	16	15	16	18	16	17	17
Zinc	mg/L	0.005	0.029	0.026	0.018	0.066	0.077	0.050	0.127	0.029

	Field ID		WYMB06 (EPA13)	WYMB06 (EPA13)	WYMB06 (EPA13)	WYMB06 (EPA13)	WYMB06 (EPA13)	WYMB10 (EPA14)	WYMB10 (EPA14)	WYMB10 (EPA14)
	Location Code		WYMB06(EPA13)	WYMB06(EPA13)	WYMB06(EPA13)	WYMB06(EPA13)	WYMB06(EPA13)	WYMB10(EPA14)	WYMB10(EPA14)	WYMB10(EPA14)
	Date		09 Jan 2024	05 Mar 2024	25 Jun 2024	17 Sep 2024	16 Dec 2024	24 Jun 2024	17 Sep 2024	16 Dec 2024
	Unit	EQL								
Cyanides										
Cyanide (WAD)	mg/L	0.004	0.011	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Inorganics										
Reactive Phosphorus (Orthophosphate)	mg/L	0.01	0.28	0.58	<0.10	<0.10	0.15	0.86	0.55	0.37
Sulfate as SO4 - Turbidimetric (filtered)	mg/L	1	2,130	1,760	2,140	1,950	1,920	224	2,100	2,560
Nitrite + Nitrate as N	mg/L	0.01	<0.01	0.26	0.02	0.05	0.02	6.66	2.06	0.80
Alkalinity (Bicarbonate as CaCO3)	mg/L	1	1,280	1,290	1,260	1,280	1,340	900	942	1,040
Alkalinity (Carbonate as	mg/L	1	<1	<1	<1	<1	<1	<1	<1	<1
Alkalinity (Hydroxide) as	mg/L	1	<1	<1	<1	<1	<1	<1	<1	<1
Alkalinity (total) as CaCO3	mg/L	1	1,280	1,290	1,260	1,280	1,340	900	942	1,040
Ammonia as N	mg/L	0.01	0.07	0.01	0.15	0.17	0.13	0.02	0.10	<0.01
Anions Total	meq/L	0.01	153	122	155	143	159	50.4	242	308
Cations Total	meq/L	0.01	154	121	136	148	133	46.4	240	276
Chloride	mg/L	1	2,960	2,110	3,020	2,710	3,260	985	6,360	8,300
Cyanide (Free)	mg/L	0.004	0.009	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Cyanide Total	mg/L	0.004	0.063	0.071	0.131	0.077	0.061	<0.004	<0.004	<0.004
Electrical Conductivity	µS/cm	1	13,100	11,100	12,800	12,700	13,900	4,730	23,000	28,000
Fluoride	mg/L	0.1	0.4	0.6	0.5	0.4	0.4	1.3	0.7	0.9
Ionic Balance	%	0.01	0.08	0.24	6.31	1.93	8.88	4.21	0.43	5.58
Nitrate (as N)	mg/L	0.01	<0.01	0.22	0.02	0.04	0.01	6.66	2.04	0.80
Nitrite (as N)	mg/L	0.01	0.02	0.04	<0.01	0.01	0.01	<0.01	0.02	<0.01
pH (Lab)	-	0.01	7.09	7.43	7.16	7.08	7.16	6.91	6.90	7.07
Reactive Phosphorus as P (Orthophosphate as P)	mg/L	0.01	0.09	0.19	0.02	0.01	0.05	0.28	0.18	0.12
Sodium (filtered)	mg/L	1	2,730	2,230	2,410	2,700	2,340	950	4,440	5,070
Total Dissolved Solids	mg/L	10	9,810	7,340	8,380	8,480	8,820	2,850	15,200	18,000
Hardness as CaCO3	mg/L	1	1,740	1,210	1,580	1,530	1,540	248	2,320	2,730
Total Suspended Solids	mg/L	5	22	21	8	19	<5	7	11	21
Metals										
Arsenic	mg/L	0.001	0.014	0.048	0.064	0.096	0.054	0.003	0.002	0.002
Cadmium	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0002	0.0002	0.0001	0.0002
Calcium (filtered)	mg/L	1	159	82	152	114	154	40	188	233
Chromium (III+VI)	mg/L	0.001	0.001	0.001	<0.001	0.001	0.001	<0.001	0.004	0.003
Copper	mg/L	0.001	0.007	0.019	0.011	0.013	0.008	0.008	0.010	0.007
Iron	mg/L	0.05	0.67	0.22	1.39	2.45	1.34	0.17	0.47	2.01
Lead	mg/L	0.001	0.002	0.014	0.004	0.008	0.004	<0.001	<0.001	0.002
Magnesium (filtered)	mg/L	1	326	244	291	303	282	36	449	522
Mercury	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Nickel	mg/L	0.001	0.010	0.015	0.018	0.021	0.016	0.003	0.006	0.008
Potassium (filtered)	mg/L	1	6	7	6	6	6	3	17	20
Zinc	mg/L	0.005	0.013	0.090	0.029	0.042	0.038	0.020	0.025	0.012