

**Warning Concerning Copyright Restrictions:**

The Copyright law of the United States (Title 17, United States Code) governs the making of photocopies or other reproduction of copyrighted material.

Under certain conditions specified in the law, libraries and archives are authorized to furnish a photocopy or other reproduction. One of these specified conditions is that the photocopy or reproduction is not be used for any purpose other than private study, scholarship or research. If electronic transmission of reserve material is used for purposes in excess of what constitutes "fair use", that user may be liable for copyright infringement.

**Citation:**

Kirsch, Stuart. "Mining and Environmental Human Rights in Papua New Guinea," in *Transnational Corporations and Human Rights*, edited by George Jędrzej Frynas and Scott Pegg. Houndmills, UK ; New York: Palgrave Macmillan, 2003, pp. 115-136.

**Copyright:**

Jędrzej George Frynas and Scott Pegg 2003

---

# Transnational Corporations and Human Rights

Edited by

Jedrzej George Frynas  
*Lecturer in International Management*  
*Birmingham University*  
*UK*

and

Scott Pegg  
*Assistant Professor of Political Science*  
*Indiana University Purdue University Indianapolis*  
*USA*

palgrave  
macmillan



UGL  
HD  
2755.5  
• T67451  
2003

© Jędrzej George Frynas and Scott Pegg 2003

All rights reserved. No reproduction, copy or transmission of this publication may be made without written permission.

No paragraph of this publication may be reproduced, copied or transmitted save with written permission or in accordance with the provisions of the Copyright, Designs and Patents Act 1988, or under the terms of any licence permitting limited copying issued by the Copyright Licensing Agency, 90 Tottenham Court Road, London W1T 4LP.

Any person who does any unauthorized act in relation to this publication may be liable to criminal prosecution and civil claims for damages.

The authors have asserted their rights to be identified as the authors of this work in accordance with the Copyright, Designs and Patents Act 1988.

First published 2003 by  
PALGRAVE MACMILLAN  
Houndmills, Basingstoke, Hampshire RG21 6XS and  
175 Fifth Avenue, New York, N.Y. 10010  
Companies and representatives throughout the world

PALGRAVE MACMILLAN is the global academic imprint of the Palgrave Macmillan division of St. Martin's Press, LLC and of Palgrave Macmillan Ltd. Macmillan® is a registered trademark in the United States, United Kingdom and other countries. Palgrave is a registered trademark in the European Union and other countries.

ISBN 0-333-98799-3

This book is printed on paper suitable for recycling and made from fully managed and sustained forest sources.

A catalogue record for this book is available from the British Library.

Library of Congress Cataloging-in-Publication Data  
Transnational corporations and human rights / edited by  
Jędrzej George Frynas and Scott Pegg.

p. cm.

Includes bibliographical references and index.

ISBN 0-333-98799-3

1. International business enterprises – Social aspects. 2. International business enterprises – Social aspects – Case studies. 3. Human rights. 4. Social responsibility of business. I. Frynas, Jędrzej George. II. Pegg, Scott. HD2755.5.T6745 2003

323-dc21

2003041433

10 9 8 7 6 5 4 3 2 1  
12 11 10 09 08 07 06 05 04 03

Printed and bound in Great Britain by  
Antony Rowe Ltd, Chippenham and Eastbourne

---

# 6

## Mining and Environmental Human Rights in Papua New Guinea

*Stuart Kirsch*<sup>1</sup>

The effective exercise and enjoyment of basic human rights for much of the world's population is prohibited by environmental problems. Water and air pollution, accumulations of solid and hazardous wastes, soil degradation and deforestation prevent many people from securing the minimum requirements for health and survival. Whether or not a basic human 'right to the environment' exists, a safe and ecologically balanced environment is necessary for the realization of all basic human rights.

(United Nations Economic and Social Council 1994).

Whether transnational corporations should be held accountable for actions which violate human rights is a question which cannot be answered without consideration of new configurations of power that enable corporations to evade regulatory control.<sup>2</sup> Where the state is an effective regulator of transnational corporations, its own laws will be more practically enforced than the general principles of human rights (Muchlinski 2001, p. 45). But with the spread of neo-liberal political and economic policy, states have become markedly less effective as regulatory bodies, often transferring the responsibilities for monitoring and compliance to the corporations under review. Similarly, when state-corporate relationships take the form of economic partnerships, the regulatory functions of the state may fall victim to conflict of interest. Pressure from multilateral agencies may also affect state regulation of transnational corporations. Where the regulatory inclinations and capacities of the state are constrained or diminished, new ways to enforce corporate accountability are required. The recent rise of NGOs that monitor

the behavior of transnational corporations is one response to these conditions (Kirsch 2002). Declarations of human rights may also constitute important political resources for persons and communities who are adversely affected by transnational corporations. The enforcement of the principles of human rights may help to regulate corporate behavior in the absence of responsible state control.

While most claims regarding human rights violations against transnational corporations are concerned with violence, militarization and forced labor, this chapter addresses the issue of environmental human rights (Popović 1996). Unfortunately, these principles remain poorly defined, lacking in both legal precedents and operational specificity. Moreover, like other human rights principles, they are constructed primarily with reference to state actors rather than corporations. While acknowledging the practical and theoretical limits of human rights regimes, including the relative weakness of enforcement schemes, Popović (1996, p. 602) is nonetheless positive about their potential application to environmental problems, concluding that 'with widespread dissemination and considered discussion, [they] have the potential to lead to a powerful and authoritative statement of international law on the connections between human rights and the environment'. In other words, increased attention to environmental human rights may expand what is regarded as normative and thus potentially enforceable as international law.

The argument that transnational corporations should abide by the principles of human rights raises the specter of a 'free-rider' problem, placing corporations which operate according to higher standards at a competitive disadvantage in relation to those which do not. These costs can be substantial in the case of environmental impacts for the mining industry. Moreover, corporate 'public standing' (Muchlinski 2001, pp. 38-9) may be of less value to the mining industry, which does not sell directly to consumers and is therefore less susceptible to public opinion. While the most common response to the free-rider problem is to reduce standards to the lowest common denominator, yielding to what critics have called the 'race to the bottom', the application and enforcement of uniform standards to the entire industry would reduce or eliminate existing economic incentives to pollute.

This case study of the Ok Tedi copper and gold mine in Papua New Guinea demonstrates that existing mechanisms for protecting the environment and environmental human rights are insufficient. This was true despite extraordinary efforts on the part of the affected communities to stop the mine from polluting their environment through

riverine disposal of tailings and other mine wastes. As a shareholder in the mine, the state faced a substantial conflict of interest regarding its regulatory responsibilities. This led some observers to characterize BHP's (formerly Broken Hill Proprietary Ltd) relationship with the state in criminal terms ranging from coercion to collusion (Harper and Israel 1999). The mine's efforts to limit its own environmental impact were inadequate by any standard, ultimately prompting the corporation to acknowledge that the project was 'not compatible' with its environmental values (Barker and Oldfield 1999).<sup>3</sup> The Ok Tedi case demonstrates the need to hold transnational corporations accountable for their impact on environmental human rights.

### **The Ok Tedi mine**

Located in the Star Mountains of Papua New Guinea, the Ok Tedi mine began producing gold in 1984 and copper three years later.<sup>4</sup> While the original Environmental Impact Assessment for the project called for the construction of a tailings dam, this work was never completed after a landslide destroyed the footings for the structure (Pintz 1987, p. 58; Townsend 1988, p. 114). Temporary permission to continue to mine using riverine tailings disposal, in which mine wastes are released into local rivers, was granted by the government of Papua New Guinea in 1986.<sup>5</sup> Permission was renewed in 1989 following the civil war on the island of Bougainville, which forced the closure of the controversial Panguna copper mine operated by Rio Tinto, putting enormous economic pressure on the state. While the lack of expenditure associated with tailings containment, for example, a tailings dam or a pipeline to a lowlands storage facility, made the mine a relatively low-cost copper producer, cost overruns and declining metal prices forced investors in the mine to write off much of their US\$1.4 billion expenditure (Jackson 1993). The world's sixth-largest copper producer, Ok Tedi's primary markets are located in Asia and Europe.<sup>6</sup> Its export sales were K701.8 million in 1998, representing 19.9 per cent of Papua New Guinea's foreign exchange earnings.<sup>7</sup> In the same year, the mine paid K9.8 million in royalties to the government of Western Province and contributed K52 million in taxes to the Papua New Guinea government, which also benefits economically from being a shareholder in the mine (Ok Tedi Mining Ltd 2001).

The Ok Tedi mine currently releases more than 30 million tons of tailings and another 40 million tons of waste rock into the Ok Tedi River annually, causing massive environmental degradation downstream

along the Ok Tedi and Fly rivers, one of New Guinea's largest and most important river systems. It is expected to operate until at least 2010, although possible extensions to the existing ore body may extend its working life.

### Chronicle of a disaster foretold

From the early stages of mining it was evident that the Ok Tedi mine was problematic from an environmental point of view. After the government suspended the requirement for tailings containment, an engineer employed by the government of Papua New Guinea published a critical review entitled 'Giving Away the River' (Townsend 1988). The same year, an anthropologist who contributed to the original environmental impact studies for the mine described the project as New Guinea's 'disaster mine' (Hyndman 1988). In a newspaper editorial published in the *Times of Papua New Guinea* the following year, I described the Ok Tedi River as a 'sewer' and suggested that the entire Fly River was at risk (Kirsch 1989a). The Australian Conservation Foundation later reported that the Ok Tedi River was 'almost biologically dead' (Rosenbaum and Krockenberger 1993, p. 9).

Despite its widely-publicized environmental problems and despite enormous efforts by the downstream communities to stop the mine from dumping tailings and waste rock into their river system, the Ok Tedi mine continues to operate without any system of tailings containment. Representatives from the affected communities have sent petitions to the government, organized protests, enlisted the support of national and international NGOs, and traveled extensively throughout Europe and the Americas, presenting their case to the media at the Rio de Janeiro 'Earth Summit', the German Parliament (Schoell 1994, pp. 13-14) and the International Water Tribunal in the Hague (International Water Tribunal 1994). Their protests culminated in a high-profile lawsuit in the Victorian Supreme Court in Melbourne, where BHP is incorporated, pitting 34,000 local landowners against one of Australia's largest corporations. The case was settled out of court in 1996 for a potential US\$500 million in commitments to compensation and tailings containment (Gordon 1997; Kirsch 1997).<sup>8</sup>

Yet following the release of more detailed environmental impact studies carried out by the mine in 1999, the managing director of the mine reported to the media that the impacts were 'much worse than previously expected', acknowledging significant discrepancies between earlier corporate representations of the mine's impacts and the assessments of

local communities and independent observers. The corporate-sponsored review pointed out that even if mining at Ok Tedi were to cease immediately, the problems downstream would continue to increase due to the sheer volume of tailings already in the river and ongoing erosion from waste rock dumps adjacent to the mine in the mountains (Parametrix, Inc. and URS Greiner Woodward Clyde 1999a, p. 8). These problems are expected to continue for at least fifty years, which is as far into the future as their models can project. While 1300 square kilometers of rain forest along the river is already dead or under severe stress, this damage is expected to spread downstream, eventually covering as much as 2040 square kilometers (Higgins 2002). Even this projection may be optimistic, however, and the damage may ultimately encompass 3000 square kilometers (Parametrix, Inc. and URS Greiner Woodward Clyde 1999a, p. 8). While the changes to the river system will eventually stabilize, the local species composition is not expected to return to pre-mine conditions, with savanna grasslands replacing much of the existing rain forest (Chapman et al. 2000, p. 17).

Moreover, questions remain about toxicity at both the bottom and the top of the food chain, ranging from algae to fruit bats and marsupials (Parametrix, Inc. and URS Greiner Woodward Clyde 1999b, p. 9). While the potential health risks of exposure to heavy metals for the human populations along the river are expected to be minor (Parametrix, Inc. and URS Greiner Woodward Clyde 1999b, p. 13), these populations must be monitored for their exposure to lead and cadmium, both of which are highly toxic substances (Chapman et al. 2000, p. 14). Finally, the potential for acid mine drainage is significant, which would precipitate an even greater environmental crisis. Continued operation of the mine without effective tailings containment will increase the chance that this will occur (Chapman et al. 2000, pp. 8-9).

### **Indigenous responses to industrial pollution**

People living downstream from the mining project on the Ok Tedi River first became concerned about environmental problems after a cyanide spill at the mine site on 19 June 1984. A bypass valve was left open for more than two hours, releasing 100 cubic meters of highly concentrated cyanide waste into the Ok Tedi River; dead fish, prawns, turtles, crocodiles and other riverine life floated downstream more than 100 kilometers from the mine (Hyndman 1988, p. 94). People in the villages along the lower Ok Tedi River recall gathering up the dead fish and animals, which they cooked and ate.

---



Several years after copper production began, the people living in the communities downstream began to experience problems caused by the increased sediment load carried by the river. This caused riverbed aggradation, flooding and the deposition of mine tailings and other waste material in the adjacent lowlands and rain forest. Petitions were sent by local communities to the Papua New Guinea government and the mine, expressing their concerns and demanding action. In 1988, residents of a village on the Ok Tedi River sent a petition to the North Fly Area Coordinator, describing a wide range of environmental problems which they attributed to the mine (Kirsch 1995, pp. 84-5). A letter written by people living on the Ok Tedi River to Ok Tedi Mining Ltd (OTML) expressed even more sweeping concerns about the mine's environmental impact:

All of these things show evidence of the mine's impact: our garden crops, dogs, pigs, fish and even people becoming ill. Coconut trees have died. People are suffering from sores. Even our staple food sago is affected. The rain makes us sick. The air we breathe leaves us short of breath. And the sun now burns our skin.

In the past, everything was fine. We never experienced problems like these before. But in the ten years that OTML has been in operation, all of these changes and more have taken place. Other plants in our gardens have been affected as well. We are concerned about these changes and it seems reasonable to assume that they are signs of the impact of the Ok Tedi mine. (Kirsch 1995, pp. 82-3; text modified for presentation)

When environmental impacts are evaluated from a scientific perspective, the focus is on changes in flora and fauna that can be quantified or measured. In economic terms, only those natural resources that possess value as commodities are measured. The magnitude of the loss is therefore determined by the market, rather than by local values. Neither of these perspectives captures the full range of concerns expressed by the people affected by the Ok Tedi mine. Complaints that no birds fly along the Ok Tedi are not simply references to changes in species composition or economic loss, but also symbolic representations of the environmental crisis.

### **An international appeal**

The Wau Ecology Institute of Papua New Guinea helped several representatives from the Ok Tedi River present their grievances against the

THE UNIVERSITY OF MICHIGAN LIBRARIES

mine at the second International Water Tribunal in the Hague in 1992 (International Water Tribunal 1994, pp. 49–85).<sup>9</sup> The tribunal found BHP guilty of violating the rights of the people living downstream and criticized the mining company for using its foreign earning power to compel the government of Papua New Guinea to lower its environmental standards. Moreover, it was critical of the government for permitting the mine to monitor its own impacts. It advised the government to establish and enforce legally binding provisions to prevent long-term environmental damage. Finally, the tribunal recommended that if the mine could not devise a way to curtail riverine tailings disposal, then it should close its operations.

Forums of this nature, for example, tribunals and people's courts, provide important opportunities for indigenous and other politically marginalized peoples to express human rights concerns and receive a fair hearing, especially when the resources for more protracted legal procedures are unavailable. The judgment of the International Water Tribunal was significant because it internationalized and legitimated the claims of the people living downstream from the Ok Tedi mine. Unfortunately, the tribunal has no powers of enforcement and neither the government nor the mine changed their policies regarding tailings containment. In retrospect, however, the judgments of the tribunal proved to be prescient.

### **Documenting the problems downstream**

In response to the findings of the International Water Tribunal, the Ok Tedi mine engaged a team of social scientists to carry out social impact studies of the downstream communities from 1991–94. I worked with the communities of the lower Ok Tedi River, where I had previously conducted anthropological research. As the river moves from the mountains into the lowlands, it begins to deposit its sediment load along the river banks. The lower Ok Tedi is therefore particularly vulnerable to overbank flooding and by 1992 had sustained a high level of damage from material deposited outside of the river channel.

Mine waste had been deposited onto forest and garden land, into adjacent wetland areas and upstream along the streams that flow into the Ok Tedi River. This contrasted starkly with the fertile soil that used to be deposited along the river's flood plains, permitting gardening with only a short or even no fallow period. The mine wastes had an adverse impact wherever they were deposited, killing plants and trees, and disrupting local ecosystems. The damage extended for approximately

40 kilometers along the river, with areas of dead trees along local streams as far as three kilometers from the main channel. There had been little regrowth. This land had been particularly valuable to the villages along the river because it offered resources not readily available in the rain forest interior. At the time of the social impact study, almost no formal assessment of the environmental damage along the river had been undertaken by the mine or the government, and almost no compensation had been paid. The people living in this area were plagued by frustration and despair because their efforts to obtain restitution and to stop riverine tailings disposal had been ignored.

Approximately 2000 people lived in the eight villages along the lower Ok Tedi in the 1980s and 1990s. Another thousand persons lived in adjacent refugee camps (Kirsch 1989b), all of whom depended upon local resources for the majority of their subsistence needs.<sup>10</sup> Pollution from the mine compromised the abilities of the people living along the lower Ok Tedi River to feed themselves and their families. The loss of garden land forced them to compete for plots in the rain forest that produced at most one or two good harvests. There were fewer fish in the river and people were often afraid to consume them. Turtles no longer migrated upriver along the Ok Tedi to lay their eggs, once an important seasonal resource. Local streams were choked with mine wastes, making it difficult to catch prawns, previously an important source of protein, especially for children. Large stands of *Metroxylon* palms, the source of sago starch that is the local staple, were also adversely affected by mine tailings.

Most of the people whom I interviewed for the study in 1992 agreed that the mine should not have begun production until a safe method for dealing with the tailings had been put in place. They complained that pollution had already 'spoiled' their land. At that particular juncture, however, they preferred that the mine stay open so that they could receive compensation for the damages that they had incurred. They also demanded that the mine stop polluting. The villagers indicated that rather than resort to violence, which had caused so much hardship and suffering during the civil war in Bougainville, they intended to enlist the support of local non-governmental organizations to bring about reform. This warning was included in the social impact study that I presented to the mine in 1993, but not heeded; local NGOs went on to file their lawsuit against BHP in the Victorian Supreme Court in Melbourne the following year.

Local concerns about pollution were largely supported by a series of NGO audits and evaluations, including the Starnberg Report commissioned by the German Lutheran Church (Starnberg Institute 1991),

the review by the Australian Conservation Foundation (Rosenbaum and Krockenberger 1993), and a report issued by the International Union for the Conservation of Nature and Natural Resources (1995, p. 53), which called for a more conservative approach to the estimation of future environmental impacts. While these reviews were routinely criticized by the Ok Tedi mine for their methods, their small sample sizes and other perceived inadequacies, they proved to be much better predictors of environmental impact than the voluminous studies produced by the mine itself.

### **Existing international law and the failure to protect the environment**

The people living downstream from the Ok Tedi mine did not receive adequate protection from the government of Papua New Guinea, which did not monitor or adequately regulate the impact of the mine.<sup>11</sup> Local protests and petitions were largely ignored (Burton 1997). Even though the International Water Tribunal was unable to enforce its judgment, its decision encouraged the downstream communities to seek redress through the courts. They looked to international law for support in their bid to stop the mine from using their rivers for tailings disposal.

One of the earliest expressions of international environmental responsibilities was Principle 21 of the Stockholm Declaration:

States have ... the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their own jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction. (Principle 21, Declaration of the United Nations Conference on the Human Environment, Stockholm, June 1972, cited in Hohmann 1992)

This principle has been invoked in various efforts to establish an international basis for environmental human rights, including Principle 2 of the Rio Declaration on the Environment and Development of 1992. These principles have also been cited in recent legal cases concerning foreign direct liability, the principle of holding transnational corporations accountable for their actions abroad (Kirsch 1997; Newell 2001; Ward 2001). Major cases against Texaco for its petroleum operations in Ecuador and Freeport-McMoRan regarding its copper and gold mine in Papua (formerly Irian Jaya), Indonesia, have turned on questions about

the responsibilities of states not to cause environmental harm beyond their own borders (Broderick 1994, p. 16; Kimmerling 1997; Duval 1997).

Even where stringent environmental statutes or laws exist, they are often very general in nature. For example, the principle of sustainability is enshrined in the 1975 constitution of Papua New Guinea:

We declare our fourth goal to be for Papua New Guinea's natural resources and environment to be conserved and used for the collective benefit of us all, and to be replenished for the benefit of future generations. (Papua New Guinea 1975)

Legal statutes which are consonant with the right to a clean and safe environment, such as this constitutional principle, are often too broad to be enforceable as law. For example, in *Oposa v. Factoran*, an important case in the Philippines regarding the right of the Timber Licensing Authority (TLA) to harvest the remaining rain forest in the Philippines, the judgment was based on constitutional guarantees of a 'balanced and healthy ecology' (Rosario 1993). The courts found that:

Such a right, as hereinafter expounded, considers the 'rhythm and harmony of nature'. Nature means the created world in its entirety. Such rhythm and harmony include, inter alia, the judicious disposition, utilization, management, renewal and conservation of the country's forest, mineral, land, waters, fisheries, wildlife, off-shore areas and other natural resources to the end that their exploration, development and utilization be equitably accessible to the present as well as future generations.

However, Judge Eriberto U. Rosario (1993) later found that this claim was not enforceable because it was lacking in specificity, and thus would deprive potential defendants of the right of due process.

### **The lawsuit against BHP and the Ok Tedi mine**

In 1994, a lawsuit representing 30,000 indigenous persons as plaintiffs against BHP and the Ok Tedi mine was filed in both the capital of Port Moresby and the Victorian Supreme Court in Melbourne, where BHP is incorporated. *Rex Dagi v. Broken Hill Proprietary Company Limited* was one of the largest claims in Australian history. It received considerable media attention and the public response to the environmental impact of the mine was overwhelmingly critical.

The case against the mine did not directly address damage to property, because the court found that it had no jurisdiction to entertain claims relating to the loss of land or damage to land (Gordon 1997, p. 153). Moreover, it did not address fundamental questions of environmental human rights, because no statutes were seen to raise the level of an enforceable international norm and because environmental laws in Papua New Guinea were insufficiently developed to be of use. Accordingly, the claims against the mine were reframed to plead loss of amenity, which embraced the subsistence economy of the plaintiffs (Gordon 1997). This was a novel concept for the court, in that it did not involve a claim for economic loss, which forms the foundation for damages in virtually all western legal systems (Victorian Supreme Court 1995, p. 59). The precedent is of considerable significance to indigenous communities internationally, for whom environmental damage has often meant the destruction or impairment of their subsistence resources.

### **Valuing indigenous losses**

Mining companies make three major types of payments to indigenous communities in Papua New Guinea (Banks 1998, pp. 55–6). The first is known as 'compensation' and includes one-time payments for disturbance or damage to land or forest, or other improvements to the land, including houses, gardens, and 'lifestyle'. A second form of recompense called 'occupation fees' consists of annual rent for expropriated land and resulting lifestyle disruptions; these payments are calculated according to the area of land that is leased. The third category is royalty payments, which are based on a percentage of the gross value of production. More recently, as local communities have acquired equity shares in mining projects, a fourth category of dividends has emerged.

Large-scale mining operations may also be responsible for improved access to health care and education, usually according to terms spelled out in agreements between the landowners and the government, and the provision of new, although not necessarily better, housing and community infrastructure (for example, water supplies, roads and so on). These elements form a central part of compensation regimes even though substitution of a water tank for a freshwater spring, for example, while measurable on an index of modernization or development, does not necessarily translate into an improved quality of life, particularly when the introduced technology has a limited lifespan and provisions are not made for its eventual replacement.

The logic of compensation assumes that all damages have an equivalent in monetary form and that all things can be reduced to their value as commodities, which may inappropriately 'bottom-line' values that are not properly amenable to financial calculation (Rappaport 1993, p. 299). The assumptions underlying the compensation process therefore ignore the presence of other values, such as the importance of land for identity and local knowledge (Kirsch 2001). This may hold true even for indigenous communities with extensive participation in the cash economy, who may bring these resources to bear on their subsistence pursuits, which remain central to their identities and essential for social relations (Sahlins 2000). Rights to land and subsistence practices are fundamental human rights for indigenous peoples, as many scholars and advocates have observed (for example, Popović 1996, p. 541). Land is often pivotal to the historical accumulation of experience and identity; such losses must be reckoned not only in economic terms, but also in terms of the community's capacity to produce local subjects.

### Provisions of the settlement

The lawsuit against BHP and the Ok Tedi mine was settled out of court in 1996. The first component of the settlement established a K110 million compensation package that is being distributed to the 34,000 people living along the Ok Tedi and Fly rivers during the remaining years of the mine. A second trust of K40 million was set up on behalf of the landowners and resource users who live along the lower Ok Tedi River where the impact of the mine is most pronounced.

The central feature of the settlement was corporate commitment to tailings containment, the most likely option for which was a tailings pipeline from the mine site in the mountains along the east bank of the Ok Tedi River to a lowland storage area. While the storage area was projected to cover between 30 and 50 square kilometers, this land could be progressively rehabilitated. The estimated cost of the pipeline ranged between US\$180 and US\$250 million. The lower Ok Tedi River is also being dredged at a cost of US\$30 million per year; this has lowered the river bed and reduced flooding into the adjacent forests. However, it removes only a fraction of what the mine releases into the river every day. Finally, the company agreed to establish an environmental rehabilitation program for deforested land along the river. Through the settlement, BHP also committed to implement the most practicable tailings containment option on the recommendation of the Papua New Guinea government following a review of the available options.

The provisions of the accord were backed by an agreement with BHP that any disputes arising during the course of its implementation would be heard by the Victorian Supreme Court in Melbourne. The settlement also ratified the principle of alien tort claims, which seeks to hold corporations accountable in the countries in which they are incorporated and according to legal standards in their home countries. As such, the Ok Tedi case was a forerunner – and one of the most successful cases to date, even given its shortcomings – of international legal action regarding foreign direct liability, which includes cases against Freeport-McMoRan's Grasburg mine in West Papua (Indonesia) and Texaco in Ecuador, in addition to ExxonMobil's natural gas installation in Aceh (Indonesia), Unocal's oil pipeline in Burma, Chevron and Royal Dutch/Shell for their petroleum operations in the Niger Delta, Rio Tinto for its alleged military collusion in the civil war on Bougainville and British Thor Chemicals for the health impacts of mercury-based chemicals on its South African employees, all of which have recently been or are currently before the courts in the United States and the United Kingdom (Newell 2001; Pegg, Chapter 1 of this book; Ward 2001).<sup>12</sup>

Yet the review carried out by BHP in 1999 claimed that none of the proposed strategies for tailings containment – a tailings dam, as envisioned by the original environmental impact assessment, but never completed; dredging the lower Ok Tedi River to remove tailings and sediment; or a combination of dredging and a 100 kilometer pipeline to transport mine tailings to a lowlands containment area – will substantially mitigate the environmental processes already in train. This assertion prompted the communities downstream from the mine to return to court in Melbourne in April 2000, charging BHP with breach of the original settlement agreement. The case is expected to come to trial in 2003.

### **Conclusions and recommendations**

The full range of factors which have influenced decision-making about the Ok Tedi mine cannot be catalogued here (see Jackson 1993; Filer 1997). Multilateral agencies guaranteed loans and provided risk insurance despite warnings and environmental problems early in the project history. Financial pressure from the unexpected closure of the Panguna mine on Bougainville in 1989 affected government decision-making regarding continued riverine tailings disposal from the Ok Tedi mine. The state faced international pressure to generate export income and had an interest in creating an investment climate that encouraged international capital, given the country's limited infrastructure, lack of



skilled labor and high costs of living. The state also had a conflict of interest as a result of its investment in the mine and saw itself as 'paying double' for expenditures on environmental protection, through the loss of both royalties and taxable income.

Finally, there was an absence of binding standards, statutes or laws that could have prevented the problems at Ok Tedi from occurring. Indigenous protests and petitions were comfortably ignored, even when they entered the international arena. The findings of an international tribunal were not heeded. Criticism from scholars fell on deaf ears. Even negative media coverage had little impact until amplified by the court proceedings. Corporate policies, codes of best practice and other voluntary agreements lacking enforcement mechanisms were equally ineffective.

Perhaps the most important observation that one can make with respect to the Ok Tedi case is that despite actively pursuing all of these options, the indigenous people living downstream from the mine were not successful in stopping or even limiting the mine's detrimental impacts. It took years and a combined political and legal campaign to force the mine to take its environmental impact seriously, as indicated by their belated admission in 1999. Moreover, local efforts were largely ineffective despite advantageous circumstances. The 1990s was the UN decade of indigenous peoples and they readily found common cause with environmentalists interested in conserving biodiversity and tropical rain forests. The problems were caused by an industry strongly associated with Australian national identity and a company whose stocks were held by unions and church groups sensitive to these issues. In addition, media coverage of the legal case kept the issues in the public eye.

Despite criticism of the project almost from the outset, BHP and the Ok Tedi mine failed to implement tailings containment that would have prevented the devastation of the Ok Tedi and Fly rivers. In early 2002, BHP Billiton transferred its 52 per cent share in the mine to a trust company established in Singapore that will indemnify both the corporation and the PNG government from future environmental claims. It remains unclear whether the economic returns from this investment will be sufficient to offset the value of the losses downstream; a cost-benefit analysis of this relationship was commissioned by the PNG government and completed in 2001, although the results have not been made public. Rather than take responsibility for the long-term impacts of the mine on the downstream environment, which by their own account will last for at least 50 years and possibly much longer, BHP Billiton severed its relationship with the project and the affected communities. It is unclear how this decision, especially given the uncertain nature of the

THE UNIVERSITY OF MICHIGAN LIBRARIES

long-term impacts of the mine, corresponds to the ideals expressed in its corporate social and environmental policy.<sup>13</sup>

Despite the efforts of the affected communities and irrespective of their international support, the outcome at Ok Tedi was disastrous, as even BHP acknowledged in its statement that the Ok Tedi mine is incompatible with its environmental values. The process by which environmental impacts from mining projects are monitored and controlled in Papua New Guinea and elsewhere in the Third World is clearly inadequate and in need of major reform. How might the recognition and enforcement of environmental human rights help to prevent another Ok Tedi?

1. Indigenous communities should have veto power over projects which affect their land, livelihood and use of subsistence resources. To this end, governments, multilateral agencies and NGOs should formally recognize indigenous land and resource rights.<sup>14</sup> For these communities to exercise this power effectively, they need to be fully informed about environmental matters.
2. Independent social and environmental monitoring is required to evaluate mining and other large-scale resource extraction projects. Special efforts must also be undertaken to overcome state conflicts of interest regarding its responsibilities as a regulator on behalf of its citizens and its other economic policies and ownership interests.<sup>15</sup> Regular external reviews should be clearly linked to processes through which necessary changes are mandated and enforced. The review process must be open and transparent and include public participation.
3. Where appropriate, indigenous environmental knowledge should be incorporated into environmental impact assessments and monitoring of extractive industry (see Berkes and Henly 1997; Stevenson 1996).
4. There is an urgent need for full disclosure of environmental information and more effective communication between mining projects and affected communities regarding environmental impacts. Translation and explanation of scientific data and other findings may require special efforts and resources on behalf of indigenous communities.
5. Corporations are responsible for providing just and reasonable compensation for their impact on local environments and resources, local subsistence practices, sacred sites and the full costs of relocation if community permission is granted. These efforts must take cultural values into account as well as the market value of land and resources (see Popović 1996, pp. 537–9).

6. Support should be provided for mechanisms of dispute resolution at a variety of levels, including the courts. Access to international courts should not be restricted, as the government of Papua New Guinea attempted to do in 1995 by criminalizing participation in overseas legal actions against mining corporations for their operations in Papua New Guinea, claiming infringement of their national sovereignty. Nor should the countries where transnational corporations are incorporated oppose legal action when affected parties lack access to impartial courts in their home countries. Forums such as the International Water Tribunal should be supported and their verdicts linked to mechanisms of enforcement, including binding obligations on multilateral agencies that finance and insure international development projects like the Ok Tedi mine.
7. Finally, there is an urgent need for international legal precedents on environmental human rights that rise to the level of recognized standards and norms. Greater specificity is needed for the standards for environmental human rights if they are to be operationalized. Double standards which allow corporations to operate according to lower standards abroad, potentially resulting in environmental racism, should be prohibited. For example, a mine using riverine tailings disposal would not be approved in Canada or the United States, so its operation in Papua New Guinea should not be accepted even though it might comply with national standards.

The potential benefits of these recommendations include greater social and environmental justice, and the reduction in violence and conflict over resource development. Changes in how extractive industries and host governments calculate the costs of environmental degradation and pollution are also necessary; these externalities should be internalized from the outset of project planning. Moreover, mining companies need to assess their responsibilities in terms of longer time frames commensurate with the longevity of their environmental impacts, for example, at least 50 years in the case of the Ok Tedi mine (see Adam 1998). New standards for responsible mining practices must be developed, perhaps focused on mining on smaller scales with reduced throughputs. No new ore body should be exploited until reliable strategies for tailings containment have been identified. This means that some ore bodies will be off-limits to development in the immediate future, and perhaps even permanently, if no effective means of tailings disposal is available. Some strategies of waste disposal, for example, riverine tailings disposal in the tropics, as used by the Ok Tedi mine,

Freeport-McMoRan's Grasburg mine, and the Porgera mine in New Guinea, should be permanently banned.

Whether or not a basic human 'right to the environment' has been firmly established, a productive and healthy environment is clearly fundamental to the exercise of other human rights. It is imperative that these reforms be enacted and enforced, to prevent extractive industries, in their pursuit of financial gain, and host governments, in their pursuit of other development goals, from denying essential human rights to indigenous peoples. This case study also demonstrates that conflict with local communities is unavoidable until transnational corporations look beyond regulatory requirements and procedures for compensation to recognize environmental human rights and make these principles the cornerstones of industrial policy and practice.

## Notes

1. This chapter is a revised and shortened version of a paper presented at a workshop sponsored by the United Nations High Commissioner for Human Rights in Geneva on 'Indigenous Peoples, Private Sector Natural Resource, Energy and Mining Companies and Human Rights' in December 2001. My research on mining in Papua New Guinea was generously supported by the Royal Anthropological Institute and Goldsmiths College Fellowship for Urgent Anthropology and the Center for International Business Education at the University of Michigan. I would like to thank the editors for their invitation to contribute to this volume and their suggestions for revisions, although I take full responsibility for any errors of fact or interpretation.
2. Critics of human rights regimes have argued that they constitute an extension of the colonial project, making universal claims for what is essentially a cultural model drawn from Euro-American intellectual traditions (Mutua 2002). The assumptions which they make about the appropriate relationship between individual rights and society, for example, run counter to many cultural traditions. Moreover, these regimes lack 'the analytical or normative tools – or even the desire and gumption – to unpack the complex oppressions which globalization now wreaks on individuals and communities' (Mutua 2002, p. 157). Critics call for new dialogues and debates that 'confront structurally and in a meaningful way the deep-seated imbalances of power and privilege which bedevil our world' (Mutua 2002, p. 157). Other scholars have written critically about how the 'market of civic virtue' shapes academic discourse on human rights (Rabinow 2002, p. 147, n. 7). While sympathetic to some of these arguments, I oppose the dismantling of existing human rights regimes in the absence of concrete alternatives. This chapter, as well as the other contributions to this volume, recommends a strengthening of these regimes through their application to corporate behavior, providing new political resources to affected persons and communities by establishing new means to hold transnational corporations accountable for their actions.

3. In its statement on environmental policy, BHP commits to: 'Comply with all applicable laws, regulations and standards; uphold the spirit of the law; and where laws do not adequately protect the environment, apply standards that minimise any adverse environmental impacts resulting from its operations, productions and services' (Anderson 1999).
4. In 2001, the shareholders in the Ok Tedi mine were BHP (52 per cent), the Independent State of Papua New Guinea (30 per cent) and Inmet Mining Corporation (18 per cent). In 2002, BHP merged with the London-based Billiton to become BHP Billiton, which divested its ownership share of the mine into a Singapore-based trust (the Sustainable Development Program Company).
5. Hyndman (1994, p. 90) notes that, 'the state renegotiated the project six times to sustain mining production, thereby canceling the environmental protection envisioned in the original OTES [Ok Tedi Environmental Study]'.
6. The production of copper concentrate in 1998 was 491,336 tons, containing 151,556 tons of copper, 413,265 ounces of gold and 838,619 ounces of silver (Ok Tedi Mining Ltd 2001).
7. The value of the Papua New Guinea kina in 1998 was US\$0.4856.
8. This figure has been greatly reduced by the devaluation of the Papua New Guinea kina by more than 60 per cent (from US\$0.749 in 1996 to US\$0.275 in 2002), and by the failure to implement tailings containment, by far the largest expenditure envisioned by the settlement.
9. BHP declined to respond, despite being informed of the case and given ample opportunity to do so (International Water Tribunal 1984, p. 84).
10. More than 10,000 political refugees crossed the international border from Papua (formerly Irian Jaya, Indonesia) into Papua New Guinea in 1984 (Kirsch 1989b).
11. Meg Taylor (1997, p. 24) notes that 'where the state acquires equity in major resource projects, it tends to relinquish its role as an independent arbiter in matters relating to a project, especially in matters involving environmental and social impact... It is not impartial and therefore not accessible to the people whose interests are damaged'.
12. The US cases are being heard under the Alien Claims Tort Act (ACTA), a 1789 law designed to enable the United States to hear claims against sea pirates who lacked a national domicile.
13. BHP's community relations policies includes a pledge to 'work co-operatively with all communities affected by proposed or existing operations for their long term benefit and that of our shareholders', as well as the obligation to 'consult with communities, and understand and respond to their concerns and wishes about the responsible management of these impacts' (Prescott 1997).
14. The Independent Commission on International Humanitarian Issues (1987, p. 50) argues that, 'all indigenous land should be made inalienable and secure, mining operations should be re-examined and, if necessary, suspended when the indigenous community is seriously affected and so demands'.
15. Writing about the Ok Tedi case after the settlement, lawyer and former Ambassador from Papua New Guinea to the United States Meg Taylor (1997, p. 24) argued that 'it is an absolute necessity to keep environmental regulation and audit at arm's length'.

## References

- Adam, Barbara. 1998. *Timescapes of Modernity: the Environment and Invisible Hazards*. New York: Routledge.
- Anderson, Paul M. 1999. *BHP Environmental Policy*. Mimeo.
- Banks, Glenn. 1998. 'Compensation for Communities Affected by Mining and Oil Developments in Melanesia', *The Malaysian Journal of Tropical Geography* 29 (1): 53-67.
- Barker, Geoffrey and Stewart Oldfield. 1999. 'BHP Admits Mine is a Mess, Downer says Dig in', *Australian Financial Review*, 12 August.
- Berkes, Fikret and Thomas Henly. 1997. 'Co-Management and Traditional Knowledge: Threat or Opportunity?', *Policy Options*, March, pp. 29-31.
- Broderick, Vincent L. (United States District Judge). 1994. In *Maria Aguinda et al. v. Texaco, Inc.* 93 Civ 7527 (VLB). Memorandum. 11 April: p. 16.
- Burton, John. 1997. 'Terra Nugax and the Discovery Paradigm', in Glenn Banks and Chris Ballard, eds, *The Ok Tedi Settlement: Issues, Outcomes and Implications*, pp. 27-55. Canberra: National Centre for Development Studies, Pacific Policy Paper 27 and Resource Management in Asia-Pacific.
- Chapman, Peter, Margaret Burchett, Peter Campbell, William Dietrich and Barry Hart. 2000. 'Ok Tedi Mining, Ltd. (OTML) Environment Peer Review Group (PRG): Comments on Key Issues and Review Comments on the Final Human and Ecological Risk Assessment Documents', pp. 1-19. April. Available at [www.oktedi.com](http://www.oktedi.com).
- Duval, J. Jr. 1997. *Tom Beanal, On Behalf of Himself and All Others Similarly Situated v. Freeport-McMoRan, Inc., and Freeport-McMoRan Copper and Gold, Inc.* [Civil Action No. 96-1474 Section K]. United States District Court, Eastern District of Louisiana. 9 April 1997.
- Filer, Colin. 1997. 'West Side Story: the State's and Other Stakes in the Ok Tedi Mine', in Glenn Banks and Chris Ballard, eds, *The Ok Tedi Settlement: Issues, Outcomes and Implications*, pp. 56-93. Canberra: National Centre for Development Studies, Pacific Policy Paper 27 and Resource Management in Asia-Pacific.
- Gordon, John. 1997. 'The Ok Tedi Lawsuit in Retrospect', in Glenn Banks and Chris Ballard, eds, *The Ok Tedi Settlement: Issues, Outcomes and Implications*, pp. 141-66. Canberra: National Centre for Development Studies, Pacific Policy Paper 27 and Resource Management in Asia-Pacific.
- Harper, Ainsley and Mark Israel. 1999. 'The Killing of the Fly: State-Corporate Victimization in Papua New Guinea'. Australian National University Resource Management in Asia-Pacific Working Paper 22. 20 pages. ISSN 1444 187X. Available at: [http://rspas.anu.edu.au/rmap/Wpapers/rmap\\_wp22.pdf](http://rspas.anu.edu.au/rmap/Wpapers/rmap_wp22.pdf).
- Hohmann, Harold, ed. 1992. *Basic Documents of International Environmental Law*, Vol. 1. London: Graham and Trotman.
- Higgins, Roger J. 2002. 'Ok Tedi: Creating Community Partnerships for Sustainable Development'. Available at [www.oktedi.com](http://www.oktedi.com).
- Hyndman, David. 1988. 'Ok Tedi: New Guinea's Disaster Mine', *Ecologist* 18: 24-9.
- Hyndman, David. 1994. *Ancestral Rain Forests and the Mountain of Gold: Indigenous Peoples and Mining in New Guinea*. Boulder: Westview Press.

- Independent Commission on International Humanitarian Issues (ICHI). 1987. *Indigenous Peoples: a Global Quest for Justice*. A report for the Independent Commission on International Humanitarian Issues (ICHI). New Jersey: Zed Books.
- International Union for the Conservation of Nature and Natural Resources (IUCN). 1995. *The Fly River Catchment, Papua New Guinea – A Regional Environmental Assessment*. Published in collaboration with the Department of Environment and Conservation, Boroko, Papua New Guinea. IUCN: Cambridge, UK.
- International Water Tribunal. 1994. 'Ecological Damage Caused by the Discharges from the Ok Tedi Copper and Gold Mine', in *Mining*, pp. 49–85. Second International Water Tribunal, Case Books. Utrecht: International Books.
- Jackson, Richard. 1993. *Cracked Pot or Copper Bottomed Investment? The Development of the Ok Tedi Project 1982–1991, A Personal View*. Townsville: Melanesian Studies Centre, James Cook University.
- Kimmerling, Judith. 1997. 'Oil, Lawlessness and Indigenous Struggles in Ecuador's Oriente', in Helen Collinson, ed., *Green Guerillas: Environmental Conflicts and Initiatives in Latin America and the Caribbean*, pp. 61–73. New York: Black Rose Books.
- Kirsch, Stuart. 1989a. 'Ok Tedi River a Sewer'. *The Times of Papua New Guinea*, 1–7 June, 491: 3.
- Kirsch, Stuart. 1989b. 'The Yonggom, the Refugee Camps along the Border, and the Impact of the Ok Tedi Mine', *Research in Melanesia* 12: 30–61.
- Kirsch, Stuart. 1995. 'Social Impact of the Ok Tedi Mine on the Yonggom Villages of the North Fly, 1992'. *Research in Melanesia* 19: 23–102. Originally distributed as 'Ok-Fly Social Monitoring Programme', Report No. 5. Port Moresby: Unisearch PNG Pty Ltd (1993).
- Kirsch, Stuart. 1997. 'Is Ok Tedi a Precedent? Implications of the Settlement', in Glenn Banks and Chris Ballard, eds, *The Ok Tedi Settlement: Issues, Outcomes and Implications*, pp. 118–40. Canberra: National Centre for Development Studies, Pacific Policy Paper 27 and Resource Management in Asia-Pacific.
- Kirsch, Stuart. 2001. 'Lost Worlds: Environmental Disaster, "Culture Loss" and the Law', *Current Anthropology* 42(2): 167–98.
- Kirsch, Stuart. 2002. 'Anthropology and Advocacy: a Case Study of the Campaign against the Ok Tedi Mine', *Critique of Anthropology* 22(2): 175–200.
- Muchlinski, Peter R. 2001. 'Human Rights and Multinationals: Is There a Problem?', *International Affairs* 77(1): 31–47.
- Mutua, Makau. 2002. *Human Rights: a Political and Cultural Critique*. Philadelphia: University of Pennsylvania Press.
- Newell, Peter. 2001. 'Access to Environmental Justice? Litigation against TNCs in the South', *Making Law Matter: Rules, Rights and Security in the Lives of the Poor. IDS Bulletin* 32(1): 83–93.
- Ok Tedi Mining Ltd. 2001. At <http://www.oktedi.com>.
- Papua New Guinea. 1975. *The Constitution of the Independent State of Papua New Guinea*, Port Moresby: Department of the Prime Minister.
- Parametrix, Inc. and URS Greiner Woodward Clyde. 1999a. 'Draft Executive Summary: Assessment of Human Health and Ecological Risks for Proposed Mine Waste Mitigation Options at the Ok Tedi Mine, Papua New Guinea.

- Detailed Level Risk Assessment'. Prepared for Ok Tedi Mining, Ltd., pp. 1-15. 6 August. Available at [www.oktedi.com](http://www.oktedi.com).
- Parametrix, Inc. and URS Greiner Woodward Clyde. 1999b. 'Draft Executive Summary: Assessment of Human Health and Ecological Risks for Proposed Mine Waste Mitigation Options at the Ok Tedi Mine, Papua New Guinea. Screening Level Risk Assessment'. Prepared for Ok Tedi Mining, Ltd., pp. 1-13. 13 August. Available at [www.oktedi.com](http://www.oktedi.com).
- Pintz, William. 1987. 'Environmental Negotiations in the Ok Tedi Mine in Papua New Guinea', in Charles Pearson, ed., *Multinational Corporations, Environment and the Third World: Business Matters*, pp. 35-63. Durham, NC: Duke University Press.
- Popović, Neil A.F. 1996. 'In Pursuit of Environmental Human Rights: Commentary on the Draft Declaration of Principles on Human Rights and the Environment', *Columbia Human Rights Law Review* 27(3): 487-603.
- Prescott, J.B. (Managing Director and Chief Executive Officer, BHP). 1997. *BHP Community Relations Policy*. Mimeo.
- Rabinow, Paul. 2002. 'Midst Anthropology's Problems', The 2001 David M. Schneider Distinguished Lecture, *Cultural Anthropology* 17(2): 135-49.
- Rappaport, Roy A. 1993. 'Distinguished Lecture in General Anthropology: the Anthropology of Trouble', *American Anthropologist* 95(2): 295-303.
- Rosario, Judge Eriberto U. 1993. In *Juan Antonio Oposa et al. v. The Honourable Fulgencio S. Factoran, Jr*, in his capacity as the Secretary of the Department of Environment and Natural Resources, and the Honorable Eriberto U. Rosario, Presiding Judge of the RTC, Makati, Branch 66, respondents [G.R. No. 101083. July 30].
- Rosenbaum, Helen and Michael Krockenberger. 1993. *Report on the Impacts of the Ok Tedi Mine in Papua New Guinea*. A report for the Australian Conservation Foundation, November.
- Sahlins, Marshall. 2000. 'What is Anthropological Enlightenment? Some Lessons of the Twentieth Century', in Marshall Sahlins, *Culture in Practice: Selected Essays*, pp. 501-26. New York: Zone Books.
- Schoell, Hans-Martin. 1994. 'Part One. Introduction: Controversies about Development in the Pacific', in Hans-Martin Schoell, ed., *Development and Environment in Papua New Guinea: an Overview*, pp. 9-16. Goroka: The Melanesian Institute (POINT).
- Starnberg Institute. 1991. *Development and the Environment: Economic-Ecological Development in Papua New Guinea*. Commissioned by the Department of World Mission of the Evangelical Lutheran Church in Bavaria, Germany. Goroka: The Melanesian Institute for Pastoral and Socio-Economic Services.
- Stevenson, Marc G. 1996. 'Indigenous Knowledge in Environmental Assessment', *Arctic* 49(3): 278-91.
- Taylor, Meg. 1997. 'Putting Ok Tedi in Perspective', in Glenn Banks and Chris Ballard, eds, *The Ok Tedi Settlement: Issues, Outcomes and Implications*, pp. 12-26. Canberra: National Centre for Development Studies, Pacific Policy Paper 27 and Resource Management in Asia-Pacific.
- Townsend, William. 1988. 'Giving away the River: Environmental Issues in the Construction of the Ok Tedi Mine, 1981-1984', in J.C. Pernetta, ed., *Potential Impacts of Mining on the Fly River*, pp. 107-19. United Nations Environment



- Program: UNEP Regional Seas Reports and Studies No. 99 and SPREP Topic Review No. 33.
- United Nations Economic and Social Council. 1994. *Question of the Realization of the Right to Development*. Commission on Human Rights, Fiftieth session, Agenda item 8: points 6-10, 10 February (E/CN.4/1994/NGO/50). Written statement submitted by Human Rights Advocates, a non-governmental organization in consultative status (category II).
- Victorian Supreme Court 1995. *Rex Dagi et al. v. The Broken Hill Proprietary Company Limited No. 5782 of 1994 and others*, 24 October, pp. 58-63.
- Ward, Halina. 2001. 'Securing Transnational Corporate Accountability through National Courts: Implications and Policy Options', *Hastings International and Comparative Law Review* 24: 451-74.

THE UNIVERSITY OF MICHIGAN LIBRARIES