

There are always two sides ...

Puhipuhi Gold & Silver

Beneath Puhipuhi is the largest gold deposit in Northland. It has been known about for many decades, well before our councils and Government spent \$2 million of public money on mineral surveys in 2011. The mountain is part of a chain of ancient volcanoes stretching from the Coromandel, Aotea/Great Barrier Island to Kaeo.

Gold found in these types of deposits are in hard rock that's sometimes very deep. There are two types of mining this kind of rock:

- "open cast" which is digging a giant hole which could literally mean moving mountains, agricultural land, destroying native forests or
- "underground", building underground tunnels and then trucking out the rock to be processed on site or at a processing plant further away.

Either way, some of the largest mercury sites in the country would be reopened.

Then to extract gold, the rock needs to be crushed to dust, mixed with water and cyanide. Cyanide is essential to the process and kills fish downstream but only for a short time. The cyanide brings out the gold and silver so it can be removed.

But the bigger danger comes from cyanide bringing out the other heavy metals like mercury, zinc, cadmium and arsenic and makes them 'bio-available'. That means instead of being safely trapped in the rock, mercury and other heavy metals can be taken up by plants and animals.

This toxic waste needs to be stored out of the food chain beyond timescales we can imagine. It is usually stored in giant dams near to the mine itself to cut down on transportation costs.



PHOTO 1: Dam of toxic waste in Waihi. Concerned mine workers have passed on information that in heavy rain there have been breaches of water and waste from the dams. Where else can it go?

Conservatively **18 tonnes of toxic waste** is produced to make **one gold ring**. 40 million tonnes of toxic waste produced from the gold mine near Waihi is stored in huge lakes near the town.

Anyone living in the area knows how flood prone we are. Puhipuhi forms the headwaters of catchments that drain to Helena Bay and Mimiwhangata, Waikare Inlet in the Bay of Islands, across Hukerenui and Hikurangi swamp to the Kaipara Harbour, the largest breeding site for snapper in the country.

One flood last March dropped 31mm of rain on Puhipuhi in an hour. Runoff swamped state highway one and the Hikurangi Swamp (5400 hectares) which produces \$33 million annually in dairy. If toxic waste had been carried by the flood the results could have been catastrophic both to the environment and economically.

In recent decades there have been problems when the District Council used toxic waste from the historic mercury mine on Puhipuhi used as roading gravel. That mercury mine and its toxic waste has laid abandoned since World War II.

We can't risk anymore waterways being further contaminated. Already the Far North District Council and Northland Regional Council cannot deal with pollution from farming, let alone toxic pollution from mining companies.

Local authorities have claimed that all mining applications will be subject to 'strict' requirements. But right now changes to our mining laws (the Crown Minerals Act) are going through Parliament. Mining interests are lobbying to strengthen their corporate 'rights' and relax their environmental care. The mining companies want easier access to any land with minerals and the key objective of new mining laws is to be 'promoting attractiveness for business and investment'.

The Resource Management Act is also undergoing extreme changes which will lower protection from pollution and favour fast-tracking mining.

But all this does not mean you are powerless. And if you are a landowner on Puhipuhi you are in a stronger position than anyone else.

Later last year a company called De Grey bought the Puhipuhi minerals exploration licence from Newmont.

De Grey is an Australian company searching for gold, silver and other minerals here in Australia and Argentina. De Grey is not a mining company, they are an exploration company. They find minerals and sell that information on to a company that would mine. The Government are keen for the phase of exploration to swiftly turn into mining.

You have probably heard that De Grey's representatives are knocking on doors around Puhipuhi and you may have been visited by one.

De Grey is seeking access arrangements across private property to areas they want to sample for minerals and onto private and public land to drill.

It is your right to deny access onto and through your land. Denying access can help prevent mining in the future.

De Grey want permission and access to carry out 'exploration' on private and public land. This could come in many different forms from taking rock and soil samples on the surface to drilling out 500 metre long samples, and clearing areas of bush to get machinery in, to seismic testing.

Even drilling at this stage could potentially cause toxic pollution. Puhipuhi is like a cake of many layers, with different types of rock and water flowing through which comes to the surface as springs around the mountain.

De Grey has stated they intend to bring up drill rig machinery this year.

If a De Grey representative knocks on your door you can tell them that your land is for agriculture, not mining and not toxic waste. That you want to keep clean water for yourself and everyone else downstream and you want people upstream to protect the water supply too. Exploration that leads to mining will not achieve us to this.

You could say you refuse access and permission to drill on your land, or diagonal drilling under your land from a neighbouring area. Also, that you don't want trucks and heavy machinery, explosions and night lights disturbing you.

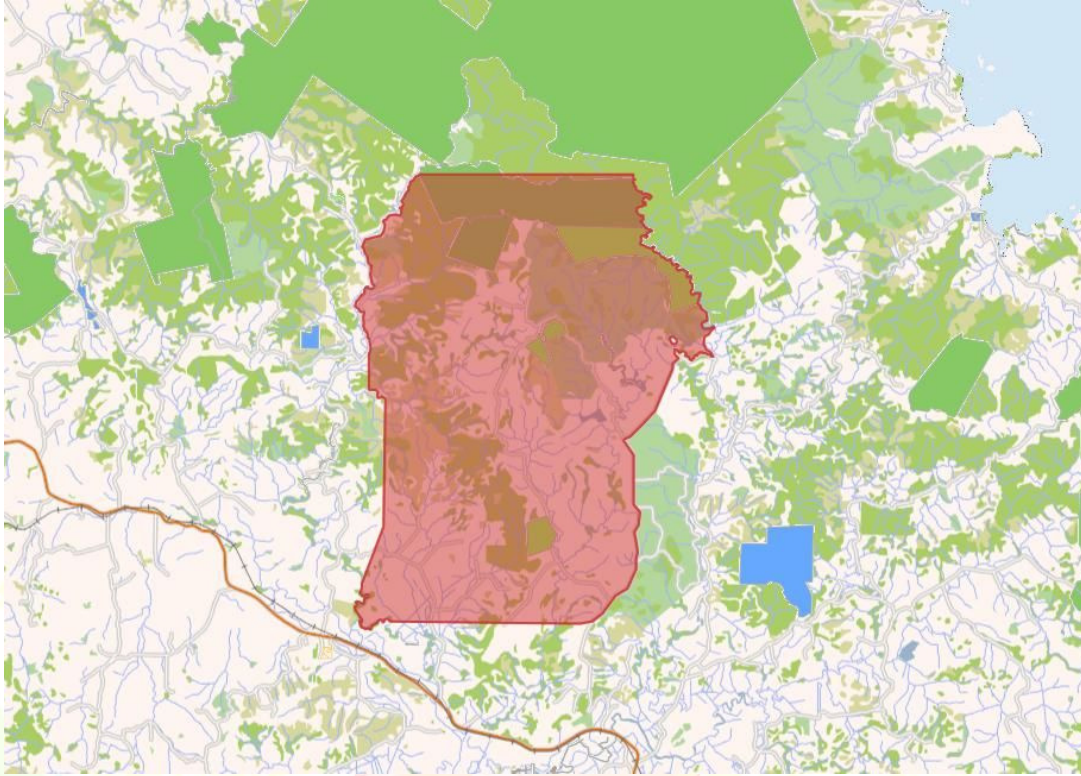
If you do have a conversation with a De Grey representative make sure you write down what was said on both sides with date, location and names and keep it somewhere safe. You may need this in the future.

Please act to look after the water that we all share.



The Martha Mine at Waihi used to be a mountain. The mountain, Pukewa, has now been crushed and turned to toxic waste to extract gold for Newmont, one of the world's largest gold mining companies.

Exploration for Gold on Puhipuhi Conservation Land



This map shows, in red, the area in which De Grey Mining holds an existing exploration permit. Exploration includes drilling and bulk sampling. If De Grey confirms that the extraction of the minerals in this area will be economically viable, then it is likely that mining permits and resource consents will be sought in this area. There is a high probability that an application will eventually be filed to mine within the red area. All land outside the red area on this map, and further afield, is currently under permit for prospecting. Tenders were called in 2012 for exploration to be carried out in those areas. Tenders will be awarded across Northland on 8 April 2013. Exploration is significantly more intrusive than prospecting. The areas shaded green are land managed by the Department of Conservation (DOC). It is not yet known what the areas marked in blue signify.

The Whangarei Area Office of DOC has received an application from De Grey Mining Ltd seeking permission to access DOC conservation land for exploration within the Whangarei Area.

The areas that De Grey seeks permission to access are as follows:

- Russell Forest (Pt Northland Conservation Park)
- Russell Forest (Addition No2) Conservation Area
- Waikiore Conservation Area
- Pukekaikiore Stream Marginal Strip
- Puhipuhi Conservation Area

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