



# Mining Ombudsman Case Report: Tolukuma Gold Mine



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## Feedback welcome

We appreciate any feedback, comments or input you may have about issues and cases discussed in this report. Comments can also be emailed to:  
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*Cover: Morris Movi points to the Auga River where DRD/TGM dumps over 160,000 tonnes of mine waste annually from the Tolukuma mine. He is concerned about negative environmental and health impacts and the lack of compensation and development from the mine.  
Photo: Ingrid Macdonald/Oxfam CAA*

*Left: Rose from Gaiva 2 describes the negative social, economic, health and environmental impacts on local women that have arisen since the Tolukuma Gold Mine started operation in PNG. Photo: Ingrid Macdonald/Oxfam CAA*



# The Mining Ombudsman project

**In the past few decades, the Australian mining industry has increased its activity in economically developing countries in the Asia-Pacific, Africa and the Americas. Australian mining operations are increasingly impacting on poor and vulnerable communities – the same communities that Oxfam Community Aid Abroad has worked with for over 50 years.**

Many communities have complained of human rights abuses and environmental degradation caused by, or on behalf of, Australian mining companies. These communities often have no institution they can go to for fair and equitable redress, so companies are able to disregard their concerns. This sometimes leads to costly legal actions and violent confrontations. This case report on Tolukuma Gold Mine (TGM) illustrates some of the negative impacts that mining can have on local women, men and children.

*Below: Local women from throughout the Auga/Dilava Valley walk long distances across rugged and difficult terrain carrying food to sell for small amounts of money at TGM (behind them). They fear robbery and sexual assault along the way.  
Photo: Ingrid Macdonald/Oxfam CAA*

**In February 2000, Oxfam Community Aid Abroad set up the Mining Ombudsman to:**

- Assist women and men from local and indigenous communities whose human rights are threatened by the operations of Australian-based mining companies.
- Assist women and men from communities that are, or might be, affected by a mining operation to understand their rights under international law.
- Help ensure that the Australian mining industry operates in such a way that the rights of women and men from local communities affected by mining are better protected.
- Demonstrate the need for an official complaints mechanism within Australia.
- Demonstrate the need for enforceable, transparent and binding extra-territorial controls that would require Australian mining companies to adhere to universal human rights standards wherever they operate.

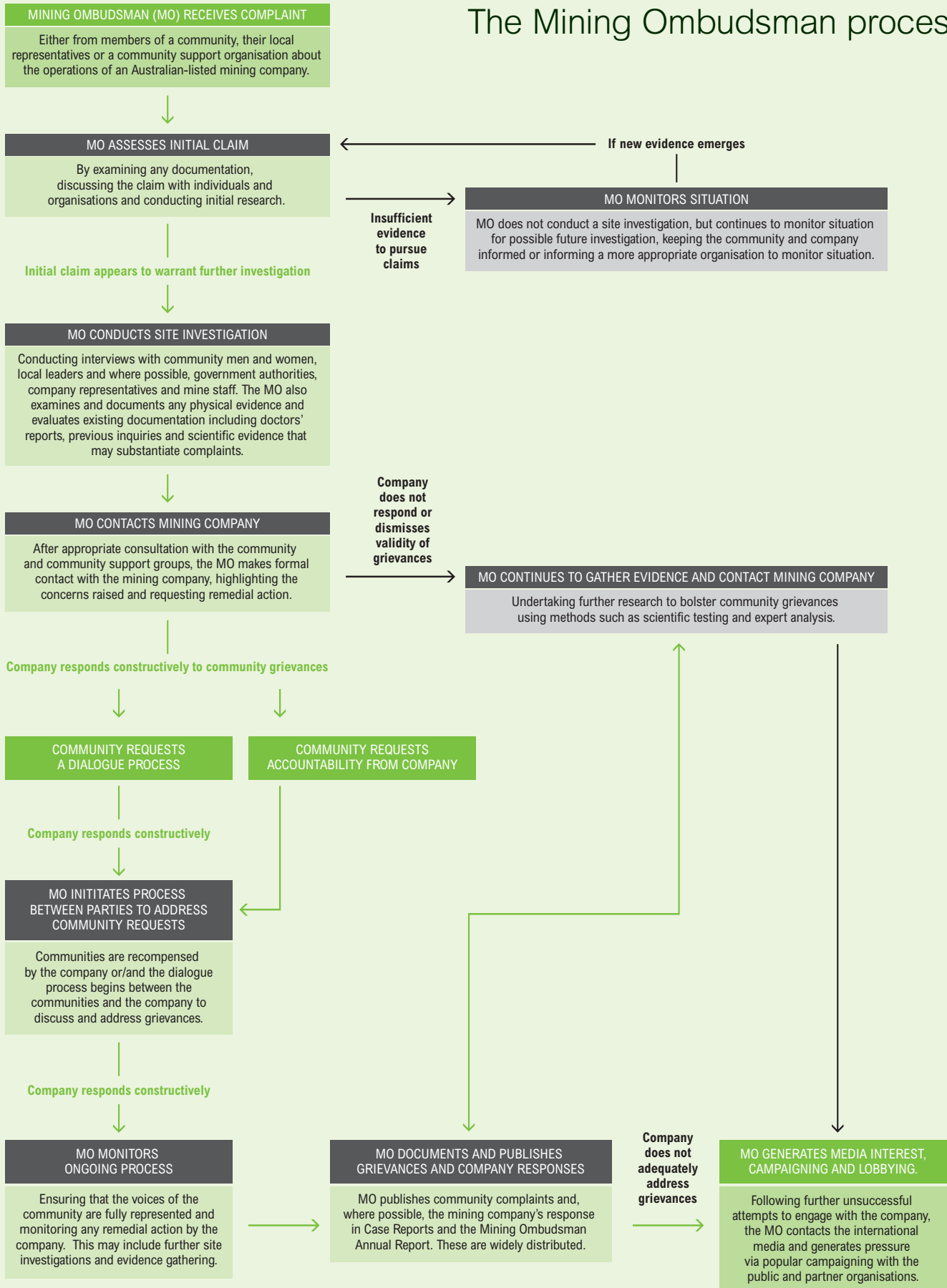
The Mining Ombudsman receives complaints through Oxfam Community Aid Abroad networks in Asia, the Pacific, Africa and the Americas. The Mining Ombudsman checks all claims through site investigations; a process involving extensive interviews with local community men, women and youth, civil society organisations and where possible, government and company officials.

The Mining Ombudsman then produces an investigation report that is sent to all stakeholders for comment and action, and undertakes on-site progress evaluations every 18 months to two years. It is not the Mining Ombudsman's role to judge individual mining projects, but rather to try to ensure that companies treat local communities in a fair and equitable manner, respecting the human rights of local women and men.

A detailed discussion of the framework and arguments in favour of a complaints mechanism for the mining industry is available in the *Mining Ombudsman Annual Report 2004* at: [www.oxfam.org.au/campaigns/mining](http://www.oxfam.org.au/campaigns/mining)



# The Mining Ombudsman process





Above: The local Priest from Gaiva 2 explains to the Mining Ombudsman how their village has successfully pursued their own form of development separate from the mine, but they now fear that TGM's exploration in their area will destroy their livelihoods. Photo: Ingrid Macdonald/Oxfam CAA

## The rights-based approach

Oxfam Community Aid Abroad takes a rights-based approach to its work. This approach reflects the view that poverty results from the denial and violation of the human rights of women and men by entities that have more access to power, or through systems that are based on injustice, inequality and discrimination. An explanation of the application of this approach to the mining industry is contained in the *Mining Ombudsman Annual Report 2004* available on the website at:

[www.oxfam.org.au/campaigns/mining](http://www.oxfam.org.au/campaigns/mining)

## Human rights and transnational mining corporations

Over the last few decades, there have been considerable changes in the structure of international society. Transnational corporations, including mining companies, have gained unprecedented influence over patterns of economic development – particularly in developing countries which are competing for foreign direct investment.

As stated in an Oxfam America briefing paper:<sup>1</sup>

*"Foreign direct investment (FDI) ... has become such an important part of global development strategies that it has replaced foreign aid as the main source of external capital for many developing countries. Today, FDI amounts to about 60 per cent of the international capital flowing into developing countries each year and is nearly ten times larger than official development assistance. In contrast, in the late 1980s, the amounts of annual aid and FDI in developing countries were roughly the same."*<sup>2</sup>

Recent figures also show that the revenues of five of the largest transnational corporations are more than double the combined Gross Domestic Profit of the poorest 100 countries.<sup>3</sup>

Given the increasing power of the private sector throughout the world, including the mining and minerals sector, it is essential that companies contribute positively to poverty alleviation and development by upholding and promoting the human rights of people affected by their activities. This is especially important when mining companies operate in

countries where the national laws are inconsistent with international human rights standards, or in the majority of cases, where human rights standards are integrated into national law yet the relevant governments fail to uphold these standards. For further information see the *Mining Ombudsman Annual Report 2004* available on the website at:

[www.oxfam.org.au/campaigns/mining](http://www.oxfam.org.au/campaigns/mining)

## The need for accountable management of mining revenues

The full public disclosure of payments made by mining companies, governments and other entities is fundamental if mining is to generate benefits for local communities and not undermine their human rights. The details of how disclosure of government payments by mining companies should work are set out in the Publish What You Pay campaign (<http://www.publishwhatyoupay.org>).

The *Mining Ombudsman Annual Report 2003* also highlights gaps in existing disclosure laws about the funders and insurers of mining companies and projects which is available on the website at:

[www.oxfam.org.au/campaigns/mining](http://www.oxfam.org.au/campaigns/mining)



## Oxfam Community Aid Abroad's approach to mining

Oxfam Community Aid Abroad is an independent, non-government aid and development agency and the Australian member of the Oxfam International confederation. For over 50 years, Oxfam Community Aid Abroad has been a vehicle for Australians to assist others to build a fairer and more sustainable world by fighting global poverty and injustice. The agency undertakes long-term development projects, provides humanitarian responses during disaster and conflict, and advocates for policy and practice changes that promote human rights and justice.

Oxfam Community Aid Abroad takes a rights-based approach to its work. This reflects the view that poverty and suffering

are primarily caused and perpetuated by injustice between and within nations, resulting in the exploitation and oppression of vulnerable peoples. Such injustice and suffering are neither natural nor inevitable, but result from the violation of the human rights of women, men and children by people or institutions that have greater access to power, and through systems based on injustice, inequality and discrimination.

Oxfam Community Aid Abroad speaks in its own voice. It does not assume a mandate to speak on behalf of others, but aims to facilitate people speaking for themselves. Oxfam Community Aid Abroad is not opposed to mining, but believes it must be undertaken in accordance with rights codified under the international human rights system,

particularly the right of women and men from communities to give or withhold free, prior and informed consent to both exploration and mining activities.

Oxfam Community Aid Abroad believes that private sector investment can be a driver of economic growth and poverty reduction, provided appropriate regulations and controls exist. However without adherence to human rights standards, mining can cause the loss of land and livelihoods, degradation of land and waterways, and increased violence and conflict. The most vulnerable or marginalised members of communities – women, children and indigenous peoples – tend to be most excluded from the economic benefits of mining, and to bear the brunt of its negative social and environmental impacts.

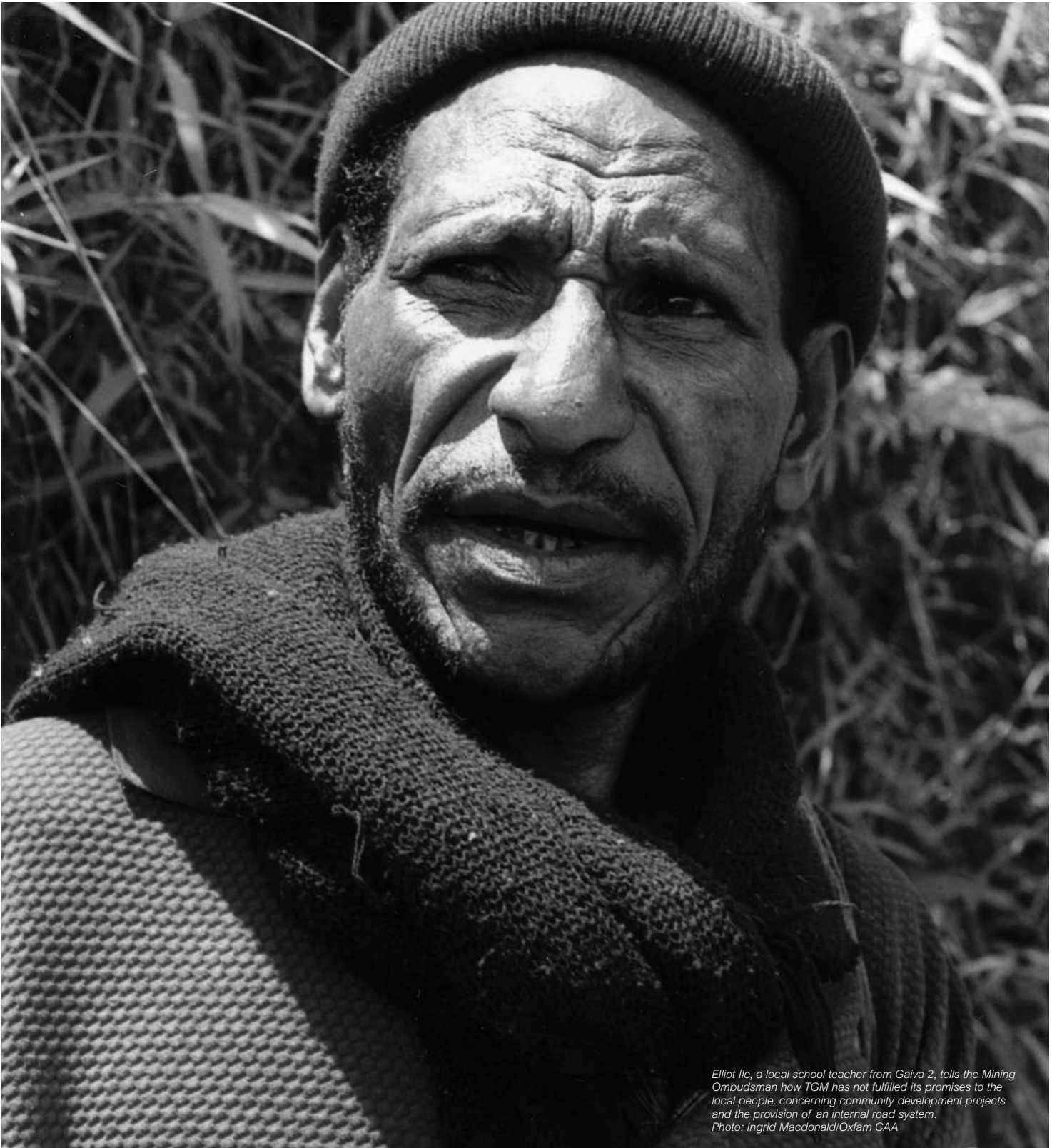
## A Summary – The Benchmarks for the Mining Industry

Oxfam Community Aid Abroad believes all company operations should apply the same set of universal standards no matter where a company operates. Oxfam believes mining companies should:

- respect the rights of local and indigenous communities to free, prior and informed consent;
- avoid, minimise and remediate mining's impact on the environment and maximise the benefits to communities;
- not forcibly remove or resettle local and indigenous community women and men to facilitate mining;
- fairly compensate individuals or groups suffering loss of assets, income or amenities;
- never perpetuate systems of oppression, exploitation and marginalisation;
- not initiate, encourage or become involved in actions by police or armed forces of a host country that are likely to lead to human rights abuses;
- not partake in corrupt activities and avoid activities in conflict zones;
- recognise and respect the special relationship that indigenous peoples have to their land and ensure women have the right to be free of discrimination and harassment;
- recognise the right of indigenous peoples and women to participate in all negotiations and decision-making concerning their natural resources, land and rights to development;
- apply the same social and environmental standards of operation to which they would be required to adhere in their home country.

These benchmarks represent a summary of the Benchmarks for the mining industry which are available in Appendix 1 of the *Mining Ombudsman Annual Report 2004* and on the website at [www.oxfam.org.au/campaigns/mining](http://www.oxfam.org.au/campaigns/mining)

# Tolukuma Gold Mine



*Elliot Ile, a local school teacher from Gaiva 2, tells the Mining Ombudsman how TGM has not fulfilled its promises to the local people, concerning community development projects and the provision of an internal road system.  
Photo: Ingrid Macdonald/Oxfam CAA*



**Resource:** Gold/Silver

**Mine location:** Goilala District, Central Province, Papua New Guinea.

**Mining method:** Open pit/underground mine.

**Affected communities:** Yaloge, Dilava, Ononge, Roro, Mekeo, Gaiva and Kuni people.

**Community groups:** Auga River Waterway Resource Owners Association (ARWROA). Golob People's Association. The Dilava Community (Working Committee). Daiana Resources. Tsiodgai People's Association. Auga/Dilava Catholic Women's Group. Mekeo Pressure Group.

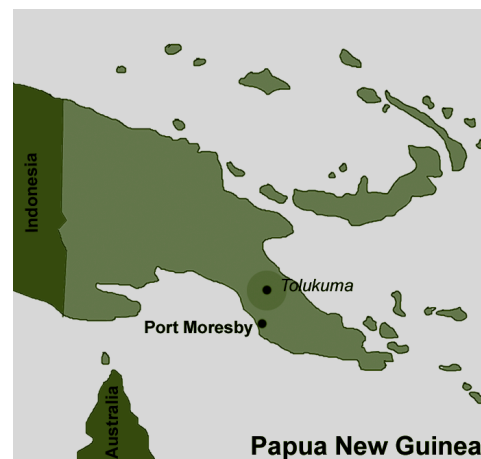
**Community support groups:**

Centre for Environmental Law and Community Research (CELCOR). Centre for Environment and Development (CERD). Environmental Law Centre (ELC). Catholic Church of Bereina Diocese.

**Mine operator:** Tolukuma Gold Mine (TGM)

**Mine owner/s:**

(1983-1993) Newmont Australia Ltd  
(1993-1998) Dome Resources  
(1999) Dome Resources (80%)/Durban Roodepoort Deep (DRD) Ltd (20%)  
(2000-present) DRD



## Introduction

The Tolukuma Gold Mine (TGM) is located 100 kilometres north of Port Moresby in the Goilala District, Central Province of Papua New Guinea (PNG). TGM is owned and operated by Durban Roodepoort Deep Ltd (DRD), which is listed on the Australian Stock Exchange. In July 2004, DRD also became the majority owner of the Vatukoula Gold Mine in Fiji, which is the subject of a separate Mining Ombudsman investigation. A copy of the Mining Ombudsman case report on the Vatukoula Gold Mine is available at:

[www.oxfam.org.au/campaigns/mining](http://www.oxfam.org.au/campaigns/mining)

The Oxfam Community Aid Abroad Mining Ombudsman received a formal request from the local community women and men affected by the Tolukuma mine in 2001. This request followed an incident in 2000 where a helicopter dropped one tonne of cyanide during transportation to the Tolukuma mine. During the initial investigation in 2001, the Mining Ombudsman met with community women and men from the Auga and Dilava Valley, some of whom walked for days to discuss their concerns.

DRD did not respond to the grievances of the local community as detailed in the *Mining Ombudsman Annual Report 2001* or to three subsequent letters sent to DRD in 2001 and 2002. However, DRD reacted immediately to the release of the *Mining Ombudsman Annual Report 2002* via a media statement acknowledging its accountability to the PNG government, the local communities and its shareholders.<sup>4</sup>

The grievances of local community women and men have been ongoing since 2001, and focus on:

- Environmental pollution, which they attribute to the dumping of over 160,000 tonnes of mine waste annually into the Auga/Angabanga Rivers.
- Increased river sedimentation and flow causing flash floods, which have been blamed for sweeping away a child, and making the river difficult or impossible to cross.
- Illnesses and deaths which the community men and women attribute to drinking and washing in the river.

- Threats to food security.
- Noise and other disturbances associated with TGM's use of helicopters.
- Lack of informed consent concerning TGM's on-going exploration activities.
- The lack of local infrastructure and development, especially roads and health facilities.
- Increased social problems, including alcoholism and violence.
- Poor communication and the company's lack of transparency regarding information disclosure.

There are also many concerns over the inadequacy of the Memorandum of Agreement (MOA), which is the main vehicle for how royalties, compensation and development are distributed and contributed to by TGM. The MOA is only concerned with the three clans living within the mining lease area, ML 104 – the Hameng, Yaulo and Yangam. ML 104 is where the Tolukuma mine is physically located and does not include the downstream communities which are impacted by TGM's dumping of mine waste directly into the Auga River; other clans impacted by the helicopter disturbance; and all those impacted by the changes brought to the area since TGM began operating.

As detailed in the *Mining Ombudsman Annual Report 2001, 2002 and 2003*, these grievances have been re-affirmed and validated in reports by the non-government organisation (NGO) Environmental Watch Group (NEWG), the Centre for Environment, Research and Development (CERD), the Centre for Environmental Law and Community Rights (CELCOR), the St. Gerard's School of Nursing and independent researchers.<sup>5</sup>

In addition to interviews carried out in 2003 and 2004, the Mining Ombudsman

returned to Tolukuma in January 2004 to undertake a monitoring investigation. During this investigation the Mining Ombudsman met with representatives from PNG NGOs, the Auga River Waterway Resource Owners Association (ARWROA), the Golob People's Association, the Tsiodgai People's Association, the Avubab, the Catholic Church of Bereina Diocese, the PNG Department of Environment and Conservation (DEC) and the Department of Mines. The Mining Ombudsman also travelled to local communities, such as Fane, Maua, Idu, Dubiulenga, Yumu, Gaiva, Mondo and Tolukuma and attended community meetings involving hundreds of participants. In addition, TGM granted the Mining Ombudsman and a representative from a local NGO, a meeting with TGM's Community Relations Office (CRO), Exploration department and Mine Manager.

As a result of the January 2004 monitoring investigation, the Mining Ombudsman found that the grievances of the local communities had not altered substantially nor had they been addressed since the initial investigation was carried out in 2001. Many community men and women were further frustrated by TGM's recent portrayal in the media – claiming that the public rhetoric of the company does not match what is really happening on the ground.

Since December 2002, DRD has made some effort to engage with local communities, civil society organisations and the Mining Ombudsman. Letters and meetings as detailed in the chronology have improved communication between the parties, however, this appears to have had more impact at a head-office and Chief Executive Officer level rather than at the actual mine-site. Further, two interviewees in January 2004 expressed positive statements about the performance of the mine since the arrival of the new Mine Manager.

***"The company are here today and gone tomorrow – we are here to stay for generation after generation – they should respect and listen to us and not treat us like they do."***

**Name withheld – ARWROA and former MP for Goilala District.**

# Chronology of events

## 1983

Newmont Australia Ltd conducts mineral exploration.

## 1993/94

Dome Resources acquires Newmont Australia's interest in Tolukuma and commences mine operations as Tolukuma Gold Mine (TGM).

## 27/02/1997

Memorandum of Agreement signed in Sydney, Australia in contested circumstances.

## 1999

Durban Roodepoort Deep Ltd (DRD) acquires 20 per cent interest in Dome Resources and TGM.

## 2000

DRD acquires Dome Resources and TGM.

## 21/03/2000

During transportation to the mine, a helicopter drops one tonne of cyanide in the Yaloge River Valley 20 kilometres south of the Tolukuma mine.<sup>6</sup>

## 12/04/2000

The Mining Ombudsman writes to Dome Resources at the request of local community members, outlining community concerns over the company's handling of the cyanide spill.

## 05/2000

Minproc Limited submits an internal review on the Tolukuma mine to DRD.

## 23/08/2000

Affected landowners forward a petition documenting their grievances with the Tolukuma mine to TGM and the Papua New Guinea (PNG) Department of Environment and Conservation (DEC).

## 13/09/2000

A helicopter drops 4,000 litres of diesel fuel on the outskirts of the Tolukuma mine whilst in transit to the site.

## 06/10/2000

TGM and the DEC respond separately to the community petition of 23 August 2000, both denying responsibility for the grievances.

## 01/2001

Landowners affected by the Tolukuma mine set up the Auga River Waterway Resource Owners Association (ARWROA) to represent them in dealings with TGM.

## 21/03/2001

The landowners, dissatisfied with the response to their petition, write to the DEC indicating their intention to take legal action against TGM.

## 23/04/2001

DEC write to the PNG Department of Mines advising of the need for the construction of a series of dams designed to minimise sedimentation and turbidity problems downstream from the mine. This letter also alludes to the need for further independent studies and the possibility of increased compensation for landowners.<sup>7</sup>

## 23/05/2001

NGO Environmental Watch Group (NEWG) writes to TGM requesting the re-negotiation of the landowners' compensation package.

## 06/2001

Tolukuma Gold Mine is included as a case in the Mining Ombudsman Annual Report 2001.

## 03/08/2001

The Mining Ombudsman conducts a case investigation and hears submissions from more than 100 representatives from 24 villages.

## 3/08/2001

ARWROA writes to the Mining Ombudsman requesting further assistance in negotiating the Tolukuma case.

## 14/08/2001

The Mining Ombudsman writes to DRD outlining community grievances. Follow-up letters are sent on 25 October 2001 and 18 June 2002 without response from DRD.

## 29/07/2002

Local civil society groups conduct scientific tests and obtain information for legal proceedings.

## 04/11/2002

The *Mining Ombudsman Annual Report 2002* is released. DRD issues an immediate press release denying responsibility for elevated mercury levels within the Auga River while claiming to be in 'substantial' compliance with PNG environmental legislation.

## 08/11/2002

The Mining Ombudsman writes to DRD clarifying community concerns raised in the *Mining Ombudsman Annual Report 2002*, which is responded to by DRD on 13 November 2002.

## 14/11/2002

St Gerard's School of Nursing releases a report suggesting contamination of the Auga/Angabanga Rivers from TGM discharges. This includes reports of 18 unexplained deaths and 106 people who are very ill.

## 22/11/2002

DRD issues an open letter to shareholders disclosing and rebutting the issues raised by the Mining Ombudsman.

## 09-15/02/2003

The Mining Ombudsman travels to PNG and discusses the Tolukuma case with community representatives, NEWG, CELCOR and the Central Province Governor.

## 11/03/2003

DRD meets with NEWG, raising the prospect of establishing a community environmental advisory committee for the Tolukuma mine.

## 19/03/2003

DRD meets with Oxfam Community Aid Abroad to discuss the proposed environmental advisory committee, scientific testing and allegations that exploration has been conducted without landowner permission.

## 18/06/2003

DRD advises that it has met with local communities, wishes to pursue the environmental advisory model, expects to make the results of recent scientific tests public, and disagrees that it has not obtained the consent of landowners to conduct exploration.

## 22/08/2003

The Mining Ombudsman writes to DRD requesting that it addresses current grievances before further exploration occurs and recognises established associations and landowner groups during consultation processes.

## 17/09/2003

Oxfam Community Aid Abroad releases the Mining Ombudsman Annual Report 2003.

## 18/09/2003

DRD responds to the Mining Ombudsman Annual Report on its website, claiming the report contains inaccuracies, and defending its conduct.<sup>8</sup>

## 18/09/2003

A helicopter drops one tonne of fuel near Karamé village in the Auga Valley, with the fuel spreading across an area estimated at 400 square metres.<sup>9</sup>

## 25/09/2003

DRD responds to the Mining Ombudsman's letter of 22 August 2003 claiming there is no opposition to exploration and defending its approach to consultation.

## 03/10/2003

Results of an environmental health and water quality investigation conducted by DEC and the Central Province Health Division asserts that the presence of heavy metals in water and blood samples were below the compliance criteria for the mine.<sup>10</sup>

## 25/11/2003

The Chief of Gaiva Clans writes to TGM indicating that all negotiations about mineral exploration in their lands must proceed through the Tsiodgai Peoples Association.

## 05/12/2003

The Mining Ombudsman writes to DRD, reaffirming community concerns.

## 14/01/2004

The Mining Ombudsman travels to PNG for a follow up investigation in the Goilala Valley and discussions with stakeholders.

## 03/2004

TGM is announced as the most profitable mine within the DRD group between the months of October and December 2003.<sup>11</sup>

## 09/07/2004

The *Mining Ombudsman Monitoring Investigation 2004* sent to DRD for response.

## 02/08/2004

DRD responds to the Mining Ombudsman Monitoring Investigation.

## 09/08/2004

The Mining Ombudsman travels to PNG and conducts discussions with local stakeholders.

## 19/08/04

DRD is listed on the Port Moresby Stock Exchange.

# Status of grievances

## 1. DRD's outdated waste disposal practices

TGM's permission to operate at Tolukuma was obtained in 1994 subject to 12 ministerial conditions. In the preamble to these conditions, the previous Minister for the Environment and Conservation urged TGM:

*"...to adopt a policy of continuous investigation/analysis and adoption of means and ways to contain mine waste on land rather than direct river discharge."*<sup>13</sup>

TGM does not contain its mine waste on land, instead it discharges more than 160,000 tonnes of contaminated mine tailings annually into Iwu Creek, which runs into the Auga River.<sup>14</sup> Substantial quantities of mine waste and rock, otherwise known as 'overburden' are also dumped into the Auga River via 'failing waste dumps' that erode over time. TGM opted for this outdated practice of riverine tailings disposal even though the company was warned that the resulting high levels of sedimentation within the river would likely destroy fish habitats and food resources.<sup>15</sup> Figure A on page 12 details some of the problems that have been associated with riverine tailings disposal.

As discussed in Figure A, leading mining companies and the World Bank Group no longer support riverine tailings disposal in their projects. Indeed, the method is now only used on the island of New Guinea. DRD's use of this disposal method appears to conflict with the company's publicly stated approach to environmental management, which emphasises "moving beyond compliance to adoption of best practice, having taken cognisance of global trends."<sup>16</sup> It should also be noted that riverine tailings disposal is the least expensive disposal option, requiring only minimal infrastructure.<sup>17</sup>

DRD argues that riverine tailings disposal is far safer than constructing a tailings dam at Tolukuma, because of heavy rainfall, shifting soil and seismic activity in the region. The company argues that a tailings dam at Tolukuma could result in its breaching, leaching or overflowing.<sup>18</sup> While the company claims to possess studies showing the unsuitability of a tailings dam at TGM, it is yet to communicate the findings to affected local community women and men or the Mining Ombudsman.



Above: Morris Movi describes how TGM's dumping of mine waste directly into the Auga River has negatively affected the fish, eels and prawns, as well as the health of the people in his village. Photo: Ingrid Macdonald/Oxfam CAA

DRD has confirmed that the Tolukuma mine is now treating and discharging a monthly average of 14,000 tonnes of tailings, which equates to an annual figure of 168,000 tonnes – which is much higher than the 100,000 tonnes discharged in 2000.<sup>19</sup> An increase in tailings also means an increase in production, and TGM has recently reported that it expects this to continue in the future:

*"With present reserves, the mine can expect to remain operating for at least another six to eight years, but with the introduction of the new underground diamond head drill, it is hoped (and expected) that the mine could be going for at least 10 years and hopefully longer."*<sup>20</sup>

TGM's future plans will have a major impact on the Auga/Angabanga rivers. As levels of tailings dumped into this river system increase, so will the contamination, sedimentation and destruction of fish habitats and food sources. The consequences for the communities living downstream from the mine could be devastating.

It should be noted that DRD recently acquired a 20 per cent share in the Porgera Gold Mine in PNG, the largest gold mine in the country, which also uses the out-moded practice of riverine tailings disposal.

***"They have to contain it somehow, somewhere. If they had the technology to come into a rugged terrain like this and put up a mine in a place that is so remote and so rugged then they should have the technology to be able to control the waste that is coming out of it. We are saying, 'Please don't do it to us... what you do not do in your own countries.'"***<sup>12</sup>

Matilda Koma, from the Centre for Environment and Development (CERD) and local person from the Auga/Dilava area.



## Figure A: Riverine tailings disposal – an outmoded practice

Riverine tailings disposal is the process of discharging mine tailings, or the waste rock and residues from the ore extraction process, directly into a river system. It increases the sediment load within a river system resulting in sediment build up, which in turn can generate reduced river flow and heightened frequency and severity of riverbank flooding. Water logging and the sediment build up can also produce a phenomenon called 'dieback', where the amount of oxygen in the river system is reduced to the point where riverside vegetation dies.<sup>21</sup> The quality of the river water can also be damaged due to the release of heavy metals, other minerals and process chemicals within the tailings.<sup>22</sup> Larger sediment loads and decreased water quality may subsequently have a negative impact on aquatic life within affected rivers.

An industry-sponsored research paper prepared for the Mining, Minerals and Sustainable Development project states:

*"The main concerns with riverine disposal are that river ecosystems are highly vulnerable to the addition of excessive quantities of sediment. Sedimentation of the river bed creates major problems with flooding and the consequent rising of water tables downstream destroys riverine and floodplain forests and any associated agricultural developments. It is thought that this approach should be discounted on the grounds of sustainability as it leaves a massive environmental burden for future generations."*<sup>23</sup>

The use of riverine tailings disposal has gradually diminished worldwide. The only mine sites where it is still formally employed are all situated on the island of New Guinea – at Grasberg in West Papua, Indonesia and at Porgera, Ok Tedi, and Tolukuma in PNG. The PNG Minister of Mines, the Hon. Sam Akoitai, also announced in late 2003 that riverine tailings disposal would not be permitted to be used at any new mining projects in the country. Furthermore, the recent Extractive Industries Review Report commissioned by the World Bank Group concluded that:

*"Riverine tailings disposal is considered by some companies to be a practice of the past that is no longer acceptable. Scientific evidence clearly demonstrates that this method of waste disposal causes severe damage to water bodies and surrounding environments, and at least three major mining companies – Falconbridge, WMC, and BHP – have made public statements that they will not use riverine tailings disposal in future projects. In practice, this technology is being phased out due to recognition of its negative consequences..."*<sup>24</sup>

The Extractive Industries Review agreed with the call for a ban on riverine tailings disposal. It should also be noted that the World Bank Group does not fund projects using this technology.

### The health of communities living along the Auga River

In January 2004, the Mining Ombudsman found that community men, women and youth remain adamant that their health has been severely damaged by TGM's dumping of mine waste into their river system. The communities living downstream along the Auga River are the Fuyuge, Kuni, Mekeo and the Roro people. There are many accounts of people dying or becoming ill with swollen stomachs, open sores and yellow feet, after bathing in, drinking or walking through the river.

Community members also say that illnesses escalate during the dry season when alternative water sources dry up and they are forced to drink the polluted river water, especially in Tula, Yumu and Hala. They simply want to find out what is behind their illnesses and what has caused more than 50 unexplained deaths since 2001.<sup>25</sup>

*"There are many of these instances that are not researched by the mine, there are many related deaths that the mining company does not want to answer or does not want to know. They told us we are outside of ML 104 so the deaths are outside the current activity that is happening in the mine."*

Name withheld, man from the Auga Valley.

The communities living along the Auga River have vigorously maintained that their sickness is not related to poor hygiene. They assert that they are not living any differently from the way they did prior to the establishment of the mine and that the advent of new illnesses coincided with the mine's arrival.

Evidence relating to the pollution of the Auga River has been found in various independent and internal DRD studies. In 1998 a survey conducted by Unisearch revealed mercury levels exceeding Australian and New Zealand Food Authority (ANZFA) maximum permitted concentrations in fish species. The PNG Office of Environment and Conservation (DEC) also found that mercury levels in the Auga River downstream from TGM exceeded acceptable levels.<sup>26</sup> A leaked internal DRD report that reviewed TGM's operations, raised questions in 2000 as to whether the mine was complying with some of the PNG ministerial conditions, specifically in relation to the potential risk of biological uptake of heavy metals in the Auga/ Angabanga river system.<sup>27</sup>

The internal DRD report recommended that TGM should build a flotation facility at Tolukuma and that waste with a high sulphide, heavy metal content be buried on mine property.<sup>28</sup> The proposed flotation facility would separate heavy metals from the mine waste being dumped into the river, and thereby reduce toxicity. Despite repeated requests by the Mining Ombudsman, DRD has not yet released information as to why a flotation facility has not been constructed nor how (or if) it is treating its wastes.<sup>29</sup> Instead DRD has advised the Mining Ombudsman:

*"...as previously advised in our meetings, the report referred to which recommended a flotation circuit was fully researched and found to be inaccurate."*<sup>30</sup>

Water quality investigations carried out during 2002 by PNG civil society organisation NEWG also found unacceptable levels of certain heavy metals in the Auga River.<sup>31</sup> Other reports from nurses at the St Gerard's School of Nursing<sup>32</sup> documented health concerns and 19 unexplained deaths.

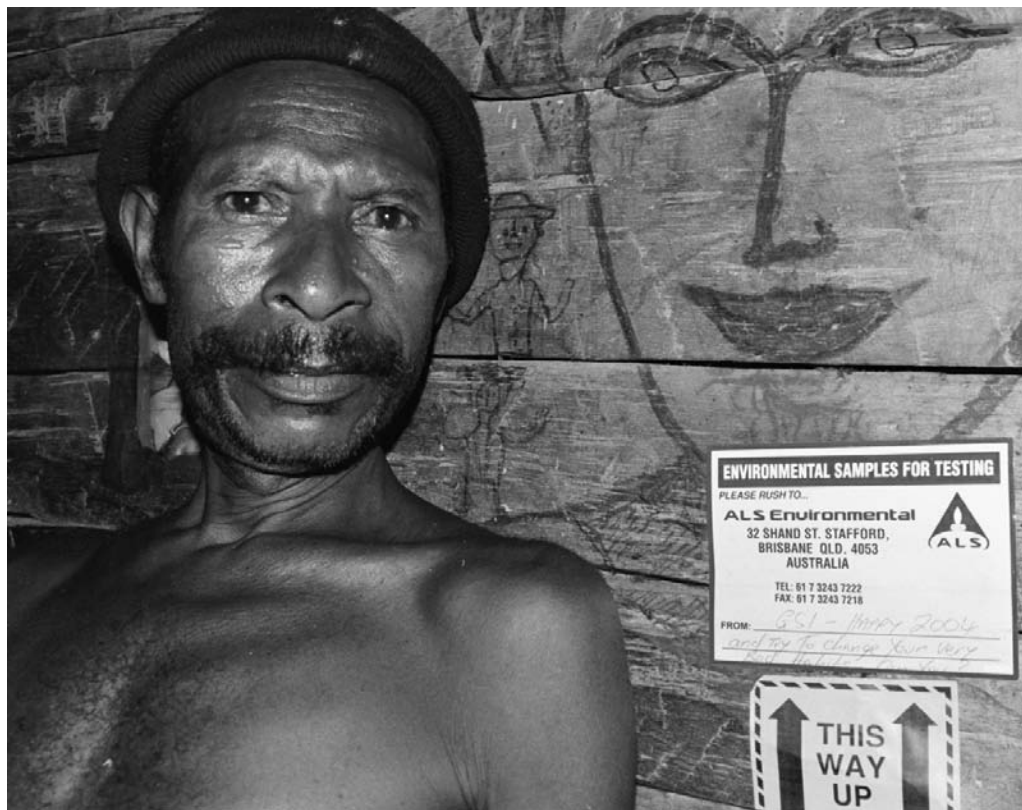
### Increased sedimentation affecting health, safety and food security

During an investigation in January 2004, the Mining Ombudsman observed the silver, milky and red-orange colour of the Auga River downstream from the mine, was unable to see the riverbed and smelt an unpleasant odour coming from the river. The Mining Ombudsman then travelled to the Auga River above TGM's riverine tailings discharge point where the water was clean and clear, with no odour present. Community members described how the conditions of the river downstream make it dangerous or impossible for them to cross and access food crops.

Since 2001, community men and women have spoken of the loss of their vegetation and fruit trees on the banks of the river, falling productivity of food crops, and the devastation of fish, prawn and eel populations. The locals say these problems are to blame for the increased levels of malnutrition and dietary-related illness amongst children, women and the elderly. Locals have also described the advent of flash flooding along the Auga River, which has made the river deadly. In January 2004, Mr Muluvi Eleli told the Mining Ombudsman that his daughter was swept away and killed when, without warning, the mine released blockages of waste from upstream. The impact of the river pollution is also felt emotionally and spiritually by the communities. The elders express sadness at the loss of community identity and tradition when the land and waterways are degraded. They tell of how power is derived from giving traditional names to fish, eels, and boulders. The sacred sites in the river are now covered by sediment and the aquatic life in the river is almost gone. The elders grieve for their children and grandchildren who are losing their traditions and identity.

The observations made by the local people about the Auga River are consistent with the warnings given to TGM prior to the mine opening that its activities would have an obliterative impact on fish habitats and food resources.<sup>33</sup> They are also consistent with warning contained within DRD's own internal report on TGM,<sup>34</sup> and a paper prepared for the Mining, Minerals and Sustainable Development project which stated:

*"Riverine disposal may have significant biological impacts. Increased sediment loads and changes to the flow regime may change the number and population of aquatic species. For example, migratory fish may not be able to reach tributary rivers for spawning."*<sup>35</sup>



Above: Muluvi Eleli alleges that a flash flood in the Auga River that was caused by TGM swept his daughter away and caused her death. Photo: Grant Walton/CERD

***"The way we used to see the river was very clear and we could see the rocks we would cross, we could see what was in the river. Now we don't like the river, we hate the river, and the respect we had for the river we don't have anymore. It gives us pain and fear that we don't like the river."***

Name withheld, community representative from Goro.

As discussed in Figure A on page 12, riverine tailings disposal causes sedimentation, particularly at the lower reaches of a river. As a result of this, the PNG Department of Environment and Conservation (DEC) wrote to the PNG Department of Mines on 23 April 2001 recommending that a series of dams be constructed at the Tolukuma mine site. The letter also suggested a need for further independent studies and explored the possibility of increased compensation for landowners.<sup>36</sup> DRD has not disclosed whether or not it has heeded the advice of the DEC despite repeated requests for this information by the Mining Ombudsman.

### DRD pays no compensation to downstream communities

Despite ongoing complaints about health, safety and environmental impacts from local communities living downstream from the Tolukuma mine, communities state they have received no compensation. One leader speaking on behalf of the Gaiva village during a community meeting in January 2004 told the Mining Ombudsman that TGM staff have accused him of telling

lies about the amount of resources that he used to get from the river. Other community representatives stated that mine staff have accused them of poisoning the river in order to get compensation from TGM.

In PNG, the state holds the right to use a river but this does not supplant the right of customary use. As such, the local people living along the Auga River retain their customary right to fish and collect water. Under the *PNG Environment Act*, customary landowners can seek compensation for any damage done to the Auga River and DRD/TGM, as the permit holder is required to compensate them for their loss. This means that the communities living downstream from the Tolukuma mine should be entitled to compensation from TGM for the loss of their customary use of the Auga River.

Similarly, the Mining Ombudsman was advised that a lack of compensation may contravene the *PNG Mining Act* which states that compensation is payable to owners of land "adjoining or in the vicinity of the land" being mined for loss or damage sustained as a result of the mining of a lease.<sup>37</sup>



However, in an interview with the Mining Ombudsman, TGM's Community Relations Manager advised that under the MOA, TGM is only required to compensate the landowners from the three clans living within ML 104, which does not include downstream communities.

In order to deal with some of the water problems, in 2001 TGM placed two water tanks near Mondo with the intention of providing water to the Mondo and Yumu communities. The communities report that the tanks have not been properly installed and are now rusting and covered in bush.<sup>38</sup> TGM's Community Relations Manager advised the Mining Ombudsman that the project was halted because the people had demanded disturbance compensation if the company put a pipeline across or under their land.

The communities at Mondo stated that TGM should compensate them, as they will not be able to use their land – even temporarily. The community stated that it is they who are losing out when it was TGM which had caused the problem.

### Inadequate compliance criteria and monitoring of tailings discharges

PNG legislation allows mining companies exemptions from compliance with water quality standards in discharge areas known as 'mixing zones'.<sup>39</sup> TGM's mixing zone is seven kilometres downstream from the mine tailings discharge. This means that the point for measuring compliance ('GS1') is seven kilometres from the tailings discharge point – yet internationally accepted practice is for it to be within 500 metres. As a result,

the Mining Ombudsman and local civil society groups within PNG have repeatedly requested that DRD use a 500 metre compliance point for measuring the mine's impacts on the Auga River. Even an internal DRD 2000 report acknowledges that:

*"In other countries when the impact on river systems of discharges of tailings and other wastes is monitored, the impact is usually measured either at the point of discharge or in the receiving water at the first location where mixing is considered to be completed. Complete mixing in the Auga River is likely to have occurred within 500 metres of the point of discharge. However, the impact of discharge is measured about seven kilometres (site GS1) downstream of the point of discharge. It is reasonable to suggest that at this sample site considerable dilution has occurred following complete mixing. There is thus a risk that any critical review by the authorities of the monitoring procedures would result in a request to locate site GS1 about 500 metres downstream of the discharge point. In such an event it is likely that the water compliance criteria for a number of heavy metals would be regularly exceeded..."*<sup>40</sup>

*"We have a garden next to the river and we have noticed that the garden is not as productive since the river has been polluted with chemicals from the mine. We have seen that the plants tend to have dry leaves and do not bear the food, which they used to, so now we have to plant gardens in the ridges."*

Name withheld, woman from Mondo village.





Moreover, a number of villages located within seven kilometres of the mine depend on the river for their water and food security needs, particularly during the dry season. Despite the impacts of the mine waste dumping, downstream communities say they receive no compensation from TGM for the impacts that they suffer.

In its defence, DRD has argued in an open letter to shareholders released on 22 November 2002 that:

*"...a routine environmental audit was conducted at the Tolukuma operations. The audit revealed the operations to be in substantial compliance with Papua New Guinea environmental legislation, the Tolukuma environmental plan and the environmental monitoring and management programme. Additionally, the annual environmental report for the Tolukuma operations for 2001 confirmed that Tolukuma is currently in substantial compliance with environmental and permit requirements."*

DRD advised in the same open letter to shareholders that it is accountable to its shareholders, the PNG Government and affected communities. Yet despite this acknowledgment of accountability to local communities, DRD has consistently refused to disclose its environmental monitoring reports to local people living downstream from the Tolukuma mine, despite repeated requests from the Mining Ombudsman. Further, there has been no indication from DRD as to what it means by its operations being in 'substantial compliance with environmental and permit requirements.' Lack of transparency remains a significant issue and appears to be a barrier to achieving genuine trust between the parties.

DRD also argues that a one-off water quality validation and health test conducted by the DEC/Central Province Health Department and TGM in 2003 demonstrates compliance by TGM.<sup>41</sup> Yet, it can be argued that the process and the reporting of these studies was flawed (as summarised in Figure B), and overall it is impossible to ascertain TGM's compliance given that there has been no regular, independent monitoring of the Tolukuma mine's riverine tailings disposal compliance by the PNG Government since 2000.

*Left: Chief Amo Aia and Caretaker Muluvi Eleli complain that their health has been badly affected, they can no longer drink the water and their crops have suffered since TGM started dumping over 160,000 tonnes of mine waste annually into the Auga River behind them. Photo: Ingrid Macdonald/Oxfam CAA*



*Above: Local villagers living along the Auga River show their feet which have turned yellow since TGM started dumping mine waste directly into the riverway. Photo: Grant Walton/CERD*

## Figure B: Critique of recent scientific studies

There has been no regular, independent monitoring of the compliance of riverine disposal at Tolukuma mine since 2000. In March 2003, the DEC/Central Province Health Department and TGM carried out one-off testing in the Auga Valley, which concluded that heavy metal values were below the criteria established by the DEC for compliance at TGM's seven kilometre measurement point. Yet, it can be argued that the process and the reporting of these studies were flawed, as summarised below:

- What is meant by compliance and which compliance criteria have been used in the study is unclear, leaving in doubt the degree to which compliance was achieved.
- There is no attempt to define project data quality objectives, the data quality of samples, or analytical methods used.
- No map is provided to clearly identify sampling points and insufficient samples were taken for such a complex river system.
- The analysis was conducted during the wet season when increased quantities of water dilute the mine tailings.
- There is a lack of analysis as to whether the mine was operating normally or whether there was a reduced flow of tailings being discharged.
- There is a lack of reference to quality control measures, namely chain of custody and tracking of samples, arrival temperature of the samples at the lab and calibration techniques used.
- Criteria and standards that are cited fall well short of Australian standards.

In an interview with the Mining Ombudsman, the DEC representative who conducted the study advised that he felt TGM was in compliance with the water quality standards for GS1. However, he also pointed out that the study should not be considered representative and more studies are needed during the dry season.

The TGM-funded health study of eight people carried out at the same time found no observable link between ill health and the presence of heavy metals in the river.<sup>42</sup> However:

- Blood samples were taken from a sample of only eight people and no criteria are given for how this sample was selected.
- Samples were stored at the TGM mine site.
- The investigation was undertaken in the wet season when health problems are much less prevalent as a number of different water sources are being used by communities.
- A community leader alleges that samples were deliberately only taken from healthy people.

The report itself concedes that health problems should be studied at more appropriate times and with greater alacrity and that a lack of resources prevented a wider sampling of the community from being obtained.<sup>43</sup>

## 2. Problems with helicopters



Above: DRD transports everything to and from the Tolukuma mine by helicopter as there are no roads in the area. Locals complain that the helicopters which operate seven days a week regularly drop objects and cause noise disturbance. Photo: Peter Davis/Oxfam CAA.

Right: During fuel transportation to TGM in September 2003, a helicopter dropped 4,000 litres of diesel, causing a crater. Photo: Grant Walton/CERD



As there are no roads to and from the Tolukuma mine, everything is transported in and out by helicopter. Problems associated with helicopters are a key concern for community women and men in the Goilala District. As detailed in the *Mining Ombudsman Annual Report 2001–2002*, in March 2000, one tonne of cyanide was dropped from a helicopter in the Yaloge River valley on the way to the Tolukuma mine. The Yaloge people are seeking compensation for the psychological and physical impacts of the cyanide spill; alleged illegal and unsafe packaging and transportation of the cyanide; and inadequate measures undertaken by TGM to clean up the spill.<sup>44</sup> Further, due to poor communication between TGM and affected communities, and the remote location, local reports of up to six deaths attributed to the cyanide spill have never been investigated.

In the same year as the cyanide spill, a helicopter dropped 4,000 litres of diesel. Another 4,000 litres was dropped on 18 September 2003. It was reported that the fumes from the most recent spill covered the nearest village, causing panic and hysteria. In describing the incident, those interviewed said that helicopters still drop materials regularly, such as empty drums, electrical cable, timber, iron cables and iron posts.<sup>45</sup>

In addition to helicopters dropping items, there is noise pollution from the air traffic throughout the day, seven days a week. The noise scares away animals, which the community relies upon as a source of food. The communities report that the continuous noise disrupts school classes, church services, clan meetings and ceremonies.

### Figure C: Cyanide at Tolukuma

Diluted solutions of sodium cyanide are used to leach gold from finely ground ore extracted from the mine. This is a common method of extraction for many large-scale gold mining operations. The cyanide is extremely poisonous and can be fatal if it is swallowed, breathed or comes into contact with skin. Cyanide inhibits or prevents cells from taking up oxygen, resulting in damage to the brain and heart through oxygen deprivation. It can kill in minutes or over longer periods depending on the level of exposure.

As there is no vehicle access to the mine at Tolukuma, cyanide is transported by helicopter. The cyanide is usually transported in two one-tonne containers on an open sled, which dangles beneath the helicopter.<sup>46</sup> The International Civil Aviation Organisation (ICAO), of which PNG is a member, has declared cyanide to be a Group One Substance of “great danger” that should only be carried in maximum loads of 50kg, contained within packages of no more than 2.5kg. The practice at Tolukuma clearly contravenes these ICAO standards.

*“I would have my baby in my bilum and the chopper would wake her up and she would start to cry, so I would have to stop work in the garden and go to her... The chopper drops things once in a while – very big belts, sometimes ropes. They just drop off and fall. Once a drum fell off... it was near the house and the main road... It fell on breadfruit and beetle nut trees. We get no compensation for this.”*

Name withheld, young woman from the Dilava Valley.



### 3. Negative social impacts and rising food prices

Local women and men described how the evolving cash economy since the mine's arrival has had some positive impacts, but has also impinged upon their traditional existence. It was repeatedly stated that one or two families had benefited by establishing shops, however, most people were not better off since the mine.

Although TGM does not encourage the sale of beer, locals report that since the mine began operation, the consumption of beer has dramatically increased. This in turn has led to an increase in alcohol-related domestic violence, sexual assault, sex worker activity, drug abuse amongst young people, gambling, and an increased incidence of HIV/AIDS and sexually transmitted diseases and infections.<sup>48</sup>

There have been complaints about how people's attitudes have changed since the mine's arrival, with increasing reports of stealing, disrespect towards elders, and difficulty keeping youth in school.

Some of the women elders interviewed at 'Tent City' next to the mine site described how the women within the ML104 area are afraid to go out at night for fear of sexual assault. They also complained that men now spend money

on gambling, alcohol and sex workers. They stated that while they have always had problems with violence, this has worsened since the arrival of the mine.

The local people interviewed within the ML104, particularly the women, complained about the inflated price of food and other goods compared to other areas. For example, the Mining Ombudsman observed a four-fold increase in the price of rice from Fane to Tolukuma. In Port Moresby, a kilo of rice will cost between 1 to 2 kina, however, at Tolukuma it costs approximately 12.50 kina. This high price exists despite TGM

advising the Mining Ombudsman that rice is transported from Port Moresby 'freight free.' The CRO also stated that they provide 'freight free' transportation for coffee farmers to sell produce in Port Moresby, yet community members interviewed by the Mining Ombudsman in January 2004 stated that these projects do not benefit those living outside ML 104.

One woman told that Mining Ombudsman that even though her family receives royalties from TGM, the amount is very little and does not cover her family's expenses.

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*"All the prices of the food are high... Before the price was low and we could sell the food in the village. But now with the mine, the prices are very expensive, and everyone goes to the mine to sell the food."*

Name withheld, young woman from Dilava Valley.

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*"In the process of mining, we have seen many forms of destruction take place, like breakdown in traditional structures and control, violence in the homes, lack of respect in the communities, social problems, and environmental destruction beyond repair."*<sup>47</sup>

Tony Aia Koma, Gaiva Chief.

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Left: Women within ML 104 sit outside the Tolukuma mine gate selling produce to the mine workers. Local people complain about inflated prices for food since TGM started operation. Photo: Ingrid Macdonald/Oxfam CAA

Above: Local women from throughout the Auga/Dilava Valley walk long distances across rugged and difficult terrain carrying food and beer to sell at Tolukuma for small amounts of money. They fear robbery and sexual assault along the way. Photo: Ingrid Macdonald/Oxfam CAA



## 4. Lack of communication and TGM not listening to concerns

Since the initial Mining Ombudsman investigation in 2001, widespread allegations have been made by community women and men about the lack of communication between TGM management, local communities and/or applicable landowner associations. This seems particularly to be the case for communities living downstream from the mine. It is also an issue which was noted by the Department of Environment and Conservation during its one-off water sampling of the Auga River in March 2003.<sup>49</sup>

The main vehicle established by TGM for communication between the company and communities is the Community Relations Office (CRO). It became clear during the Mining Ombudsman investigation in January 2004 that the CRO is seen by the communities affected by TGM as an impediment rather than a help. Most of those interviewed described the CRO as “distant” and “biased” against the communities. Some said that the CRO had antagonised and intimidated the local people. It was also alleged that funds are being used to wield power over the communities within the mining lease area, favouring those people who side with the CRO. The people living outside the mining lease area complained that their problems are largely ignored despite the impact

*Below: Mary Gadava who lives within ML 104 describes the negative social, economic, health and environmental impacts on local women that have arisen since the TGM started operation. Photo: Ingrid Macdonald/Oxfam CAA*



*“The Avubab does not spend the money on the people – they use it for other things that they are not supposed to. The people within ML 104 do not feel good towards the Avubab. (Name withheld) makes decision on the 20 per cent – and she does not tell the Government how it is spent – she used to tell lies to government that she does this and that but she doesn’t.”*

Name withheld, woman leader from ML 104.

TGM's operations have on them. Many suggested the CRO, especially the Manager, should be replaced. In turn, DRD has stated that:

*“TGM has elected to establish direct community consultation with local communities and is actively doing so. Our approach has been well received by the PNG Government and the local communities it interacts with.”<sup>50</sup>*

Furthermore, in response to the community complaints against the CRO, DRD advised:

*“Your criticism of CRO needs to be considered in terms of the responsibilities of that office. There will always be people disappointed with compensation. The issue here is whether entitlement is by lineage or by geographic location, ie. title. Under guidance from the PNG Government, TGM has taken a line on a map as being the appropriate model as this matches our tenure and title.”<sup>51</sup>*

The CRO Manager countered communities' claims in January 2004 stating that the CRO office is an easy target and the Goilala area is difficult to work within because of in-fighting, particularly amongst women. However, the Mining Ombudsman did not hear one positive statement about the CRO from the hundreds of locals she met with, including those who receive royalties and other benefits from TGM. In contrast, the Mining Ombudsman did hear two positive comments about the new Mine Manager.

### TGM's appointed decision-making body – Avubab

Those interviewed also expressed concern about the Avubab, which is the decision-making body set up by TGM to represent the people within ML 104. This body consists of representatives from the three clans living within ML 104 and members of TGM. The Avubab is used by the company to distribute royalties and development

funds under the MOA. In regard to the role of the Avubab, the Chief Executive Officer of DRD stated in a letter to the Mining Ombudsman dated 2 August 2004 that he wanted to:

*“...reiterate DRD's faith in TGM's Community Relations Office and the success of the Avubab as a representative and culturally significant forum for communities to manage community issues.”<sup>52</sup>*

Furthermore, the CRO staff advised the Mining Ombudsman that the Avubab is an independent body and that while the company controls the money, it is the Avubab and the company together who decide which projects should be funded.

However, since the establishment of the Avubab, considerable concern has been expressed by locals that the Avubab relies solely on support and direction from the CRO. It is alleged that the CRO controls the money and tells Avubab members how to spend the funds on the people within ML 104. For example, it was alleged that TGM flies in foodstuffs for members of the Avubab to sell at the mine site at inflated prices, which only benefits a number of select groups in the Tolukuma area. The high price of rice that is sold by the Avubab at Tolukuma was used as an example. For a discussion of the inflated prices, see the previous section on negative social impacts (page 17).

Community men and women are angry that the Avubab is making decisions relating to communities outside ML 104, especially the downstream communities, as it only has representatives from communities living within ML 104. They want TGM to deal directly with the appropriate landowner associations in the other areas. The Mining Ombudsman was also advised in January 2004 that the Avubab is ‘an illegal body that was formed by TGM,’ as it is not recognised within the MOA.

## 5. Lack of benefits and development for local people



Figure D: TGM profitability

Recent financial results circulated by DRD indicate that TGM and the Tolukuma mine is making a significant contribution to the operating profit of the company. In the nine months running up to March 2004, production at TGM represented only 9.5 per cent of DRD's overall production, but supplied 26.5 per cent of its operating profit.<sup>53</sup> Its cash profit of US\$8.1 million compares favourably with the US\$2.4 million derived from far more extensive gold mining operations in South Africa. If profits from its 20 per cent stake in the Porgera mine are included (another gold mine in PNG where riverine tailings disposal occurs), PNG mines contribute 92 per cent of DRD's cash operating profit in the current financial year.

TGM is a comparatively low cost operation, with cash operating costs of only US\$254 per ounce, compared with an average of US\$373 per ounce in South Africa.<sup>54</sup> This means that the cost of producing an ounce of gold in Tolukuma is approximately US\$120 less expensive than in South Africa, where the company would be prohibited from using the low cost riverine tailings disposal method which is being used at TGM.<sup>55</sup>

Since 2001, local community men and women have complained to the Mining Ombudsman that:

- (i) TGM has not honoured the original MOA in failing to provide:
  - significant infrastructure development, like housing, roads or bridges;
  - support for local people in mine business spin-offs;
  - contracts at the mine site; and
  - the provision of training opportunities and employment for the local people.
- (ii) If local people have received royalties, these payments are inadequate; and
- (iii) Many people are not receiving any compensation even though they are being negatively impacted by the mine activities.

### Problems with the Memorandum of Agreement (MOA)

Many of the communities' concerns communicated to the Mining Ombudsman centre on the inadequacy of the MOA, which is the main vehicle for how royalties, compensation and development are distributed and contributed to by TGM. The MOA is only concerned with the three clans living within the mining lease area: ML 104 – the Hameng, Yaulo and Yangam. ML 104 is where the Tolukuma mine is physically located and does not include those impacted downstream and those impacted by helicopters. Elders pointed out that this artificial clan division is destroying traditional lineages of the clans and cutting off the three clan groups from the rest of their 'family'. Many of those interviewed within ML 104 also complained

that the royalties paid to them by TGM are insufficient. The following testimony by an elderly man from ML 104 is one example:

*"We have three major landowner groups. They receive 80 per cent of their land royalty and it is 70 – 80 kina a month. It is very hard to survive on that 80 kina and they have outstanding debts already. One kilo of rice is 12.5 kina. They are left out and hungry. The whole problem is that everyone knows what is happening to them but people just keep their mouths shut."*

Since 2001 there have been consistent allegations that the original MOA was never seen or agreed upon when it was signed two and a half years after the mine began operation. It is alleged that a youth leader signed the MOA in Sydney, Australia on 24 February 1997.<sup>56</sup> This is considered a key reason by local community men and women as to why the MOA does not adequately protect the rights of the communities impacted by TGM. Further, it is claimed that the MOA has not been reviewed every two years, as was supposed to occur.

In January 2004, the CRO Manager disputed that people had not been

involved in previous reviews of the MOA. She also advised that the entire MOA is not open to change during the review processes, as the agreement states that it is only the sections deemed to be non-operating that are required to be reviewed. The CRO Manager added that this is the 'fine detail' of the MOA which people fail to understand.

However, on 2 August 2004, DRD advised the Mining Ombudsman that it is developing a new MOA which will include sustainable development for more communities than just those within ML 104.<sup>57</sup> In a media release by TGM on 30 July 2004, the company stated that under the new MOA there will be an agricultural officer for local skills development and fishery; a proposed road between TGM and Kosipe-Woitape, with the financial assistance of some private aid donors and the PNG Government; and support for the adaptation of traditional houses.<sup>58</sup>

Above: Elizabeth Pilous, a women's representative from the Waitape Local Level Government Council, Central Provincial Government, complains that TGM has not honoured its obligations under the MOA. Local women suffer many negative impacts from the Tolukuma mine. Photo: Grant Walton/CERD.

*"The company has its own hospital within the camp... Sometimes we have had birth complications with women trying to deliver babies. Some have passed away during delivery. Inside the camp the clinic belongs to the workers – a few people that they like get in there... We have asked for the medical clinic to be in Dilava or for the company to fix up the hospital at Fane but the company always says that it is not within the MOA. Those people who live on the Auga River do not have payments from the mine – they don't ever go to the mine site – it is too far to walk and too difficult – so they don't get to the clinics and they get sick and pass away."*

Elizabeth Pilous, Women's representative for the Waitape Local Level Government Council, Provincial Central Government.

However, as acknowledged by TGM in its media release, the Central Province Government did not attend the TGM meeting on the proposed new MOA. Instead, local provincial government representatives and others have different impressions of how TGM is handling the current MOA review process and how this is being reported in the local PNG media. Elizabeth Pilous, women's representative from Waitape Local Level Government Council, Central Provincial Government, stated during an interview with the Mining Ombudsman:

*"The review team is in the hands of the provincial government – the Central Province Governor is also on the side of the people – he is also helping to push for the review of the MOA. The MOA is now supposed to be heard on 27th of this month [August 2004]. The Tolukuma people were the first to run a workshop during the Provincial assembly and it really touched the heart of the Provincial Governor. But – even though the media came to the assembly and heard about the things being said by the people, they did not put down correctly what people were saying. When the mining company put their media statements out the media just reported that and said that there is nothing bad really happening at Tolukuma... it is not fair the media saw the realities and they do not print it..."<sup>59</sup>*

### Lack of infrastructural development

Local people complain that TGM states that it is only a small mine with limited resources, and cannot assist the communities with their problems. Yet, local people see that TGM is making a profit, the mine is expanding and the company is undertaking significant exploration. They are angry that TGM does not spend more of its profits assisting communities which are suffering. (For a discussion of TGM's profitability, see Figure D on page 19.)

Under the MOA, TGM is required to provide '20 per cent' of two per cent of profits to the Central Province government for development and infrastructure projects. There has been considerable anger concerning the way in which these payments are being managed and spent. The CRO Manager confirmed that the '20 per cent' has been managed by TGM since 2001, however these funds were supposed to be managed by the Central Province government. As an example of the lack of community development within ML 104, many pointed to 'Tent City,' which is described in Figure E.

### Figure E: Tent City

**'Tent City' is a community of a few hundred people within ML 104 who live approximately 50 metres from the barbed wire mine-site fence. The houses are constructed out of bush vegetation and covered with canvas, thus the name Tent City. Some people living in this area receive royalties from the mine, many work at the mine and some are migrants trying to benefit from selling produce, alcohol or sex to mine workers.**

**The Mining Ombudsman spent a night at Tent City in 2004. Despite the close proximity to the mine, there is no electricity or sanitation facilities and only one rubber hose that supplies water. The Mining Ombudsman observed an open drain flowing down the hill from the mine site through Tent City carrying waste. There were complaints that the unsanitary conditions were causing sickness and death. Some of the inhabitants and mine workers living at Tent City told the Mining Ombudsman that they expected more from TGM, as many of the residents claimed to be company employees or family members of employees.**

Many community representatives expressed dissatisfaction that TGM had not developed infrastructure and services, both within ML 104, and in the surrounding area affected by mining activities. This includes inadequate medical and school facilities and no proper housing, roads and bridges. Some advised that they had been given some seeds for agriculture, but it was only a select group who received this help. DRD also advised the Mining Ombudsman that it has "installed water pumps and solar lighting at six downstream communities," although the Mining Ombudsman was only able to find one community downstream from the mine that had a pump in January 2004.<sup>60</sup>

### No road to Port Moresby

The only way in and out of the Tolukuma area is by air or on foot. The mine uses helicopters to transport its goods and people to and from Port Moresby. There is also an airstrip at Fane, which is accessed every second day by small commercial aircraft. During the rainy season, planes are often unable to land due to poor

weather and airstrip conditions. This means that the area can be cut off for days or weeks on end.

The communities of Gaiva claim that TGM has lied about building an 'all weather' road for them to use. They say TGM is in fact building a road for its operating purposes and not for community use, away from their communities to a new prospect at Serec Cere Duma to the South of ML 104. This will mean that their closest airport, which is at Fane, will not be connected with a road. TGM confirmed in its media statement on 30 July 2004 that it is building such a road.<sup>61</sup> The only other 'all weather' road runs from the Tolukuma mine to a nearby hydropower plant which supplies power to the mine.

There were considerable differences of opinion about the benefits or impacts of a new road to Port Moresby. Some stated that they wanted it to run from Tolukuma, through the main airstrip of Fane and to Port Moresby. Others expressed concern that if a road linked the area to Port Moresby then it may open up their area to 'rascals' and crime. However, these locals

***"They [women] carry these heavy loads of foodstuffs because they need school fees and they need money to survive and to buy some clothing, food and house utensils... and this is why they carry the heavy load to the mine and walk on this bad road."***

***"We try selling some of our food at the market. We bring greens and food on a slippery road – the things get smashed and squeezed in the string bag. When we get to the market, we are in pain and sick, and the things we are going to sell are all spoiled."***

**Name withheld, young woman from Dilava Valley.**



still wanted to transport their produce to markets in Port Moresby. They want TGM to consult with the communities prior to building a road to reduce any negative impacts and increase benefits.

### No internal road system

There are two sets of tracks in the Auga Valley – the ‘missionary’ tracks and the ‘local’ tracks. The missionary tracks are overgrown and longer, yet they are much easier to walk than the local tracks. The local tracks are used mainly by the communities, as they provide quicker and more direct routes between villages. Both tracks are poorly maintained and difficult to walk, traversing steep-mountain slopes (up to approximately 70 degrees). It would be impossible for a motorised vehicle or a bicycle to use these tracks.

A major concern of the local people, particularly the women, is the lack of internal roads linking the mine communities and Fane with the surrounding communities. Community representatives advised that they have asked TGM to improve the internal road system so that it would be easier for the communities to trade amongst themselves and have easier access to the mine site to sell goods.

In November 2003, TGM publicly announced that “upgrading the road between Fane and Tolukuma has provided benefits to many people in various ways.”<sup>62</sup> Yet in January 2004, the Mining Ombudsman observed that the ‘road between Fane and Tolukuma’ is actually only an old narrow track that by January 2004 was overgrown with foliage and blocked by logs, landslides and waterfalls. The Mining Ombudsman did observe a group of people repairing a bridge on the missionary track, yet most bridges were in a state of disrepair and potentially very dangerous to cross.

### Women selling produce at the mine

TGM advised the Mining Ombudsman that it is attempting to assist local community development by purchasing fresh produce from the locals. It also stated in *The Tolukuma Times* that:

*“While improving delivery for supplies and access for Tolukuma medical personnel, the road has made it easier for local landowners to deliver produce to the mine.”*<sup>63</sup>

The Mining Ombudsman observed that this practice involves local women walking three to six hours daily, carrying heavy produce in string bags along the difficult track system. Some of the women told the



Mining Ombudsman that after this journey they are sometimes not even able to sell their produce. A woman interviewed by the Mining Ombudsman in August 2004 also told of the poor conditions in the market place:

*“They [the women] sell their food at the market but the rain washes the chemicals towards their stalls. They asked for money to build a market somewhere higher and they [the company] gave her two pieces of tarpaulin but it wasn’t strong enough and has already been ruined”.*

The women interviewed said that they receive very little for their produce and are paid just 10 Kina (approximately AUD\$4 to \$5) for each slab of beer they carry. The money they earn is used to purchase dry goods or pay for school fees. This difficult and tiring work was not what the women considered to be ‘development’. They want TGM to improve the track system by building proper roads between their communities so that it would be easier for them to transport and sell goods, especially if the company is publicly telling others that it is helping locals by buying their produce.

### Lack of health facilities

The spate of illnesses recently experienced by the communities has illuminated the lack of access to quality health services in the district. Even TGM acknowledges the scarcity of facilities available to many downstream villages and communities.<sup>64</sup>

There has been some debate about the provision of health services at the mine site. The CRO Manager contended that in 2003 all of the development funds were spent

on opening a community health aid post, which she asserts benefits not only the people living within ML 104, but also those who live outside. TGM has also stated that:

*“Tolukuma now funds and manages the Yalai Community Aid Post. The local people now have a facility dedicated to community health as opposed to the mine’s purely mine focused health system. However, the mine site clinic does cater for all emergency cases and all medivac cases for the Auga/Dilava area.”*<sup>65</sup>

The company has also advised that it has:

*“Substantially increased medivac assistance to local communities and for family members and individuals who need emergency treatment or helicopter transport to Port Moresby.”*<sup>66</sup>

Some interviewed in January 2004 alleged that TGM defines ‘local communities’ as only those within ML 104 and therefore it does not let those outside ML 104 use company facilities or the health post. They also claimed that it is only select people who have access to airlifts to Port Moresby.

The women interviewed by the Mining Ombudsman stated that they are reluctant and sometimes unable to walk for up to seven hours across difficult terrain to the aid post. They also described how they could not afford to pay for the medicine at the mine aid post.

*Above: Despite being 50 metres from TGM’s front gate, locals and mine-workers living in Tent City have no electricity or sanitation facilities and there is only one rubber hose that supplies water to the hundreds of inhabitants. Photo: Ingrid Macdonald/Oxfam CAA*

## 6. Problems around exploration

### Lack of free and informed prior consent

The company has embarked on extensive exploration in the region, undertaking drilling and other activities. TGM has ten exploration leases in PNG that are either current, under renewal or under application.<sup>67</sup> Locals have told the Mining Ombudsman that they hope, but are doubtful, that exploration will bring real benefits to the community. Their doubts are based on what they see as the inadequate provision of services in the ML 104 area. As a result, communities are increasingly organising into landowner associations to negotiate the terms of any future exploration and ensure their demands are met.

Local community women and men claim that TGM is undertaking exploration in their areas without their free, prior and informed consent, and have demanded a halt to activities until TGM addresses community grievances. Where consultation is occurring, there are complaints that TGM is not adequately explaining its plans or the potential negative impacts of exploration and that sometimes only a select number of people have been consulted.

TGM has previously argued that consultation does not mean 'asking permission' before exploration, but involves "discussing the programs, techniques and difficulties that may arise, how best to implement those programs and how inconvenience can be mitigated."<sup>68</sup> TGM's perspective is consistent with laws in PNG, where a company is not legally obligated to obtain 'permission' to explore. However, TGM's approach undermines the right of free, prior and informed consent of indigenous peoples as set out under the international human rights system.

### Dividing Port Moresby landowners

Some of the landowners interviewed accused TGM of attempting to divide communities by verbally undermining the

landowners in Port Moresby. TGM claims that it has had difficulty identifying the appropriate people to consult with outside ML 104 because numerous people claim to own the same piece of land. However, the company has previously stated that it did consult with Port Moresby landowners about exploration in 2003 – this was confirmed by some of the landowners in Port Moresby. These landowners also claim that they had requested that TGM provide them with sufficient notification so that they could attend the village-based consultations in the Auga Valley; yet this had not happened. They also requested that TGM use appropriate landowner associations for its negotiations.

### Inadequate notification

The Exploration Manager stated in January 2004 that DRD makes applications for exploration permits in line with the *PNG Mining Act 1992*, where one or two locations will have mine warden hearings. The company must give at least one month's notice for each hearing date in a newspaper. The Exploration Manager stated that because the locals do not have access to newspapers, mine employees travelled to notify the local people in person ten days beforehand, although some attempts were disrupted by bad weather. He also advised that TGM had employed two locals to work on exploration communication with local communities at the mine warden hearings. A letter from DRD dated 25 September 2003 also stated that:

*"TGM recognises that village people do not receive daily newspapers. Subsequently, TGM takes the extra step of advising villagers of the Hearings. This is done on foot for areas close to Tolukuma or by helicopter for more distant venues and is always undertaken."*

These company claims have been rejected by community members. In reference to a mine warden hearing in Mondo in April 2003, locals claimed that they were only informed about the hearing one day before



Above: Augustine Hala shows a TGM exploration tag. Local communities complain that they do not want the exploration to proceed until their current concerns are addressed by TGM. Photo: Grant Walton/CERD

it was held. They said that such late notice had hindered their ability to inform landowner associations and external technical and legal advisers about the meeting, and restricted their ability to offer informed consent for any future exploration.

Representatives of the ARWROA also denied that they were always informed before mine warden hearings. They told the Mining Ombudsman that if they are informed they only receive 24-48 hours' notice. It was also alleged that after a mine warden's hearing on 29 April 2003, there was a sudden change of venue on the hearing day.<sup>69</sup> However, a few of those interviewed did state that the company had started to provide them with a week's notice before hearings.

Following these interviews, the Mining Ombudsman found that overall, the level, timing and nature of notification for mine warden hearings by TGM has appeared to be both erratic and inconsistent across different sites.

### Lack of third party advisers

Tolukuma is only accessible by air every second day. This means that considerable advance notice is needed if support organisations and technical advisers are to attend mine warden hearings. DRD stated that it was not TGM's responsibility to invite community representatives or advisers to such meetings and also alleged that many third party organisations are not known or welcomed by local villagers.

*"The exploration is good and also not so good. The good is that when... they find there is enough gold that can be mined, then we hope we can come up with an agreement which will include everything we want the company to do for us. Like building houses, more classrooms, roads and sending some of the kids to school... However the fact is we don't know whether the company will do all that for us after all the bad that is happening at Tolukuma right now."*

Name withheld, Mondo



However, most of those interviewed by the Mining Ombudsman in January 2004 said they wanted support and advice from external parties during meetings. Access to independent information and advice was viewed as crucial to inform discussions with the company and help was needed to raise awareness in the wider community and internationally about exploration agreements.

### Damage from exploration

Under PNG mining legislation, the holder of a lease is not entitled to enter or occupy any land that is the subject of exploration until:

- (a) an agreement has been reached with the landholders as to the amount, time and mode of compensation and the agreement has been registered by the Registrar under the Act; or
- (b) compensation has been determined by the Mining Warden and the holder of the tenement has paid or tendered such compensation.<sup>70</sup>

Landholders are entitled to compensation if the impact includes:

- damage to the natural surface of the land;
- deprivation of use of the natural service of the land; and
- social disruption

TGM's Exploration Manager advised the Mining Ombudsman that the company adheres to the guidelines for paying compensation for damage and disturbance caused by exploration. He stated that TGM does carry out assessments and pay appropriate and timely compensation.

However, many of those interviewed by the Mining Ombudsman in January 2004 alleged that TGM's exploration was impacting on sites of immense cultural and social significance. They complained that TGM does not value their cultural sites and undervalues the importance of the trees, animals and water that are affected during exploration.

Many of the issues concerning exploration were common to all affected communities. These shared experiences and concerns were encapsulated by a delegation from the Kone Faven communities who supported their claims with detailed documentation and photographs.<sup>71</sup> An extract from their written testimony is shown in Figure F.

### Figure F: Complaints by Kone Faven community

**Kone Faven community letter concerning complaints against DRD at Tolukuma presented to the Mining Ombudsman January 2004:**

"Our area is located to the north of Mt Olom and consists of two tribes containing more than two hundred people. The [exploration] activity was carried out for more than five months in the year 2002. There were five locations in which camps were set up. There were three helipads which were used to deliver and to transport to and from the Lolikirum, Favan and Kiri areas.

During the prospecting exercise, such destructions occurred:

1. Bush clearing – trees and bushes were been cut down. Herbs and other useful things... that are useful to local people were been destroyed. The colour of the nature has been lost.
2. ...the soil has been dug up and removed to put up camps, helipad sites and for sampling procedures.
3. ...road tracks were made into customary land and restricted areas destroying our dignity and beliefs
4. Some local mothers... provided local food and vegetables plus household work but were not paid... Local men were with the team as guides as well as security but were never been paid.

Illegal airborne survey... started on 25 September 2003... for more than two weeks. We have not been informed of the results.

Due to echo disturbance created by the chopper everyday before sunrise, our area is vacant with wild animals... our hunting grounds are empty. Our breeding animals have also dispatched... and has created hardships for owners.

We the chiefs, community leaders and local people from the Kone Faven area, suggest that there should not be any further mining activities in our area until our concerns are met with satisfaction."

*Below: Community men and women hold piglets, which have been abandoned by their parents, which the community say is a result of continuous noise from the airborne exploration surveys conducted by TGM near Kone Faven. Photo: Local community photo from Kone Faven.*





## 7. Labour and policing



Left: Mining trucks. Photo: Penny Tweedie/Oxfam

Right: A local man from Gaiva 2 tells the Mining Ombudsman how local people in his village have received nothing from the mine even though the Auga River is now polluted and helicopters disturb them all day.

Photo: Local community photo from Kone Faven

***“One of the employees argued with security (and) they (the security guards) belted him. The employees that saw this, got to the security guard and belted him up. Later on he died. The guy arguing with the security guard became paralysed. The argument was about wearing overalls out of the camp.”***

Name withheld,  
Tolukuma mine worker <sup>75</sup>

### Labour

There are allegations of ongoing labour rights' violations at the mine site and an outstanding industrial dispute from 15 October 2002, which was discussed in the *Mining Ombudsman Annual Report 2003*.<sup>72</sup> During the Mining Ombudsman monitoring investigation in January 2004, claims were made that a number of employees died after being injured at the mine, that helicopters had been unable to fly injured people out to hospitals and that on-site medical facilities were insufficient. Employees interviewed also complained about the mistreatment of workers at the mine and alleged that the company has attempted to discourage the recent formation of a union. They claimed that individuals had been pressured to withdraw membership from the union with threats of wage reductions or losing their jobs.

In respect of its labour at Tolukuma mine, DRD has stated:

*“The mine currently employs 529 people with the majority of employees being qualified locals and mine-trained operators. The mine has a commitment to local employment and training, with a strong transition from expatriate to PNG management.”* <sup>73</sup>



### Policing

DRD advised the Mining Ombudsman in a letter dated 2 August 2004 that it had built a new Court House and Police Station at Tolukuma.<sup>74</sup> The Mining Ombudsman was also told by one of the PNG police officers at TGM in January 2004 that he is employed by the CRO and reports directly to the CRO Manager. He stated that his wages are paid for from the MOA community development '20 per cent', even though he provides services for TGM and not the local communities.

Local community members advised the Mining Ombudsman that when the CRO Manager travels to the communities she is accompanied by police officers with weapons. They said that they find this intimidating, unnecessary, offensive and not conducive to open and honest communication with TGM. They also questioned who is benefiting from having the police based at the mine, the company or the people?

# Mining Ombudsman recommendations

The following are recommendations for DRD/TGM to address and resolve community grievances:

- DRD should respect the right of community members to free, prior informed consent to exploration and mining projects.
- DRD should respect the wishes of the local downstream community men and women who want DRD to find an alternative method of waste disposal that will not further contaminate the Auga River system and further undermine the health and wellbeing of their communities. DRD should also secure all mine site developments in order to prevent further erosion from waste dumps, which has increased pollution in the river system.
- DRD should disclose which remedial and mitigation actions it has taken to address the increased discharge of tailings into the Auga River, particularly in relation to the downstream communities, and if it has constructed the series of dams recommended by the DEC.
- DRD should disclose the scientific monitoring results from the testing at 500 metres from the discharge of the mine and the seven kilometres GSI testing point.
- Independent investigations and monitoring should be carried out regarding the water quality and the cause of disease, illness and death in local communities living near or in constant contact with the Auga River.
- DRD should inform communities downstream about toxicity levels in the river system and fulfil its contractual obligations to rehabilitate. This should be done with community participation and alternative water sources should be provided.
- DRD should put in place performance bonds for the Tolukuma Gold Mine and any future projects. These should be held in trust by an independent body to cover any unexpected or unforeseen rehabilitation, mitigation or remediation costs.
- DRD should produce a mine closure plan in consultation with local communities that identifies any relevant compensation required for future losses.
- DRD should follow internationally accepted guidelines on the packaging, handling and transportation of cyanide and other materials.
- DRD should honour all commitments and contractual obligations as established in the PNG Ministerial Conditions.
- DRD should recognise established associations and landowner groups (such as ARWROA and the Golob Peoples Association) in all negotiations.
- DRD should respect the expressed wish that further exploration activities do not proceed until current community grievances are addressed, especially at the head of the Dilava River. DRD should also undertake open and transparent consultations with both men and women in affected communities from the outset of any proposed activity, including those living downstream and not just those with recognised land ownership.
- DRD should not use the Avubab to make decisions concerning the communities living outside ML 104.
- DRD should compensate individuals, groups, and/or communities who have suffered a loss of assets, income, or amenities as a direct result of the DRD exploration and mining operations.
- DRD should recognise that mine employees can pose risks to the isolated communities in the Auga Valley and the Goilala District as a whole by introducing illnesses such as HIV/AIDS, and that these communities lack the infrastructure or access to adequate social services to deal with such an epidemic.
- DRD should develop a Code of Conduct for employees covering such areas as cross-cultural relations, responsible alcohol use, relations with local women, increased risk of STD/Is and HIV/AIDS and so forth. This should be supplemented by staff training, including cross-cultural and gender training and a commitment within the company to develop, implement and enforce this Code.
- DRD should not pay for, nor provide logistical or other support to the police or armed forces of the host country who are currently located at the mine site in return for them maintaining security at the mine.
- DRD should fund women's resource centres and programs chosen by local women themselves and provide support to women to manage these facilities for themselves.
- DRD should ensure that women are involved in all elements of decision-making and companies should provide opportunities that enable women themselves to define what is appropriate development and participation.
- DRD should invest in and improve the internal road systems within the Auga Valley and undertake consultation with the local communities concerning the proposed road to Port Moresby. The company should work with the local communities and independent experts to develop strategies for avoiding and/or mitigating any potential negative impacts from the development of such an external road.
- DRD should ensure that all health facilities are open and accessible not just to communities within ML 104 but also to those communities living downstream and in other areas.
- DRD should begin immediate rehabilitation activities with full participation of affected communities, as stipulated under its contractual agreements. It should also release its rehabilitation plan to communities and their support organisations.
- DRD should provide sufficient, accurate and detailed information about proposed exploration activities to all members of affected communities in an appropriate manner and language, in order that they are able to give informed consent or dissent. For guidance on what this information should include, see the 'Benchmarks for the mining industry' in the appendix of the *Mining Ombudsman Annual Report 2004*, available online at: [www.oxfam.org.au/campaigns/mining](http://www.oxfam.org.au/campaigns/mining)

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Locals hold the TGM mine tailings discharge pipe which pumps over 160,000 tonnes of mine waste directly into the Auga/Augabanga Rivers. Locals complain about unexplained deaths and environmental degradation that has occurred since TGM started operation.  
Photo: Brendan Rossi/Oxfam CAA

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*“The mine does not do anything good for my people... I do not feel proud about the mine.”*

Elizabeth Pilous, Women's representative from  
the Waitape Local Level Government Council,  
Central Provincial Government.

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