

LIST OF ACRONYMS

Term	Meaning
ACM	Asbestos Containing Material
Act or the Act	Fast-track Approvals Act 2024
AEE	Assessment of Environmental Effects
AEO	Authority to Enter and Operate
AEP	Amenity Effects Programme
AGM	Annual General Meeting
ANC	Acid Neutralising Capacity
ANCOLD	Australian National Committee on Large Dams
ANE	Ammonium Nitrate Emulsion
AMD	Acid and Metalliferous Drainage
AMP	Archaeological Management Plan
ANFO	Ammonium Nitrate Fuel Oil
AQMP	Air Quality Management Plan
ARD	Acid Rock Drainage
ARI	Average Recurrence Interval
asl	Above Sea Level
AWBM	Australian Water Balance Model
BACI	Before-After Control-Impact
BGL	Below Ground Level
BND	Blast Notification Device
CAF	Cemented Aggregate Fill
Conservation Act	Conservation Act 1987
CRF	Cemented Rock Fill
Crown Minerals Act	Crown Minerals Act 1991
CIA	Cultural Impact Assessment
CFP	Coromandel Forest Park
CGP	Conservation General Policy 2005



Term	Meaning
CLMP	Coromandel Peninsula Conservation Land Management Plan
CMS	Waikato Conservation Management Strategy
CNMP	Construction Noise Management Plan
CO	Carbon Monoxide
CP	Contingency Pond
CTMP	Construction Traffic Management Plan
CVA	Cultural Values Assessment
DOC	Department of Conservation
DRP	Dissolved reactive phosphorus
ELMP-WUG	Ecology and Landscape Management Plan for the Wharekirauponga Underground Mine Area
ELMP-WA	Ecology and Landscape Management Plan for the Waihi Area
EOL	Extension of Land
ESC	Erosion and Sediment Control
ESCAR	Erosion and Sediment Control Assessment Report
Fast-track or the Act	Fast-track Approvals Act 2024
FDI	Foreign Direct Investment
Fisheries Regulations	Freshwater Fisheries Regulations 1983
FMU	Freshwater Management Unit
FTE	Full Time Equivalent
FOS	Factor of Safety
GCMP	Ground Control Management Plan
GDP	Gross Domestic Product
GOP	Gladstone Open Pit
GOP TSF	Gladstone Open Pit Tailings Storage Facility
HAIL	Hazardous Activities and Industries List
HDC	Hauraki District Council
HDPE	High Density Poly Ethylene
HDP	Hauraki District Plan

Term	Meaning
HNZPT Act	Heritage New Zealand Pouhere Taonga Act 2014
HPL	Highly Productive Land
HSFP	Hazardous Facilities Screening Procedure
HSMP	Hazardous Substances Management Plan
HSW-HS	Health and Safety at Work (Hazardous Substances) regulations
IBI	Index of Biotic Integrity
IUCN Red List	International Union for Conservation of Nature's Red List
KDMP	Kauri Dieback Management Plan
LENZ	Land Environments of New Zealand
LHD	Load haul dump
LINZ	Toitū Te Whenua Land Information New Zealand
LMP	Lizard Management Plan
LOM	Life of Mine
LoMP	Life of Mine Plan
LTO	Licence to Occupy
LUC	Land Use Consent
m RL	Mine Datum minus 1000m
Martha SFA	Surface Facilities Area at Martha Pit
MALF	Mean Annual Low Flow
MBIE	Ministry of Business, Innovation & Employment
MCA	Multicriteria assessment
MCI	Macroinvertebrate Community Index
MCP	Mill Contingency Pond
MGP	Macraes Gold Project
ML	Mining Licence
MP	Mining Permit
MUG	Martha Underground Mine
NAF	Non-Acid Forming

Term	Meaning
NES Air	Resource Management (National Environmental Standards for Air Quality) Regulations 2004
NES Drinking Water	Resource Management (National Environmental Standard for Sources of Human Drinking Water) Regulations 2007
NES Electricity Transmission	Resource Management (National Environmental Standard for Electricity Transmission Activities) Regulations 2009
NES Freshwater	Resource Management (National Environmental Standards for Freshwater) Regulations 2020
NES Soil	Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011
NO and NO ₂	Nitrogen Oxides
NOF	National Objectives Framework
NPS-FM	National Policy Statement for Freshwater Management 2020
NPS-HPL	National Policy Statement for Highly Productive Land 2022
NPS-IB	Draft National Policy Statement for Indigenous Biodiversity 2019
NRS	Northern Rock Stack
NMD	Neutral Metalliferous Drainage
NZDI	New Zealand Deprivation Index
NZAA	New Zealand Archaeological Association
NZDSG	New Zealand Dam Safety Guidelines
NZLRI	New Zealand Land Resource Inventory
NZSOLD	New Zealand Society on Large Dams
NZS6802:2008	New Zealand Standard 6802:2008 Acoustics – Environmental Noise
NZS6803:1999	New Zealand Standard 6803:1999 Acoustics – Construction Noise
NZTA Waka Kotahi	NZ Transport Agency Waka Kotahi
OBDA	Overburden Disposal Area
OEHHA	Office of Environmental Health Hazard Assessment
OGNZL	OceanaGold (New Zealand) Limited
OIO	Overseas Investment Office

Term	Meaning
ONFL	Outstanding Natural Feature and Landscape
ONL	Outstanding Natural Landscape
ONMP	Operational Noise Management Plan
PA	<i>Phytophthora agathidicida</i>
PAF	Potentially Acid-Forming
PAMP	Pest Animal Management Plan
PEA	Preliminary Economic Analysis
PCR	Polymerase Chain Reaction
PSI	Preliminary Site Investigation
PM ₁₀	Particulates less than 10 microns in diameter
PMP	Probable Maximum Precipitation
PP6	Proposed Plan Change 6
QMCI	Quantitative Macroinvertebrate Community Index
RCS	Respirable Crystalline Silica
REL	Reference Exposure Level
RL	Reduced Level
RMA	Resource Management Act 1991
RO	Reverse Osmosis
ROM	Run of Mine
RPS or Waikato RPS	Waikato Regional Policy Statement
RWQC	Recreational Water Quality Criteria
SAG	Semi-Autonomous Grinding
SFA	Surface Facilities Area
SH2	State Highway 2
SH25	State Highway 25
SIA	Social Impact Assessment
SMD	Saline Mine Drainage
SMEZ	Significant Mineral Extraction Zones
SMP	Site Management Plan



Term	Meaning
SNA	Significant Natural Area
SRP	Sediment Retention Pond
SSESCP	Site-Specific Erosion and Sediment Control Plan
TARPS	Trigger Action and Response Plans
TCDC	Thames Coromandel District Council
TC District Plan	Thames Coromandel District Plan
TCP	Tailings Contingency Pond
TR2009/02	Waikato Regional Council Technical Report No. 2009/02 Erosion and Sediment Control Guidelines for Soil Disturbing Activities, January 2009
TR2020/07	Waikato Regional Council Technical Report. 2020/07 Waikato Stormwater Management Guideline, updated May 2020
TSF	Tailings Storage Facility
TSP	Total Suspended Particulate
TSS	Total Suspended Solids
USEPA	United States Environmental Protection Agency
VWP	Vibrating Wire Piezometer
WAA	Wildlife Act Authority
Waihi SFA	Waihi Surface Facilities Area (Processing Plant area)
WAMPA	Wharekurauponga Animal Pest Management Area
WBM	Water Balance Model
Wildlife Act	Wildlife Act 1953
Willows SFA	Willows Road Surface Facilities Area
WNP	Waihi North Project (the entire project area)
WPP	Waihi Processing Plant
WRC	Waikato Regional Council
WRP	Waikato Regional Plan
WRS	Willows Rock Stack
WUG	Wharekurauponga Underground Mine
WTP	Water Treatment Plant



Term	Meaning
WTPCP	Water Treatment Plant Contingency Pond
ZOI	Zone of Influence



GLOSSARY OF TERMS

Term	Meaning
Alimak	A proprietary mast climbing (rack and pinion) access system developed by Alimak Group AB (Sweden; https://alimak.com/new-equipment/) that has been adapted to facilitate bottom-up underground shaft construction.
Area 1	Means Area 1 as shown on Figure 4 in the Overarching AEE.
Area 2	Means Area 2 as shown on Figure 4 in the Overarching AEE.
Area 3	Means Area 3 as shown on Figure 4 in the Overarching AEE.
Area 4	Means Area 4 as shown on Figure 4 in the Overarching AEE.
Area 5	Means Area 5 as shown on Figure 4 in the Overarching AEE.
Area 6	Means Area 6 as shown on Figure 4 in the Overarching AEE.
Area 7	Means Area 7 as shown on Figure 4 in the Overarching AEE.
Average Return Interval	The average time period between rainfall or flow events that exceed a given magnitude.
Benthic	Of, relating to, or occurring at the bottom of a body of water.
Canopy	Tallest layer of the forest.
Catchment	An area of land bounded by natural features such as hills or mountains from which surface water flows into streams, rivers and wetlands.
Central Borrow Area	An area within TSF3 from which material / waste rock will be borrowed using blasting and earthmoving techniques.
Central Stockpile	An existing stockpile, located adjacent to the existing TSFs, used for the disposal of rock material.
Concrete Batching Plant	Existing infrastructure, located north of the conveyor and immediately west of the WTP, that produces cement aggregate fill for use in the backfilling of underground mines.



Term	Meaning
Construction Runoff	Any runoff, sediment laden or otherwise, that flows as a result of the construction related activities. Typically results from rain events.
Collection Ponds	A pond for the purpose of gathering and retaining run-off water for treatment in the WTP. This may include settlement, treatment, and interception/removal of hydrocarbons.
Contact water	Is water that has contact with mining, mineral processing, and tailings disposal and, as such, is not suitable for direct release into the environment.
Construction works	Various activities undertaken to construct the Waihi North Project.
Contingency Ponds	<p>Ponds which collect runoff from the ore stockpiles and conveyor, while also providing containment of any chemicals used for processing ore and water treatment in the event of spillage. These ponds will remain active until mine closure.</p> <p>A number of contingency ponds are located in the Waihi SFA area including the Mill Contingency Pond (MCP), Tailings Contingency Ponds (TCP, TCP2, TCP1A) and WTP Contingency Pond (WTPCP).</p>
Conveyor	<p>Existing infrastructure (overland conveyor system) used to transport material from the Martha Mine to the Waihi Surface Facilities Area and to the Central, Northern and Eastern Stockpiles and TSFs.</p> <p>Upgrades to the conveyor infrastructure within the Waihi SFA (Area 5) are proposed to support the processing of additional ore extracted from the Wharekirauponga orebody.</p>
Correnso Underground Mine	An existing underground mine, authorised in 2013, located beneath residential properties in Waihi's east end and accessed via the existing Favona portal.
Cover drill	Drilling above an area of workings, for the purposes of injecting grout into the drill holes to prevent water ingress or dewatering.
Decant water	Water that is separated from the tailings slurry.
District Plan	The Hauraki District Plan.



Term	Meaning
Diversion Drains	Drains utilised to divert water around mining areas.
Drive	A horizontal passage underground that follows along the length of a vein or rock formation as opposed to a crosscut which crosses the rock formation.
Dual Tunnel or Wharekirauponga Dual Tunnel	A 6.9 km dual decline tunnel system that extends from the Willows Portal within the Willows Road SFA to the base of the Wharekirauponga ore resource.
Earthworks	As defined under the HDP.
Eastern Borrow Area	An area within TSF3 from which material / waste rock will be borrowed using blasting and earthmoving techniques.
Eastern Stockpile	An existing stockpile, located adjacent to the existing TSFs, used for the disposal of rock material.
Ephemeral streams	Streams that flow continuously for at least three months between March and September but do not flow all year.
Explosives Magazine	Class 1 storage facility, used for the storage of high explosives (ammonium nitrate fuel oil, booster and packaged explosives).
Favona Portal	An existing portal, located to the west of the Waihi SFA which provides access to the existing underground mines (Favona, Trio, Correnso, Slevin, and Martha Phase 4 Underground Mines).
Favona Stockpile	An existing stockpile, located at the Waihi SFA between the Favona Portal and the Processing Plant, which is used to temporarily stockpile rock before it is transported elsewhere for permanent disposal.
Favona Underground Mine	An existing underground mine, authorised in 2004, located beneath residential properties in Waihi's east end and accessed via the existing Favona portal.
Fish IBI	The Fish Index of Biotic Integrity (IBI) is a measure of how intact the native fish community is within a stream reach or stream.
Fish passage	The movement of fish between the sea and any river, including up-stream or downstream in that river.

Term	Meaning
Gladstone Open Pit	A new open pit mine within Area 5 that will be situated predominantly over Gladstone Hill and part of Winner Hill, immediately east of the existing Waihi SFA.
Gladstone Portal	A new portal within Area 5 to the Trio Upper Drive within the Gladstone Open Pit. It will replace the existing Favona Portal that currently provides access to the Martha Underground Mine.
Gladstone Open Pit Tailings Storage Facility	A new fully lined TSF that will be established within the Gladstone Open Pit following the completion of mining within the Gladstone Open Pit. Also referred to as the 'GOP TSF'.
Maintenance Workshop and other surface facilities	Located within the Waihi SFA to the south of the Processing Plant. It contains a workshop and stores for vehicles and parts, changing room facilities, offices, tearooms and various other surface facilities for staff.
Martha Mine	The Martha Mine is an open pit located in central Waihi. The Martha Mine has been operated since 1987.
Martha Phase 4 Cutback	Comprises a small extension to the north of the Martha Pit to remedy the failure of the north wall in a manner that will enable the pit walls to be left in a stable and safe condition at the completion of mining and restores access to the remaining consented ore reserve in the pit. Forms part of Project Martha in which consents were granted in 2018.
Martha Underground Mine	Underground mining beneath the Martha Pit and under a small area of residential, reserve and commercial land to the southeast of the pit. Forms part of Project Martha in which consents were granted in 2018.
Modified watercourse	An artificial or modified channel that may or may not be on the original watercourse alignment and which has a natural channel at its headwaters.
MUG Portal	A new portal within Area 5 to the Trio Upper Drive. It will be located adjacent to the WUG Portal.
Northern Diversion Drain	An existing diversion drain diverting clean water around TSF2 and authorised via AUTH 971309 and AUTH 971310. The Northern Diversion Drain will be extended as part of the various activities associated with the NRS in Area 6.



Term	Meaning
Northern Rock Stack	<p>A new rock stack proposed to accommodate surplus rock associated with the Waihi North Project in Area 6. The NRS will accommodate rock predominantly from the GOP but may include some development rock from the WUG.</p> <p>At its maximum extent, the NRS footprint will encompass the existing Northern Stockpile area.</p>
Northern Stockpile	An existing stockpile located north of the existing TSF2. This stockpile can be used in association with any new mine located within the Waihi epithermal district.
Northern Uphill Diversion Drain	An uphill clean water diversion drain which will be constructed upstream of the NRS for the collection of natural ground runoff and stream flows.
Overland Flow Path	Routes that collect and convey rainwater. Typically, they only flow for the duration of a rain event.
Paper road	HDC legal road reserve: a legally-recognised road that is undeveloped or partly formed, but provides public access to a particular area or feature.
Permanent river or stream	A continually flowing body of fresh water, excluding ephemeral streams, and includes a stream or modified watercourse; but does not include any artificial watercourse (including an irrigation canal, water supply race, canal for the supply of water for electricity power generation, and farm drainage canal except where it is a modified element of a natural drainage system).
Pier	Vertical support structure for a bridge.
Polishing Pond Stockpile	An existing stockpile is located within the Waihi SFA to the north of the WTP. It is used to temporarily stockpile rock before it is transported elsewhere for permanent disposal. It may also be used to temporarily store excess ore where it exceeds the Processing Plant and ROM Stockpile capacities. This stockpile has a footprint of approximately 250m by 200m (5ha) and a height of approximately 30m.
Processing Plant	Located within the Waihi SFA in Area 5. It consists of a conventional carbon-in-pulp gold and silver processing plant. The Processing Plant is currently authorised to process up to 1.25 million tonnes of ore per annum from

Term	Meaning
	anywhere in the Waihi epithermal district. The Processing Plant will be upgraded as part of the Waihi North Project.
Project Martha	Authorised in 2018 to extend life of mining in Waihi. Contains two key components; the Martha Underground Mine and the Martha Phase 4 Cutback.
Raise Boring Machine	A machine used in underground mining, to excavate a circular hole between two levels of a mine without the use of explosives.
Regional Plan	Refers to the Waikato Regional Plan.
Rehabilitation and Closure Plan	Describes the proposed method of rehabilitation and closure of the project areas.
Rock and Tailings Storage Facilities	<p>Engineered structures designed and constructed to hold mineral waste (tailings) and / or rock.</p> <p>Existing Rock and Tailings Storage Facilities include the Central, Northern and Eastern Stockpiles and two Tailings Storage Facilities (known as TSF1A and TSF2) to the east of the Ohinemuri River.</p>
Run of Mine Stockpile	The Run of Mine Stockpile is located within the Waihi SFA and is used to store ore before it is processed in the Processing Plant. It is located to the south of the Transfer Station on the conveyor and adjacent to the Processing Plant.
Sediment control	Capturing sediment that has been eroded and entrained in overland flow before it enters the receiving environment.
Services Trench	A trench that will be established between the Waihi SFA and Willows Road SFA to carry electricity, fibre, wastewater, and potable/raw/recycled water services within buried pipelines.
Shaft	Collective term for ventilation raise shafts and egress shafts.
Significant Natural Area	Areas of significant terrestrial indigenous vegetation or significant habitats of indigenous fauna located either on land or in freshwater environments identified in District Plans.



Term	Meaning
Silt Ponds	A pond for capturing run off water which has not intercepted potentially acid forming rock for the purpose of intercepting hydrocarbons and allowing the settling of sediments prior to discharge to the local environment.
Slevin Underground Mine	An existing underground mine, authorised in 2016, located beneath residential properties in Waihi's east end and accessed via the existing Favona portal.
Southern Diversion Drain	Is an existing diversion channel that diverts clean surface water around TSF1A. It will be extended around TSF3 as part of the Waihi North Project works in Area 7.
Southern Stockpile	A temporary topsoil and NAF area (approximately 0.9 ha in area and approximately 12m high) to be established around the GOP for storing topsoil stripped from the GOP.
Stormwater	Water that flows from impervious areas after the construction period.
Stoping	The opening of large underground rooms, or stopes, by the excavation of ore.
Tributaries	Small 'feeder' streams that drain into larger streams and rivers. The catchments of these tributaries are known as sub-catchments.
Trio Underground Mine	An existing underground mine, authorised in 2012, located beneath residential properties in Waihi's east end and accessed via the existing Favona portal.
True Left or True Right	The true left and true right banks of a stream or watercourse refers the left or right side of the stream when looking downstream, i.e., looking to where the water is flowing to.
TSF1A and TSF2	Existing tailings storage facilities located to the east of the Ohinemuri River.
TSF3	A new tailings storage facility to be established as part of the WNP in Area 7 to the east of the existing TSF1A. It will accommodate additional tailings volume from the processing of ore from the Waihi North Project and other mining activities.

Term	Meaning
Underground Mines	Refers to the various underground mines that have been established to the east and southeast of the Martha Pit in the last 30 years. These include the Favona, Trio, Correnso, and Slevin Underground Mines, and more recently, the Martha Phase 4 Underground Mines authorised as part of Project Martha.
Waihi Epithermal District	The area around Waihi which contains economic concentrations of precious metals.
Waihi North Biodiversity Project	A voluntary large scale predator control and habitat enhancement project OGNZL proposes to undertake over an approximate 18,870 ha of the Coromandel Forest Park as part of the Waihi North Project.
Waihi North Project	Is the topic of this resource consent application. A project centred around development of the newly discovered Wharekirauponga ore deposit. It involves activities within Areas 1 through 7 and will extend the life of the Waihi mining operation to 2038, with the potential to add over 1.7 million ounces of gold and 2.9 million ounces of silver production over a 13-year period.
Waihi Surface Facilities Area	Existing SFA located to the east of Waihi township, containing various infrastructure required to support mining activity (including the WTP and Processing Plant). Access to the Waihi SFA is by way of Baxter Road and an access road over the Ohinemuri River.
Watercourse	A natural or artificial channel through which water flows.
Water Treatment Plant	An existing onsite Water Treatment Plant within the Waihi SFA and Area 5 which is used to treat water from mining operations prior to discharging this water into the Ohinemuri River at two consented locations via multi-port diffusers. The Water Treatment Plant will be upgraded to treat water from additional mining operations, to be authorised as part of the Waihi North Project.
Western Borrow Area	An area within the NRS from which material / waste rock will be borrowed using blasting and earthmoving techniques.



Term	Meaning
Wetland	Defined in s2(1) of the RMA to include “... <i>permanently or intermittently wet areas, shallow water, and land water margins that support a natural ecosystem of plants and animals that are adapted to wet conditions</i> ”.
Wharekirauponga Access Tunnel or WUG Access Tunnel	A 5km long tunnel which will connect the Waihi SFA with the Wharekirauponga Dual tunnels. It will be used to transport ore underground to the existing Processing Plant, and for general operational access between the Wharekirauponga Underground Mine and the Waihi SFA. It will also be used to transport rock from the NRS to the Wharekirauponga Underground Mine for backfilling of stopes once the supply of rock stored in the Willows Rock Stack is exhausted.
Wharekirauponga Dual Tunnels or Dual Tunnels	A 6.9 km dual decline tunnel system that connects to the Wharekirauponga Access Tunnel and Willows Access Tunnel at approximately the boundary of the Coromandel Forest Park and extends to the base of the Wharekirauponga ore resource within the Wharekirauponga Underground Mine.
Wharekirauponga Underground Mine	<p>An underground mine that will enable mining of the Wharekirauponga orebody. It is located approximately 10 km north of Waihi, beneath the Coromandel Forest Park land administered by the Department of Conservation (DOC).</p> <p>Access to the underground mine will be provided by the Wharekirauponga Dual Tunnels, and the Willows Access Tunnel or Wharekirauponga Access Tunnel.</p>
Willows Access Tunnel	<p>A Tunnel which connects the Willows SFA to the Dual Tunnel.</p> <p>It will be used to transport development rock from underground to the Willows Rock Stack, and for general operational access between the mine and the Willows Road SFA. The Willows Access Tunnel will also be used to transport rock from the Willows Rock Stack to the Wharekirauponga Underground Mine for backfilling of stopes.</p>
Willows Road Farm	OGNZL owned property within Area 2 that will house the surface infrastructure required to support the Wharekirauponga Underground Mine.
Willows Rock Stack	A temporary rock stack within Area 2 which forms a component of the Willows Road SFA north of the Willows Portal. It will be approximately 5 ha



Term	Meaning
	in area, have a total storage capacity of up to 900,000 m ³ , and a maximum height of 20 m above natural ground level.
Willows Road Surface Facilities Area	An 18-ha area located within Area 2 at the Willows Road Farm property that will house surface-based facilities required to support the Wharekirauponga Underground Mine.
Willows Portal	The portal within Area 2 which provides vehicle access to the Willows Access Tunnel.
Wharekirauponga Access Tunnel Portal or WUG Portal	A new portal within the Waihi SFA in Area 5 between the existing Polishing Pond Stockpile and the end of Moore Street which will provide access to the Wharekirauponga Access Tunnel
Vent shaft / shaft(s)	Required for air circulation and to provide an emergency exit from the Wharekirauponga Dual Tunnel, Willows Access Tunnel and Wharekirauponga Underground Mine. Five vent shafts are proposed – four on Hauraki District Council administered road reserve within the Coromandel Forest Park and one within Area 2.