A glossary of mining and technical terms you may hear being used in relation to Correnso and CEPA

Backfill

Material returned underground to fill the *stopes* (voids) left when ore is removed. Some of the *backfill* at Correnso will be *waste* material mined during *development*. *Backfill* will also be sourced from a local quarry and trucked to site before being mixed with concrete and transported underground.

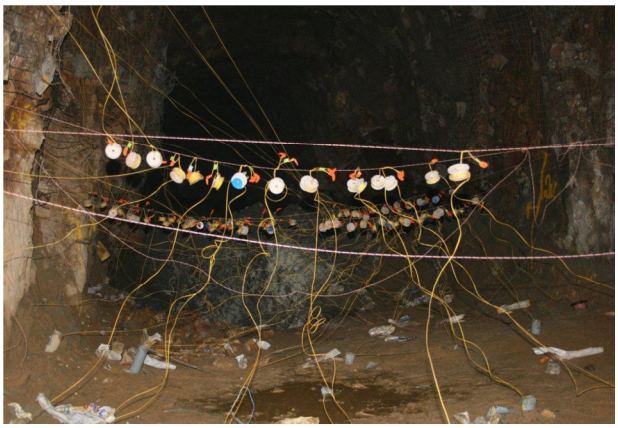
Above: A *bogger* in a *drive* and another on the surface.

Bogger

A low profile front end loader used underground to load *ore* or *waste* onto underground trucks. Some boggers can be operated by remote control.

CEPA

Short for Correnso Extensions Project Area. The name given to the smaller area for which consents were applied for and received during court-assisted mediation.



Above left: *charging up* a face. Above right: A series of *decked* charges all wired and ready to go.

Charge Up
Placing explosives in readiness for a blast. To reduce vibration some charges are *decked*. This means they are wired and timed to be detonated sequentially rather than all at once.

Compliance
If an operation meets its consent conditions it is said to be in compliance.

Competent ground
The name miners give to rock underground which is sound and not prone to collapse or fragmentation. When a *drive* has been *bolted and meshed* and then sprayed with *shotcrete* it is competent ground. Staff are not allowed in any areas which are not competent ground.

Consent Conditions
The series of decisions determined by local and regional councils (usually with the help of outside commissioners) which make up the rules an activity must abide by. The CEPA consent conditions cover a wide range of topics from blast vibration and noise to dewatering

Decking
To minimise the vibration caused by a blast *charges* are sometimes layered in drill holes and detonated sequentially. The period of time between each layer of charges going off is only a few milliseconds, but in some situations it can be a useful method of reducing vibration.

Decline
The name given to the sloping tunnel that leads from the *portal* down to the workings.

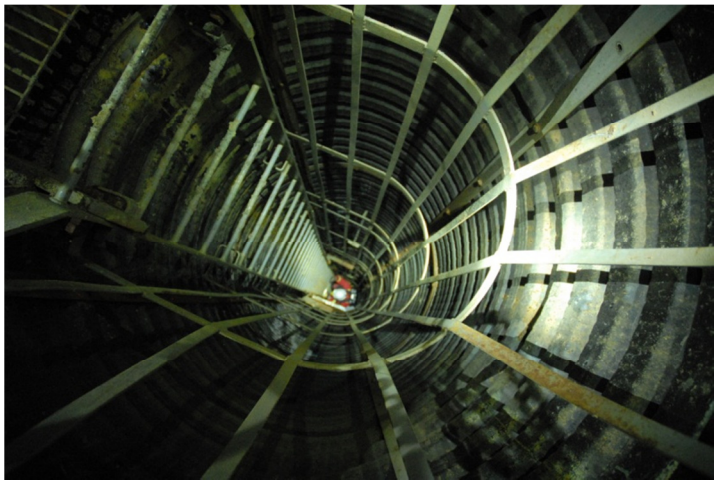
Development
Used to describe the construction of the *drives* and infrastructure needed to access the *orebody*. 'There's 200 metres of *development* to do before we reach the ore'.

Development Drive
A *drive* (tunnel) which is constructed to provide access to the *ore body*.

Drive

The name for a tunnel that leads from the decline to the underground workings. Drives are put in next to the *ore body* at various levels.

Left: A *vent bag* in a *drive*.



Escapeway

A series of ladderways in vertical shafts that provide an alternative way of getting out of the mine in the event of some form of emergency. All staff and visitors underground must be capable of climbing the *escapeway*.

Evase

Pronounced ay-vass-ay. The technical name for the funnel at the top of a *vent shaft* such as the one on Union Hill.

Left: The *evase* on Union Hill

Ex-gratia

From the Latin meaning 'by favour'. This term is used to describe something that is done voluntarily rather than required by law. In this case Newmont Waihi Gold is offering an ex gratia payment to property owners above the Correnso exploration drill drive of 5% of the value of the property ignoring the announcement of or existence/operation of Correnso. This means that if the property is valued at $200,000 we will make a one off payment of $10,000. If the property is valued at $250,000 the payment would be $12,500.

Exploration Programme

A programme of work designed to investigate a particular area. An exploration programme can take place on the surface or underground. On the surface a variety of tec hniques may be used such as gravity surveys, sediment sampling or drilling. Underground rock samples can be analysed or a drilling programme undertaken.

Exploration Development Drive

This is the name we have given to the drive that we will construct parallel to the Correnso ore body. We will place exploration drilling rigs in the drive and drill into the ore body to confirm its extent and grade.

Firing Multiple Headings

When more than one area is charged and then blasted at the same time.

Fresh Air Base

A designated place that underground staff can go to that has fresh air in the event of an emergency. Different areas can be designated as a *Fresh Air Base* depending on the location, extent and nature of any emergency.

GLPA

The Golden Link Project Area. This is the name given to the original area for which consents were applied for. It has now been replaced by *CEPA* which is about half the size.

Grade

The amount of gold contained in the rock. Usually expressed on grammes of gold per tonne of rock. For example 'We're getting 10g/t in that stope'.

Infill Drilling

When we drill into the ground looking for gold-bearing material we cannot drill everywhere so drill holes are spaced quite a distance apart and may point in different directions. If we find something of interest we go back and drill holes closer together. This is called infill drilling, and gives us a much better understanding of the extent of the *ore body* and its *grade*.

Jumbo

A large underground machine with two drilling booms used to drill into the ground to make holes for explosives. Also used to install *rock bolts* and *mesh* to ensure the ground is *competent*

Left: A *jumbo* in a *drive* which has been *shotcreted*.

LV

A light vehicle. Any comparatively smaller vehicle underground such as a ute.

Left: An *LV* in a *drive*.

Ore
The name given to rock containing precious metals.

Ore body
The area which contains the ore.

Panel
The name given to a section of an *ore body* being worked. A panel of ore is charged and blasted then the ore is loaded onto trucks for transport to the surface.

Portal
An opening on the surface that leads to the *decline*.

Above: A six person *refuge chamber*. We also have refuge chambers which hold 20 people.

Refuge chamber
An air tight reinforced steel enclosure which staff retreat to in the event of an emergency or incident. Each refuge chamber is self-sufficient for up to 36 hours, which is regarded as the maximum time an emergency in a gold mine would last. Each has battery-powered lighting and contains fresh air cylinders, water, and a toilet. Refuge chambers are strategically placed underground depending on where staff are working. A refuge chamber is also *a fresh air base*.

Shotcrete
A slurry of concrete that is sprayed onto the walls of the *drives*.

Solo
An underground drilling machine similar to a *jumbo*, except the *solo* only has one drilling boom while a *jumbo* has two.

Stope

The name given to an area that has been mined out and the *ore* removed. 'We need more backfill for that stope'. Also used to describe the act of mining the ore. 'We'll be stoping in that area today'.

Left: A *solo* at the top of the picture drills holes in preparation for *charge up*. At the bottom of the picture a *bogger on remotes* loads out *ore*. When all the *ore* has been mined out this *stope* will be *backfilled*.

Tight Fill
After the *ore* is removed (as in the picture above) the void that is left is filled with *waste* rock and the large mining machinery drives on top of the fill to reach the next level to mine. This compacted material is tight fill, and it ensures that subsidence is not possible.

Troopie

Also known as a PC which is an abbreviation for Personnel Carrier. Troopies are large four wheel drive station wagons with bench seats in the back. They are used to transport staff and visitors around the underground.

Each Troopie has a two-way radio and first aid kit, and is fitted with an on board fire suppression system. They spend most of their life underground.

Vent bag

A long canvas tube which directs fresh air to parts of the mine.

Left: A *vent bag* in the underground workshop at Trio. The outlet has been tied off to restrict the fresh air flow and direct the air to other parts of the mine.

Vent fan

A large fan which sucks air into the mine through the *portal* and pushes it up to the surface through the *vent shaft*. The vent fan at Trio is located underground to reduce noise. We also have a smaller fan on the surface on top of the *evase* which would be used in an emergency where the main vent fan was not working.

Vent shaft

A vertical shaft leading from underground workings to the surface. Fresh air is sucked into the mine through the *portal* and pushed back to the surface through the *vent shaft*.

Waste

The name given to rock which does not contain commercially viable quantities of gold and silver. *Waste rock* is used underground as *backfill* in previously mined areas called *stopes*.