

LHIR – Mine Closure Planning: Local Business & LMC Employees

Introduction

For these two stakeholder groups this section addresses:

- A) Commitments and entitlements – under the current Integrated Benefits Package (IBP) and other agreements with Lihir Mining Company (LMC).
- B) Status of commitments and entitlements - made in the IBP and contractual arrangements between LMC and landowner companies and employees.
- C) Risks and probability of disruptive action - posed by the non-delivery or change in the delivery of these commitments and entitlements, which could negatively impact on mine operations.
- D) Impact of mine closure - on the provisions of the IBP as they apply to these two stakeholder groups, no matter what the trigger for mine closure.
- E) Further options and issues – recommendations for LMC with regard to the possible mitigation of identified risks and impacts. This will also include activities that could be undertaken to mitigate the downturn of employment and landowner contractor incomes that will necessarily occur when open pit mining ceases in 2012.

Executive Summary

Under the IBP, LMC has committed to give preference to Lihirians in employment and training as well as to maximize involvement of local landowner enterprises in spin-off business opportunities resulting from mine operations.

These IBP commitments have largely been achieved with Lihirians (366) already making up almost 40% of the direct LMC workforce. Only Lihirians are recruited into vacant LMC entry-level positions. Lihirians also constitute about 45% of the more than 1000 contractor employees involved in mining related activities.

Lihirians receive preferential treatment in various training and educational support initiatives of LMC.

Local Lihirian landowner companies and joint ventures also receive a significant portion of LMC contract work, the gross value of such contracts in 2001 being approximately K55 million. Managerial and accounting assistance continues to be provided to local enterprises by LMC staff at no cost.

Various specific employment, training and local business issues have been identified (see Section C) as triggers that have the potential, if not addressed, to possibly cause disruption to mine operations.

Although the recommendations summarised below relate to triggers that could result in mine closure at any time, they equally apply to the situation that will arise when open pit mining ceases in 2012.

This is a critical milestone for both LMC employees and local landowner company contractors – an event that cannot be avoided. At this time LMC and contractor employee numbers are projected to drop by at least 800 and gross contract incomes for landowner companies and joint ventures involved in open pit work, totalling K28 million a year, will cease. Closure of the pit will result in up to 250 fewer Lihirians in paid employment and this will also impact almost all other local businesses. These are obviously significant changes to the status quo, particularly for Lihirians, and plans should be made to prepare the community to understand and accommodate them.

Recommendations

These are activities and initiatives that could be considered by LMC to mitigate or address the identified trigger issues with respect to employees or local landowner contractors that could potentially cause a stop work or mine closure situation. Additionally there are recommendations that relate to improving the monitoring of LMC employees and contractors to give advance warning of potentially disruptive issues.

Whilst LMC's HR and training policies and procedures are adequate to handle the current situation it is felt imperative that the company has to develop policies (and tailored programmes if necessary) in the period leading up to 2012 that prepare the workforce for this particular milestone. **Based on what has occurred in other mines in Papua New Guinea such as Misima and Porgera, it is important that issues such as redundancy and training are addressed sooner rather than later.**

Employment recommendations

- i)** Extend the current social monitoring activities to also cover more specific LMC employee issues, to enable:
- monitoring of Lihirian villager & employee views and perceptions on recruitment, promotion and training matters.
 - identification of traditionally key or influential Lihirians who are LMC employees and ensuring that they are retained in the company in the event of any downsizing or restructuring exercise.
 - identify qualified/experienced Lihirians previously terminated from LMC who could be considered for re-employment.
- ii)** Initiate career/succession planning that will (transparently) enable suitably qualified Lihirian staff to progress through the LMC structure to eventually take up supervisory and/or managerial positions.
- iii)** Increase efforts in raising LMC employee awareness of employee recruitment, disciplinary, termination and promotion procedures based on performance and merit; employment and redundancy terms & conditions.

Training recommendations

- iv)** Increase emphasis on training for Lihirians at all levels in the company, with transparent rules/milestones and importantly recognition for achieving various competency levels. More emphasis on training in 'relocatable' skills, possibly through the support of vocational training at Palie Catholic Mission.

v) Establish a job placement section within the HR/Training department to identify short and long-term positions for skilled and trained Lihirians elsewhere in Papua New Guinea with, for example, other resource developers, aid programmes or major construction projects.

Local Business Development & Agriculture recommendations

vi) Support to a greater extent directly, or preferably through Nimamar LLG, initiatives to encourage Lihirians to establish or re-establish agriculture, forestry and/or fishery ventures, particularly those which have a relatively long lead time to bearing or harvesting.

These activities should encompass subsistence farming and well as cash cropping for local and export markets. The intention is to reduce reliance on imported trade store foods, engage local labour and provide alternative income earning opportunities. The activities which appear to offer the greatest potential to generate export income are the growing of cocoa and vanilla.

vii) Initiate an ongoing LBD awareness programme at a community and local landowner business manager level on the need to diversify landowner company activities and investigate various investments as alternatives to distributing profits as dividends. If local businesses are to survive in the coming years they will have to develop sources of income unrelated to the current dependence on LMC contracts. Particular extension emphasis should be placed on working with the two companies – Kuridala and Lakaka - involved in open pit mining related contracts.

viii) Initiate a process through CA/BD to develop a long-term integrated economic development plan for Lihir island in conjunction with other stakeholders – NIPG, Nimamar LLG and LMALA.

ix) Involve LMC community affairs business development staff in every new contract or contract renewal that involves local landowner companies. New or renewed contracts should have provisions which require contractors to provide

monthly/quarterly management accounts, allow LMC BD officers to have observer status in their Board of Directors meetings and ensure BD officer access to contractor offices to enable monitoring of compliance with statutory and contract requirements. This will enable a greater understanding of local landowner company operations, performance and ensure that shareholders interests are being properly served. This is particularly relevant in the case of Lakaka, which as the only representative local company with a broad range of commercial activities, has the greatest potential to serve the long term interests of its Lihirian shareholders.

x) Review the geographic and clan representative spread of local landowner recipients of LMC contracts to ensure that there is equitable distribution of such benefits (for example between SMP and non-SMP villages). This may require some discussion with current contract owners on the rationale for involvement of all island communities, taking into account the distribution of all mining related benefits.

A. Commitments and Entitlements

a) Employment.

Pre- Mine construction: Prior to mine construction less than 10% of the Lihir village population was engaged in any form of money earning activity. Half of those were wage earners and the other half farmers, fishermen and 'businessmen'. In terms of full-time employment, the 50 or so wage earners were public servants (administration, teachers and health workers) and employees of Londolovit Plantation and the Palie Catholic Mission. Most of these employees were Lihirian.

Post-Mine construction:

LMC commitments under the IBP and the company Training & Localisation Program noted in the 1995 Mining Development Contract (MDC), are that with regard to employment and training suitably qualified Lihirians should be given first preference, followed by people from New Ireland Province, followed by other Papua New Guineans, then non-nationals, respectively.

Persons are employed directly by LMC or its contractors and as such these employing agencies must comply with normal statutory requirements of the PNG Employment Act and other relevant legislation.

LMC employees are engaged under standard 2 year (or for Lihirians – open ended) contracts & letters of employment. Employees receive a range of non-salary benefits (see Section B).

b) Training

LMC commitments in the IBP and the company Training & Localisation Program noted in the Mining Development Contract (MDC), are that with regard to training suitably qualified Lihirians are given first preference, followed by people from New

Ireland Province followed by other Papua New Guineans and non-nationals, respectively.

LMC was to provide a training budget of K6.0 million for the first five years of project operation. LMC was also to provide scholarships and ensure that Lihirians received preference in the award of these.

The IBP contains an LMC commitment to work with the Training, Employment and Localisation Committee established by LMALA on training and employment matters and make quarterly reports available to the national government, provincial government and LMALA.

This monitoring committee was to consist of representatives from LMC, landowners, LMALA, Nimamar local government council and the New Ireland Provincial Government.

LMC, also under the IBP, committed to identify and establish suitable village based education and training programmes for Lihirians who cannot find employment as a result of mine activities.

c) Business Development.

Pre-Mine construction. Prior to mining operations there were very few local business activities other than the sale of excess fish and garden produce to fellow villagers at local markets. The 1980 census revealed that less than 10% of the island village population was engaged in any form of money earning activity – half of these were farmers, fishermen and ‘businessmen’. The latter refers principally to the owners of village trade stores. This situation changed dramatically with the initiation of large scale exploration and mine construction activities.

Post-Mine construction. Under the IBP, LMC “..recognised the need to involve, wherever possible, Lihirian interests in commercial spin-offs from mine construction and operations.” A Business Development Programme was prepared after discussions with LMALA.

The Business Development Programme identified a list of construction contract activities that it was agreed were suitable for Lihirian companies alone or in joint ventureship. There was specific mention that plant hire opportunities should be extended to Lakaka Earthmoving Services.

Various other agreements in the IBP relating to Londolovit Township and Putput community development, also commit LMC to assisting landowners from these specific areas in establishing spin-off business activities. **These agreements appended quite comprehensive schedules of potential business opportunities for such landowners including agriculture production & sales, bottle buying, building construction, cartage, freight handling, plant hire, property development and egg production.**

During the course of normal mine operations contracts are issued to local landowner companies or joint ventures for various goods and services required.

B. Current & Projected Status of Commitments & Entitlements

a) Employment

The advent of exploration, mine construction and subsequent mine operation, resulted in a large increase in employment opportunities for Lihirians and other New Irelanders with links to the Lihirian community.

LGL stated recruitment policy is to give preference to Lihirians, then New Irelanders then other Papua New Guineans, in line with the IBP provisions. This is also in line with the LMC Community & Environment Policy that states that there will be an overall net benefit to the community in the long term as a result of company operations in the area.

The LGL mining operation is the largest employer on Lihir Island, both in terms of direct employees and employees of contractors associated with mine operations. Employment associated with the Lihir mining operations In October 2002, compared to that in December 1998, was at follows:

Category	December 1998	October 2002
Lihirians	258	366
Other PNG	312	525
Expatriate	101	95
Total LMC Employees	671	990
Contractor Employees	1576	1,176
Total mine related	2,247	2,166

Most company senior and middle management (64 employees) are residential on Lihir whilst the majority of the national workforce has a fly in-fly out roster (546 employees), except Lihirian employees who live in their home villages and work a

five or six day week. The break-up of the direct LMC employees between various operational areas, as at October 2002, is as detailed in Annex 2.

Employee recruitment, terms and conditions

All entry level position vacancies are filled by Lihirians; these are positions such as process & mine operations trainees, technical assistants, secretarial and administration juniors. All apprentices are now Lihirian.

Lihirian recruits are given special employee inductions along with a village, clan or family representative, so that rules & regulations are clearly understood. Base hourly salary levels for positions are standard although Lihirian or FIFO employees may work different rosters.

All LMC national FIFO employees are engaged on standard 2 year renewable contracts. Lihirians are engaged on open-ended contracts. Salaries, terms and conditions are set by LMC and are comparable to similar positions in other resource developers in Papua New Guinea such as those at Porgera and Ok Tedi.

Workers Unions

Because there are no active unions or union members yet at LMC there has been no reason to align salaries and conditions with any particular award level.

The HR section have advised employees that whilst they are engaged as LMC 'staff' in addition to an annually reviewable salary they are entitled to other benefits such as education subsidy, entry into SBS and LIP schemes. If as a result of union membership they had to pay employees on an hourly rate subject to an award they have been advised that they could lose their non-salary staff benefits.

Staff Benefits

LMC permanent staff employees can elect to join a Service Bonus Scheme (SBS) under which they can save up to 10% of their salary, which is matched kina for kina by LMC and paid out every two years. Almost all staff have joined SBS.

Staff can also join the Life Improvement Programme (LIP) under which LMC extend a loan to match employees contributions at a rate of 5% repayable over 3 years to allow purchase of housing, vehicles, school fees and similar. The involvement of FIFO & Lihirian staff in LIP is apparently about equal.

Other Employment Provisions

LMC operates a disciplinary/remedial system that gives employees warning if their performance is unsatisfactory; however if they do not improve they are terminated rather than demoted. In certain instances terminated employees have been re-employed at a later date.

Staff salary or grade promotions at LMC are carried out on the basis of documented merit and performance. Monthly staff liaison meetings are held between managers, superintendents and employee representatives – these are venues at which employee grievances could be aired.

Lihirian and FIFO staff are employed on different rosters except those persons on shift crews who all work the FIFO 21/12;21/9 schedule. Various different rosters have been used or trialed for Lihirian staff. LMC provides all staff with daily work transport and at least two meals a day.

Redundancy Provisions

LMC have detailed the benefits that would be received by national FIFO & Lihirian staff in the event of a stand down.

These include travel costs to point of hire, payment of up to three months base salary after all accrued annual and long service leave, continuation of SBS & LIP contributions, education subsidy and medical insurance.

If a stand down was not resolved and employees were terminated they would receive 9 weeks pay in lieu of notice, 1 week pay for every year of service and other statutory entitlements.

Non-LGL contractor employment

As can be seen in Annex 1, there are varying numbers of Lihirians employed in local businesses, totaling at least 400 in the main landowner and other businesses surveyed. Since these enterprises rely on LMC for most of their work, this number is included in the above-noted 1,176 mine contractor employees.

Principals of most of local enterprises, almost all of whom were Lihirian, explained the often low number of Lihirians in their businesses almost identically. They had all experienced that Lihirian employees were less reliable, had erratic attendance due to customary obligations and thus, in order to maintain contract deadlines, a certain number of non-Lihirians had to be employed, despite the universally expressed desire to employ Lihirians wherever possible.

Employment after closure of Open Pit activities

Pit activities currently include drilling, blasting, excavating and transport of waste, low grade and high grade ore to disposal areas, stockpiles or process facilities respectively and maintenance of equipment associated with this.

this activity is carried out by landowner (Zenex, Kuridala, Lakaka) and other contractors (WTB, Orica, PNO, Century). Cessation of open mining in 2012 will result in the laying off of most of the staff involved in this work as detailed in the table below.

Company	Current Mining Situation		Projected Post - 2012	
	No. Employees	No. Lihirians	Number Employees	No. Lihirians
Western Tug & Barge	46 (all FIFO)	0	0	0
Zenex Drilling			0	0

Century Drilling	180	90	0	0
PNOC Drilling			0	0
Orica	27	15	0	0
Lakaka - mine	130	67	0	0
Lakaka – road maintenance			?	?
Hastings Deering & other c'tractors	38	0	0	0
LMC - mining	248	70	30	10
LMC – mine maintenance	160	0	0	0
LMC – drilling & exploration	50	25	6	6
Totals	879	267	36	16

The drop in current contractor staff levels will start between 2007 and 2012 as first the PNOC and Century drilling rigs are demobilized, and finally in 2010/11, the Zenex rigs. This is assuming that no worthwhile targets are identified in current round of exploration that could justify the rigs remaining.

Once the pit is flooded the only staff remaining will be those involved in the loading and transport of low grade ore from stockpiles to the processing plant. This exercise will involve a few excavators, bulldozers and 4/5 trucks and could be contracted out in its entirety to a company such as Lakaka – this could partially compensate for their loss of pit contracts. LMC staff involved in the supervision of this transport, grade control and sampling will be minimal (30).

As can be seen, pit closure will cause a drop of 35-40% in the LMC-contractor workforce (879), including more than 200 Lihirians (exact number dependent on the future level of Lakaka operations).

Pit closure will also have other flow-on impacts on employment since less security personnel will be required (no pit/mine facilities, no explosive magazines), possibly less environmental monitoring staff and less transport needed. Camp occupancy will drop substantially so less personnel will be required by Niolam Catering Services and other camp maintenance contractors.

In terms of the composition of the workforce between now and 2012 it is expected that with current training & localisation programmes there is likely to be a slight decrease in expatriate and FIFO national staff an increase in Lihirians in most areas.

Compliance with IBP and other commitments/obligations

The numbers of Lihirians employed by LMC has steadily increased as local education levels rose. The percentage of Lihirians in the LMC workforce has also increased and Lihirians have gradually moved into more senior positions as training programmes progress.

The relatively low educational levels of Lihirians at the start of the mine and current Lihirian-only recruitment policy for entry level positions skews the numbers so that many Lihirians are in lower level positions. This will change over time.

Despite above recruitment and localization achievements, concerns about employment and advancement through the LMC structure, particularly from Lihirians, still represent a possible trigger for action against LMC operations. This is detailed in the next section.

b) Training

LGL training policy, in line with the IBP is to give preference to Lihirians, then New Irelanders then other Papua New Guineans. Within LMC, overall training is

managed by the HR department whilst the Technical Training Section supervises apprenticeship, on-the-job and traineeship schemes.

In line with the company Training & Localisation Plan, all non-national positions in LMC have the training of national employees as one of the defined objectives of the position.

Training needs identified under job evaluation exercises are addressed by LMC through in-house and on-the-job training. Some of these are formal modules, such as those under apprenticeship programs, whilst others are competency based modules such as metal fabrication, diesel fitter, auto-electrical, mechanical fitter and instrument maintenance. An example is in the process plant where Lihirian employees have been trained over the years in day crews to take up positions of greater responsibility in operational shift crews and allow a reduction in the number of FIFO national and Filipino employees.

Since only Lihirians are recruited into all entry level trainee and apprenticeship positions and only fully trained FIFO nationals are engaged to fill other positions – most training activities are directed towards Lihirians. A person is considered to be Lihirian if is Lihirian by birth (ie Lihirian mother/father) or by marriage and his name appears on the VPS database. All staff are extended professional development and supervisory training courses by LMC.

Certain operational areas within LMC have organised specific job-related training such as the Environment Section – diver training, fish autopsy, laboratory management, hydrography and fishery resource investigations. Community Affairs staff received training in social research techniques, database management and sports administration.

Specific training initiatives undertaken by LMC include:

Apprenticeships: All apprenticeship positions are now offered to Lihirians. These have a condition that there is no guarantee of employment at the end of the apprenticeship period, although during 2001, 6 of 10 trades apprentices who

graduated were engaged by LMC. After graduation in December 2002 all 45 apprentices will be Lihirian and from then on 15 Lihirian apprentices will be engaged every year.

Scholarships: In line with agreements, preference for award of these is Lihirian, New Ireland then other national candidates. LMC also prefers to provide scholarships to those students in mining related disciplines at technical colleges and tertiary institutions. In 2001, 47 students benefited from this program. Additionally 4 LGL employee dependents were selected for sponsored tertiary studies under the Employee Dependent Scholarship Program.

Employee Development Programme: LGL sponsors eligible Lihirian and other eligible employees (after at least two years employment) to attend various studies in-house, by correspondence or at training institutions within PNG and overseas. During 2001, 8 national LGL employees attended sponsored courses overseas.

Graduate Development Programme: Graduates are employed every year from the various university campuses to join this program. During 2001, LGL also hosted 27 students from tertiary institutions who worked in various operational sections during their holiday as part of their work experience training.

Secretarial Training Scheme: this is provided for Lihirian women with Grade 10 or above, to provide them with the skills necessary for employment with LMC or its contractors. In 2002, 28 out of 34 of the intake for secretarial training were Lihirian.

Tutorme Women's Training Centre: Started in 2000, this centre is administered by the LGL business development department. It has provided extensive training to over 200 Lihirian women in sewing, garment manufacture and business skills.

After providing various levels of basic tuition, most training is provided on-the-job through the completion of contract work obtained by the Centre. At present, contract income covers the cost of materials and wages for the women workers.

Incorporated as a not for profit association, Tutorme plans to take on an increasing amount of contract work as women's skills improve, so that eventually they will manufacture all industrial clothing for LMC and its contractors at a price that will cover all normal commercial overhead costs.

Resource Centre:

Part of the Training department, this provides a wide range of specialist business and general skills, including competency based training in secretarial, computing, management, leadership and business disciplines. The Centre is accredited by the PNG National Training Council as a training provider in human development and training courses. The Centre has concentrated on training of company personnel with only limited training for any non-LMC or contractor personnel.

Business Development/Agriculture: There is a limited amount of training provided by LMC staff working in these two areas.

Education Support:

In addition to direct training, LGL provides assistance under LEAP (Lihir Education Assistance Program) to Lihirian education mainly through payment of school fees and provision of minor grants to primary and high schools. A breakdown of expenditure for 2001 is presented in Table 10.

Table 10: LMC Education Support 2001

Beneficiaries (Detail)	Amount (K)
Pre/Elementary schools (25)	12,500
Primary schools (7)	3,500
Primary Top-Up (3)	11,000
Secondary schools (10)	34,000
Tertiary institutions (43 students)	189,000
Technical schools (10 students)	66,000
TOTAL	316,000

This lower level education support is provided to disadvantaged Lihirian families who would otherwise be unable to afford school fees - with the intention that overall education qualifications of Lihirians will be raised to a level at which they are able to take advantage of LMC apprenticeship schemes and other positions within the company.

Compliance with IBP and other commitments

LMC has through its stated policies and practices made efforts to comply with its IBP commitments to give preference to Lihirians in the various training programmes that it administers.

With regard to village based education and training the work of Community Affairs staff in business development, agricultural extension and the Tutorme women's training centre have all contributed to raising understanding and awareness of these activities in island communities.

Concerns about training, particularly from Lihirians, however still represent a possible trigger for action against LMC operations. This is detailed in the next section.

c) Local Business Development

As a result of IBP and other commitments a local landowner company, Lakaka Ltd was incorporated prior to construction and formed a number of joint ventures in retail trading, catering and stevedoring. LMC made an interest free loan of K200,000 to Lakaka to assist with working capital and also entered into an agreement for the provision of managerial, accounting and secretarial assistance, at no charge for a period of three years.

Under the original Business Development Programme, LMC intended to establish and staff a subsidiary - "Lihir Business Development Pty Ltd", to provide

managerial, accounting and secretarial assistance to Lihirian businesses at no cost for a period of ten years. This company was never established.

The Lihir Management Company (LMC) has a Business Development Department under a manager with a total staff of 15, including 6 agriculture extension staff and 4 staff dealing with the management and operation of the Tutorme Training Centre. Of the remaining staff there are two accountants and two business development officers.

Business Development has a total of 220 local landowner companies on its records, of whom at December 2001, 120 were operational and of these 102 whose activities were directly linked in some way with Lihir Gold Limited (LGL) operations. BD staff provide direct hands-on assistance (e.g. monthly accounts, monthly statutory returns, hold cheque books etc.) to 43 of these landowner companies as clients and some support (annual accounts/returns) to a further 20 companies.

A Local Business Development Advisory Committee (LBDAC) operates, in line with the IBP Business Development Program, to assist LMC with contracting decisions and to oversee LBD activities. The LBDAC has members from LMALA, Nimamar Development Authority, NIP Commerce, Lakaka, and community representatives. This committee is not involved in the award of contracts.

All landowner companies on Lihir are approved by the LBDAC as being properly incorporated, owned substantially by Lihirian interests and statutorily compliant before they can be considered for any LGL related contracts. The December 2001 listing of 118 LBDAC approved local companies and joint ventures involving local companies included 67 who currently have direct contracts with LMC.

Apart from providing support and assistance to its client landowner companies, BD also administers an interest free loan scheme, a loan guarantee scheme, and the Tutorme women's sewing and training centre, which are detailed below. The sentiment expressed by the BD office is that in many cases, without their financial and managerial assistance, many of their clients would not survive commercially.

Landowner company loan assistance: LGL set aside K1 million to be extended as interest free loans to small Lihirian landowner companies, principally those involved in LMC contracts. Loans are not normally more than K5,000 although consideration is being given to raising this limit to K10,000. During 2001, 22 local businesses benefited from a total of approximately K371,000 of such interest free loans. Since its introduction 120 businesses have taken advantage of this scheme.

Landowner company loan guarantees: In earlier years LMC guaranteed commercial loans to Lakaka and Lihir Holdings. Unfortunately, due to managerial problems (and in the latter case, demise) of these companies, both these guarantees were drawn down. Currently LMC has made a number of smaller loan guarantees for more modest local landowner company activities.

Tutorme Women's Training Centre: Since the centre started over 200 women have been trained in garment manufacture on domestic and industrial sewing and embroidery machines. Centre graduates go on to sewing activities for LMC, contractors, schools and local communities. For example, Tutorme graduates sewed 10,000 geological sample bags for the LGL Geology Department in just six weeks. LMC have supplied the Centre a large renovated warehouse, US\$50,000 worth of equipment, utility costs and salaries of 4 staff members.

Details of the 2001 gross contract incomes of some of the larger local contractor companies that were surveyed are detailed in Annex 1.

Lakaka Group of Companies: Lakaka rapidly expanded from its original core activity (heavy plant hire) to stevedoring, balsa plantation, Ela Motors agency, hardware retail, building development, camp catering and a supermarket.

Due to an apparent combination of stock theft, bad debts, increasing interest rates and a drop in the value of the Kina, Lakaka Limited made a net loss of K2.7 million in 1998 (1997 profit K93,890), and for the Lakaka Group a net loss of

K3.25 million. This resulted in the Company being put into receivership at the end of 1999.

In early 2001 a K5 million loan from Mineral Resources Lihir (MRL), backed in turn by a loan from LMC, was extended to the Company to take it out of receivership, and reduce its bank debt. The loan was tied to a rescheduling of creditors over 4 years and an undertaking not to significantly expand until debts were repaid. As part of this arrangement LMC undertook to provide a certain volume of contract work to Lakaka.

Pit Closure in 2012

As is detailed in Annex 1 there are two landowner companies that are involved in open pit mining - Kuridala : dry hires large dump trucks to LMC & Lakaka :direct contracts and in the Zenex drilling joint venture.

Pit closure will result in an estimated drop of gross contract income for these two companies of K28 million. Kuridala, as noted in Annex 1 has suffered from the devaluation in the kina and will not make a substantial profit at the end of the day.

On the other hand Lakaka will continue to carry out road maintenance and if it is also awarded a contract for excavation and transport of stockpiled ore, should maintain its profitability, although with lower staff numbers. CA/BD should work closely with the management and principals of these two companies to ensure that any surplus funds after debt servicing are applied to long-term investments rather than disbursement as dividends.

Compliance with IBP and other commitments/obligations

LMC has provided considerable business opportunities to local landowner companies that represent many of the clans on the island, including direct contracts to the value of K40-50 million per annum.

LMC has continued to support the Lakaka group of companies, with Kuridala, the only broadly representative local landowner company, through the provision of contracts and financial assistance to ensure its continued operation.

The LMC business development section has since the start of operations continued to provide financial and managerial advice at no cost to a large number of local business enterprises which directly or indirectly have arisen as a result of mining operations.

C. Possible trigger Issues - risks and probabilities

This relates to the risks posed by not continuing, or changing the form of, the commitments made and actions taken as detailed in sections A & B above, in relation to employment, training and local business development.

a) Employment:

The following are possible triggers – issues which if not addressed, explained and/or negotiated with staff could possibly cause a strike or stop-work and result in mine closure.

- Salary Levels; There may be a perception of salary differentials between FIFO staff and those persons residential on Lihir.
- Parity with other resource industries: National staff may feel that their salaries are not on a par with equivalent positions in similar companies in the mining and petroleum industry elsewhere in Papua New Guinea.
- Kina Devaluation; if Kina continues to devalue and Kina buying power consequently reduces, the possibility of general staff action calling on a salary revision or parity against A\$ or US \$.
- Employment terms and conditions: Actual or perceived disparities between the employment terms and conditions for FIFO staff compared to residential Lihirian staff.

For example, even though there is consistency in salary levels it may be said/thought that FIFO staff gain greater benefit from being fed & accommodated by LMC and working different rosters.

Another example is the issue of rotational travel tickets to FIFO staff but not to Lihirians (especially if spouses are from elsewhere in PNG).

Both of the above matters have been raised as issues by LMC employees in discussions and toolbox meetings with HR staff.

- 'Lihirisation'; a general feeling among Lihirians that since the mine is on their land, they have preference in employment & training this should naturally over time result in Lihirians taking up at least a percentage of senior management and supervisory positions within LMC. No perceived progress on this could be seen to be 'discriminatory'.

- Ex-LMC Employees: there are a number (20+) of disaffected Lihirian ex-LMC employees in the local communities. These are qualified, educated and experienced persons who have for various reasons been terminated over the years by LMC and who may feel they have been unfairly or harshly treated.

The presence of these disgruntled employees in the villages would exacerbate any dispute with LMC over employment issues.

- Lack of promotion: again as a result of a general feeling among Lihirian staff that being landowners, having been employed, and often received training, that they should 'automatically' be promoted through LMC structure. This is more to do with replacement of non-Lihirians in low & middle level positions than replacing senior expatriate staff. This would be exacerbated by any perception of differential treatment of FIFO & residential staff.
- Illegal practices: Instances of actual or perceived breach of industry codes in certain work place situations could be cited as a reason to cease all or some of the mining operations. Unresolved workers compensation and work related injury claims represent a potential trigger for possible industrial action.
- Reduction of employee numbers: The substantial drop in employee numbers in 2012, especially since a significant percentage of these are Lihirians, could very easily trigger some industrial action affecting the whole workforce.
- Unionisation: **a)** Although apparently not currently an issue, certain Lihirian individuals do have connections with workers unions elsewhere in PNG. Dependent on the influence of such individuals, particularly amongst the Lihirian employees, many of the trigger issues raised in these other paragraphs could be more militantly pursued as union matters. **b)** A communication with staff in response to queries about unions that "everyone is free to join a union, but if you did we (LMC) would be obliged to pay you award wages which will be less than your current package" could be construed as a threat and represents a potential trigger for some sort of industrial action.

- Redundancy Package: When 'rolled out' the redundancy package for employees, particularly Lihirians, who will cease employment when pit operations cease in 2012, may be considered by certain parties to be inadequate compensation for loss of livelihood.
- Eligibility: As has occurred already on a number of occasions, various senior Lihirians and LMALA representatives could question whether a new trainee or apprentice actually is Lihirian. Although possibly a political rather than factual matter this is a scenario which could be a trigger for further industrial action, as a 'breach' of IBP commitments.
- FIFO/Lihirian employee animosity; There is a certain level of animosity between these two national employee groups, each thinking the other is receiving preferential treatment in some way. If (as has occurred in the past) FIFO employees are prevented from traveling from camp to the work locations because of a local Lihirian issue of some description – this could spark violence between the two groups.
- Contractor employee disputes; industrial action taken by contractor employees could easily spill over and impact the whole workforce and potentially shut down operations. This occurred in the past with a Thiess-Roche employee dispute and highlights the need for vigilance on employee relations in LMC and its contractors.

A number of the above potential trigger issues can be mitigated through an increased HR emphasis on ensuring LMC staff awareness of employment terms and conditions at all levels in the workforce. This could be done through individual notices, to save information papers for notice boards, staff 'town hall' & toolbox meetings, departmental staff meetings and similar. These could make sure that staff were aware of the basis for salary calculation and how this relates to different rosters as well as the standard procedures for promotion and advancement.

Issues relating to salary levels, terms and conditions are all potential triggers but the probability of them causing a long term closure of operations is low since there are set negotiation and arbitration procedures for resolving such disputes. Additionally employees are unlikely to want a situation where there is any long-

term closure since it would also result in lack of continued employment for themselves.

Other issues, particularly those relating to the perception that Lihirians, who should have first preference in training and employment, are disadvantaged from promotion through the LMC supervisory and management structure - will be more difficult to address. At present such sentiments may be festering beneath the surface and may not be clearly articulated but could come to the fore in another 'trigger' event and perhaps increasingly towards 2012.

b) Training

As with employment, the following items are possible triggers, issues which if not addressed, explained and/or negotiated with staff and/or the community could possibly cause a strike or stop-work. As with employment issues these relate primarily to possible perceptions of differential treatment of national FIFO and Lihirian employees by LMC.

- Eligibility; perceptions that the eligibility levels for entry into various LMC training programmes in some way disadvantage Lihirians or that there was a dispute whether trainees were 'genuine' Lihirians.
- Non-Lihirians; the perception, or fact, that a large (or at least greater than Lihirian) number of non-Lihirians attend training courses.
- Training courses: LMC may decide that certain training courses are discontinued whilst the local Lihirian community and/or workforce feel that these should be continued.
- High Drop-Out Rates; no matter what the reason for there being a high drop-out rate for Lihirian trainees in training programmes, this fact could be construed/misconstrued and presented as an LMC practice that disadvantages Lihirians.
- Educational support: should LMC decide to discontinue, reduce or change the criteria for the level of financial support for LEAP and associated programmes. In the past everyone who asked got school fee subsidy from

LMC on request – now some persons may object to the guidelines that stipulate that applicant families have to demonstrate an inability to pay.

- Insufficient training; due to a perception that there is a lack of training for Lihirians or that the standard of training extended to Lihirians is insufficient. This is related to the notion that completion of training results in ‘automatic’ promotion or eligibility for a higher position/grade.

As with some of the identified employment related triggers, there is only a low probability that any of the above issues will on their own cause a work stoppage. However in the event that there was unrest in the workforce some of these matters may be cited to add weight to any discussions/negotiations.

c) Business Development

The following are potential trigger issues associated with local landowner contractors to LMC that could possibly cause a stop work due to the withdrawal of their services or their influence over large numbers of the workforce or other local contractors providing vital services to mine operations.

- Loss of contracts; should for whatever reason a landowner company contract be withdrawn or reassigned to another party without sufficient consultation on the basis for this action. This could include the loss of contracts associated with pit operation, most of which will cease in 2012. Another example could be in 2007 when the Kuridala liabilities are repaid and their trucks, which will then be worn out and no longer required by LMC, yet the company has built up no funds to replace the vehicles.
- Reduction of contract values; should gross contract values reduce as a result of lower operational requirements as staff and camp occupancy numbers decrease, such that certain landowner company operations become only marginally profitable.
- Kina devaluation; should the Kina devalue to the extent that landowner company operations are unprofitable due to high operational costs. This may occur if contracts do not have CPI or currency fluctuation provisions.
- Employee dissatisfaction; strike or stop-work action should contractor employees feel they are disadvantaged in salary or conditions in comparison with for example, direct LMC employees.

- Inequitable award of contracts: perception from west coast villagers, outside SMP area, that local business development contracts are primarily awarded to SML and SMP area community members. This does appear to in fact be the case.
- Lack of benefits; the fact that in recent years there have been no dividends paid by the two broadly Lihirian representative landowner companies - Lakaka and Kuridala. This could exacerbate the perception of lack of involvement of west coast communities in local business development opportunities.

Although the above are all possible risks that could in a worst case scenario trigger an impact on mining operations the probability of them occurring is low due to the high dependence of the landowner company contractors on LMC for the bulk if not all of their income.

The exception to this dependence would be in 2012 when landowner company contractors who had been involved in open pit activities will effectively cease operations. Unless these companies have in the meantime diversified their interests elsewhere or made other investments there is a risk that their employees and/or shareholders could vent frustration or dissatisfaction over their loss of jobs/income in a manner that could impact mine operations.

D. Impact of Mine Closure

This section details the possible impacts of premature mine closure, as a result of any particular trigger issue, on employee and local business stakeholders.

a) Employees

Non-Lihirian and expatriate employees of LMC or its contractors would, under the terms of their employment, be repatriated to their recruitment locations and are unlikely to cause any problems for LMC. Most such employees are fully aware that employment and the benefits it brings are totally dependent on their performance and the continued requirement for their skills in the workplace. Should the job no longer be required the incumbents would leave with whatever statutory benefits they are entitled to.

Lihirian employees who cease employment would almost all initially remain in their home villages on Lihir. Those with sufficiently high education, trade certification or work experience would gradually leave the island as they found suitable positions elsewhere in the country.

Apart from the cost of temporary or permanent repatriation of employees and payment of statutory redundancy entitlements LMC would have some exposure to employees' outstanding loans under the LIP scheme. If not working, employees would be unable to repay their loans and LMC may have to accommodate outstanding amounts in individuals' redundancy calculations.

The consequences of having relatively large numbers of ex-LMC or contractor employees resident back in their home villages around Lihir are discussed elsewhere.

b) Training

In the event of mine closure it is likely that almost all in-house formal apprenticeship and competency-based staff training would cease.

Scholarships and sponsorships would probably continue to the end of that particular academic year and then not be continued should the mine remain closed.

The Tutorme Women's Training Centre would likely cease operation on mine closure. LMC is one of the Centre's principal customers and supports key management staff. The level of non-mine related customers for the foreseeable future would not be sufficient to cover normal operational costs.

Closure of open pit mining activities in 2012 should not significantly affect the overall level of LMC training activities; it would merely change their emphasis. There would no longer be the need for apprenticeship or lower level technical training in heavy diesel fitter skills and reduced need for instruction in certain automotive related disciplines.

c) Local Businesses

As is evident from Annex 1 most of the larger local landowner businesses rely almost totally on direct LMC contracts for their livelihood and in the event of mine closure they would effectively cease to operate almost immediately. Most other smaller local enterprises also rely indirectly on the mining operations and the presence of a large population of wage earners and would gradually close in such a situation.

In a mine closure scenario all these local companies are likely to lay off their employees, many of whom are non-Lihirian, repatriate them to their home provinces and home villages on Lihir.

For those businesses with loan exposure, closure any length of time would mean possible inability to meet repayments and the subsequent repossession of assets by banks. It is understood that quite a number of contractors have non-Lihirian employees married to Lihirians and these individuals could remain on the island

when their employment ceased. The issue of increased numbers non-Lihirian residents on the island is discussed in elsewhere.

Only those local companies that had diversified their activities, acquired assets or investments elsewhere in the country would have any ongoing income if mine operations ceased. The only landowner company with any potential for making this sort of large scale commercial investments is the Lakaka group. With the mine non-operational and without any other major form of economic activity virtually all business activity on the island would stop. The only businesses that would survive would be those that serviced ongoing local demands – such as village trade stores, PMV's and small boat transport.

Closure of pit operations in 2012 will reduce gross local landowner contractor and joint venture income by an estimated K30-35 million – through termination of direct pit related contracts and a reduction in other service contracts due to reduced employee numbers and the facilities required to accommodate, feed and transport them.

.

E. Other Options and Issues

The following are actions that could lessen risks of triggers identified in Section C above being activated or that could mitigate the impact of premature closure on LMC employees and local contractors.

Recommendations may be useful in discussions with employees & local landowner company contractors in preparation for the closure of open pit operations in 2012 and lessen the risk of these groups taking disruptive action. Since the start of operations there have been a number of work stoppages as a result of particular employee issues especially.

Employment

- LMC has employed and is still employing individuals who, whilst they may occupy relatively junior positions within the company structure, are respected and influential persons within their traditional village structures. LMC should be aware of such individuals through its social monitoring programme and ensure that they are not in some way 'disadvantaged' in any downsizing or retrenchment exercise, to ensure that whatever goodwill there is towards the company is maintained or at least not jeopardised.
- Possible extension of the social monitoring programme to cover HR monitoring with respect to Lihirian employees of LMC. Increased intelligence or feedback on the views, perceptions and fears of local villagers on the activities of LMC – in specific personal instances, in their eyes examples of LMC policy – could be of use in modifying HR/training practice so potentially disruptive actions could be minimized or avoided.
- The HR and/or Training section of LMC could operate a job placement service. This would involve networking within Papua New Guinea with other developers, aid agencies, large construction companies and similar in order to place trained and qualified Lihirians in appropriate jobs. These positions could be short or long term – for example in contractors associated with SPA funded construction.

Whilst being good PR, this service could also be a natural extension to LMC training and sponsorship programmes. It could also assist in

relocating Lihirians who were for example being retrenched from LMC or its major contractors.

A similar initiative has been taken by Placer Dome in Misima Mines, who have actively placed skilled Misiman employees who were retrenched as a result of the reduction in mining and later processing activities.

- Increased efforts to raise employee awareness of LMC recruitment, promotion, training, disciplinary & termination policy, procedures and rationale. This could reinforce the concept of training only being one factor in promotion – not an automatic ticket. Also the importance of other factors such as work ethic, merit, attendance, consistent standards and similar in assessing performance.

Training

- Increased emphasis on adapting training to be suitable for Lihirians, preferably training leading to recognized qualifications or at least improved employment prospects. Training would not necessarily have to be geared to specific LMC positions. This is particularly important in the years leading up to closure of pit operations in 2012.

In Porgera, for example, after concerns raised by the local community, the PJV made a conscious decision to stop apprentice training completely and engage a much larger number of local technical assistants who undertook various competency based training. Although only a relatively small number have gained formal trades qualifications and there is quite a high turnover it is viewed positively by local landowners who are gaining practical skills and experience of varying levels that they would not otherwise be able to, in the years leading up to mine closure. It is recognised that these 'relocatable' skills assist landowners in seeking employment elsewhere.

- If Lihirians are considered, for any reason, not to be ready to fill senior management or supervisory positions then LMC could possibly institute a system of associates, understudies, deputies or similar in conjunction with active mentoring of potentially 'upwardly mobile' Lihirians.

This initiative would demonstrate to the local community that LMC was indeed making a special effort to involve Lihirians in the company

management structure. The more Lihirians in relatively senior positions within the company establishment, the easier it will be to address potential unrest that could be caused by Lihirian employees at lower levels.

Local Business

- Ongoing communication *tok save* exercises to raise awareness in the general community as well as in established businesses of the need to develop or change focus of business to non-mining related activities.
- Promotion of the need to diversify existing business activities.
Diversification is likely only to be achieved by the larger local businesses through establishing branches elsewhere or more likely a 'passive' investment in real estate or other major venture. This could be geared such that loan repayments are made whilst there are other sources of income.
- Particular effort should be made to work closely with the principals and management of those companies that will be directly impacted by the closure of mine operations in 2012 - Lakaka and Kuridala.
- Increased awareness on the application of local company profit for 'offshore' investments on mainland New Ireland or elsewhere in Papua New Guinea rather than distributed as dividends.
- LMC to hold or organise workshops and/or seminars for the principals of major landowner companies to look at and understand the advantages and disadvantages of various investment options – shares, real estate, treasury bills, interest bearing deposits and similar.
- Attendance of BD staff at lanco BOD meetings in an observer status to regularly emphasise the need to make investments rather than pay dividends.?
- Possibility of CA/BD liaison with various Operations sections of LMC to plan for the possible outsourcing of certain current in-house operational functions, in say 2012, that could compensate in some way for loss of other pit related contracts.
- CA/BD to work closely with New Ireland Provincial Government, LMALA and Nimamar LLG on the details of a long term integrated economic development plan for Lihir – to investigate economic alternatives to mining.

This is in line with the spirit of MOA between latter three parties & LMC in the first IBP (Chapter 3).

- CA/BD work with Nimamar LLG and the SPA to ensure that as much as possible of all civil construction and maintenance activities carried under their works programmes be carried out by local landowner contractors.
- Whilst LMC are working on the installation of geothermal power generation (1x6MW, 3X10MW turbines installed over a period), CA/BD work with LMC management on various post mine processing options for the use of this very low cost power source (along with roads, camps, accommodation, deep sea port, trained work force etc.) as an incentive to attract an alternative industry to Lihir – that could employ local labour, engage local landowner companies and generate other benefits after scheduled mine & processing closure.

At the very least one of the turbines could be run to provide electric power for island communities at a reasonable operational & maintenance cost (approximately US\$300,000 p.a).

- At present the Community Affairs business development section operates as a small business ‘first aid’ station – landowner companies only visit BD staff when they have a problem of some sort. There is no orderly monitoring of the compliance or performance of contractor landowner companies and joint ventures.

BD staff play no part in the award of contracts, no input into contract conditions and no authority to attend/observe landowner company board of directors meetings or monitor their financial performance. The LBDAC only acts as an agency to vet that tendering local companies are sufficiently Lihirian. Often when BD staff become involved it is too late, such as occurred with the Lakaka insolvency. For the sake of ensuring that landowner companies operate honestly and effectively for the benefit of their shareholders BD staff should have more involvement and ability to monitor their activities.

The ability to track landowner company performance will allow monitoring of contractor ability to continue to provide services to LMC, improve chance of shareholder returns and thus overall hopefully reduced risk of impacts of landowner company failure on LMC operations.

- It appears that at present most local business development contract opportunities are awarded to landowner companies owned by individuals, families and clans from SML and SMP villages on the north and eastern sides of the island. The two landowner companies that claim broad Lihirian shareholder representation – Kuridala and Lakaka – have not paid dividends in recent years. Although at present the sentiments of being disadvantaged from west coast villagers has been muted, this dissatisfaction could escalate in coming years.

The situation could be mitigated to a certain extent by the award of some of the smaller contracts more equitably – for example there are five bus contracts awarded to Putput village groups, none to west coast interests.

- As the only representative Lihirian company with a diverse range of commercial interests and the opportunity to invest for long term community benefit LMC should ensure a closer working relationship with the directors and management of Lakaka.
- As part of almost all the above suggestions the establishment of a BD database would be of great use in these initiatives. It would allow the orderly collection and access of data on local landowner company statutory compliance data, shareholders, directors, dividends, contracts, management accounts and similar.

Agriculture

The promotion of increased levels of subsistence farming, cash cropping agriculture, forestry & fisheries in the next nine years leading up to 2012 could:

- a) Provide an alternative source of individual income for Lihirians which is sustainable in the longer term.
- b) Employ or engage persons displaced from mining operations.
- c) Reduce village reliance on imported 'trade store' foodstuffs - apart from reducing cash living costs this also has positive health & nutrition benefits.
- d) Utilise village development funds that are only available now to establish activities that have an extended lead time such as forestry and certain tree crops.

Alternatively invest in facilities with a long-term benefit such as cocoa fermentaries, mobile sawmills, permanent fencing & water supplies.

The Lihir Growers Association was supported in 2001/2 with a grant of K100,000 from Nimamar LLG and has also apparently made a submission for assistance under the revised IBP. DPI staff provide a range of low level assistance to growers in a similar manner to that carried out by LMC agricultural extension officers. This includes provision of materials such as wire, roofing, hybrid seedlings, vanilla slips, stock feed and tools in order to encourage local village farmers to develop various agriculture, forestry or fishing activities.

Some cash crops are suitable for consumption principally within the local island economy such as pigs, poultry, vegetables and coconuts whilst others are export oriented such as cocoa and vanilla. Anecdotal evidence suggests that at present due to limited local availability, pigs required for traditional feasts are being sourced from as far away as New Britain or mainland New Ireland at somewhat inflated prices.

Also there is apparently little replanting of coconuts when older palms eventually die; although copra production is probably not viable there will be an ongoing requirement for coconuts as part of subsistence diets. Hybrid coconuts could be distributed to ensure that the island remains self sufficient in this basic subsistence item.

Cocoa growers on Lihir once produced sufficient volume of produce to sustain seven fermentaries but since commencement of mine operations cocoa production has almost completely ceased. The knowledge and skills that remain in the villages should be tapped to revive this activity.

The Lihir Growers Association apparently has in its charter to assist small and large scale growers of all types on the island and take advantage of the economies of scale in the marketing of produce or ordering of consumables for the benefit of its members. They should be supported in their activities.

Annex 1 : Local Business Development Details

Contract Values - major landowner company contracts

In 2001 the gross value of all LMC contracts awarded to Lihirian companies and joint ventures totaled more than K55 million. Some are outlined below.

- 1) Kuridala Limited:** This company represents the six main Lihirian clans. It owns 6 large 785 dump trucks, purchased in 1997 for US\$1.6 (K2.3) million each with 8.775% lease finance over 6 years from the National Banque de Paris. Deposit funds were provided by landowners and a grant from LMC. The trucks are dry hired by LMC for transport of mine and waste material, at US\$130,000 per month, most of which is used in monthly lease repayments. Residual lease balance was paid by LMC in June 2002 (approx. US\$4 million). This LMC 'loan' will be paid off during the next 5 years.
- 2) Niolam Catering Services Limited:** This company provides camp catering services to the LMC staff. NCS also manages two camp canteens for another landowner company. Annual LMC contract value is approximately K12 million.
- 3) Lihir Electrical Limited:** electrical maintenance work for LMC, a 50:50 joint venture with Huon Electrical. Annual LMC contract value K1 million.
- 4) Lihir Maintenance Company Limited:** company owned by Kapit area landowners. Carries out garbage collection (K250,000 pa) and other general camp maintenance work including grass cutting. Annual LMC contract value K500,000.
- 5) Nayal Investments Limited:** carries out office janitorial work. Annual LMC contract value K650,000.
- 6) Town/Residential area maintenance** – this includes carpentry, plumbing, painting maintenance required for residential and office areas and the hospital. Carried by a number of smaller local landowner companies. Annual LMC contract value K900,000.
- 7) Vehicle hire** – there are a number contracts awarded for the supply of vehicles wet hired by LMC, mostly from local individuals or smaller family/clan landowner companies, as follows:

- 25 seater buses: 10 totalling K660,000 per annum

- 3.5 tonne trucks: 8 totalling K530,000 per annum
- Banana Boats: 12 totalling K576,000 per annum

Other Landowner Company Enterprises

- a) Rainbird Sawmill – production of sawn timber and pre-fabricated building components (e.g. for CA Social Development projects). LMC support has included bringing in sawn timber from elsewhere in PNG for them to fabricate.
- b) Apu-Dontes Quarries Limited – owned by 4 Londolovit clans, producing road base, cement aggregates and blast charging packing material. Own some heavy plant, crusher and batch plant. Turnover K1 million per year. Previously Apu-Dontes have ‘exported’ road base to mainland New Ireland.
- c) Tor-Rau Workshop – light vehicle workshop
- d) Camp canteens (2) – owned by a local landowner company but operated by Niolam Catering Services. Have paid dividends of approximately K62,000.
- e) Lihir Tyre Centre – 50:50 joint venture with Bridgestone

There are also a number of smaller village scale trade stores, PMV trucks and small poultry projects in the various villages around the Island. At Lakakot a small guest house is operated on a defunct plantation.

In many of the villages individuals and small landowner companies have been involved in the construction of pre-fabricated houses and other buildings from the LMC funded and organised Village Development Scheme. This construction has been carried out on a labour only lump sum basis but still has resulted in the acquisition of some skills by local builders.

Lakaka: Current activities of the current main operating arms of the various subsidiaries and divisions of the Lakaka group of companies are as follows:

- a) *Lakaka Civil & Construction:* wet hire of plant and equipment to LGL, at present 18 items of plant used in mine operation and road maintenance. Has

a large workshop, administration office, training facilities and light vehicles. Has 140 employees, of whom 48% are Lihirian.

b) Lakaka Hardware: operation of retail hardware outlet.

c) Ataniom Best Buy Limited: retail supermarket, 50:50 joint venture with Steamships.

d) Aniokaka Limited: stevedoring, 50:50 joint venture with Strang.

e) Lihir Auto Services Limited: Ela Motors 50:50 joint venture.

f) Lihir Properties Limited: management of commercial properties

g) Niolam Security Limited: provision of security services/personnel (all LGL security is managed through Loss Control section). Previously 50:50 joint venture with Securimax Islands.

h) Niolam Catering Services Limited: camp catering services, 50:50 joint venture with two clan landowner companies.

i) Zenex Limited : contract drilling, 50:50 joint venture with Radial Drilling of Australia.

The last available Lakaka annual report is for the 1998 financial year and no dividends have been paid since the mid-1990s. With current scheduled creditor repayments it is unlikely that Lakaka will be in a position to pay dividends until 2005.

Discussions with one of the principal Lakaka directors revealed that, despite past difficulties, there was confidence that the company would survive financially and directors were happy with current arrangements. It is apparently the intention that after debts have been repaid and a dividend paid to shareholders, long-term investment opportunities probably elsewhere in PNG would be pursued by the company. Despite the financial assistance provided by LMC to reschedule debts Lakaka has little to do with CA/BD staff and appears somewhat secretive in its activities.

As the only representative Lihirian company with a diverse range of commercial interests and the opportunity to invest for long term community benefit LMC should ensure a closer working relationship with the directors and management of Lakaka.

Annex 1/TABLE 1. Principal Lihir Local Landowner Company Contractors impacted by 2012 Mining Closure

Landowner Company	Ownership	Activity Area	Approx. 2001 Turnover	% of business from LMC	Number of Employees	Number of Lihirian Employees	Comment
A. DIRECTLY IMPACTED BY OPEN PIT MINING CLOSURE							
Kuridala Limited	6 main Lihirian clans	Lease of 6 large 785 dump trucks	K6.2 million	100%	0	0	No employees, plant dry hire only. LMC repays loan directly, loan will finish 2007. All income will cease on closure of mining in 2012
Lakaka Civil & Construction	100% Lakaka	Heavy plant hire, civil construction & maintenance	K30 million (US\$6.6 million)	97%	130	67	Company very protective of information. Income will drop to approx US\$250,000 per month (K1.25 million) when open pit mining ceases.
Zenex Limited	50% Lakaka, 50% Radial Drilling (Aust)	Mine site drilling	K7 million (US\$2 million)	100%	58	34	Work will gradually reduce and cease when pit operations cease.
		TOTAL	K43.2 million				

		Total after mining	K15 million				

- continued over -

TABLE 1. Continued ; Sample survey of principal local businesses & joint ventures

Landowner Company	Ownership	Activity	Approx 2001 Turnover	% of work or from LMC	Number of Employees	Comment
B. INDIRECTLY IMPACTED BY OPEN PIT MINING CLOSURE						
Lihir Electrical Limited	Luise Electrical (2 clans) 50/50 with Huon Electrical	Electrical installation & maintenance	K1 million	90%	29	8 Lihirian employees.
Niolam Catering Services Limited	50% Lakaka, 50% 2 Lihirian clans	Mine camp catering	K12 million	100%	238	167 Lihirian staff. Income will drop in line with reduced employee numbers staying at camps.
Strang Aniokaka Limited	50% Lakaka, 50% Strang	Stevedoring & fleet maintenance	K5 million	100%	57	16 Lihirian. Long term contract.
Apu-Dontes Quarry Limited	100% - four Londolovit landowner clans	Quarry operation-charge packing road base aggregate	K1 million	90%	na	Should be sustained by ongoing requirement of material for road maintenance.
Sol-Bau Limited	50% Placements 50% Masuhet Isl. family	Personnel recruitment & building maint., minor c/works	K4 million	100%	na	Bulk (80%) of staff recruitment & salaries goes to Placements PNG.
Rainbird Limited	Lihirian individuals from Lodolovit &	Sawmilling, bldg pre-fabrication	K300,000	50% (est)	na	Should be sustained by ongoing building maintenance needs & village

	Zoyen area					development projects. Has been supported by CA in contract work
Lihir Builders Limited	100% Lihirian from Mazus village	Building maintenance & hardware supply	K500,000	100%	na	Also carried Ausaid funded work on Buluminski Highway on New Ireland
Nayal Investments Limited	One Lihirian clan	Office & w'shop, hospital janitorial	K500,000	95%	54	24 Lihirians. Invested in plumbing maintenance business in Kokopo, which failed
Islands Sportz Limited	3 Lihirian families	Sports clothing & other goods retail, sewing & stationery supply	K1 million	N/A – retail store	13	6 Lihirians, fortunes will mirror state of local Lihirian economy.
Lihir Civil & Construction Ltd	Unamos clan representatives	Civil construction & maintenance	K5 million	minimal	60 (?)	15 Lihirians. Picked up Ausaid funded road work in New Hanover. Also work on Simberi
Lihir Maintenance Services Limited	Lihirian family company	Rubbish collection grass cutting etc.	K500,000	100%	44	5 Lihirians
Lakemalam Limited	Lihirian family company	Building construction & maintenance	K750,000	80%	41	Most staff other NIP
Morro Limited	Lihirian family company - Kunaie	Minor civil works contracts	K500,000	99%	20	9 Lihirians
Rapasep Enterprises Ltd	2 Lihirian families	Industrial safety gear & clothing, labour hire	K250,000 ++	90%	3 (store) 21-27	Body hire to Century Drilling/LMC. Income will cease with open pit closure
Nica Limited	Basani family,	Building maintenance	K2.5 million	nil	na	Involved in construction at Lihir High

	Masuhet Island	& construction				School
TASK Security Limited	51% Central Province interests, 40% Lihirian	Supply of security guards	K720,000	100%	na	Supply guards for management and deployment by LMC loss management department.
Niolam Security Services	100% Lakaka	Supply of security guards	K1.2 million	100%	na	NCS bought out Islands Securimax and also has security contracts in Kokopo, ENBP.
Lihir Auto Services Ltd	50% Lakaka, 50% Ela Motors	Toyota agency, parts & service	K7 million	N/A	28	5 Lihirians.
Lakaka Hardware	100% Lakaka	Retail hardware	K1.5 million	80%	5	4 Lihirian staff, Profitability will depend on Lihir economy, LMC putting orders through such local retailers.
Maron Limited	100% Lihirian interests from Putput	Real estate ownership & management (to contractors).	K210,000	Nil	na	Owns 6 housing units at Londolivit
		Hose fabrication (pit)	K72,000	100%		
Ataniom Best Buy	50% Lakaka, 50% Steamships	Retail supermarket	K6 million	N/A	45	23 Lihirian staff, Profitability will depend on Lihir economy & size of working population.
		TOTAL	K51.5 million			

Annex 2: Breakup of LMC Staff at October 2002

Operational Area	Expatriate	Third Country Nationals	Other PNG	Lihirian	Contract	TOTAL
Senior Management	3	0	1	0	0	4
Commercial						
Management	1	0	0	0	0	1
Accounting	1	0	4	0	0	5
Administration	0	0	7	10	1	18
Empl Benefits	0	0	5	3	0	8
Supply	2	1	27	9	0	39
IT	1	0	7	2	0	10
	5	1	50	24	1	81
Human Resources						
Management	1	0	0	0	0	1
Empl.Relations	0	0	2	2	0	4
Training/Recr.	2	0	7	4	0	13
Tech Training	1	1	11	35	0	48
Tutorme	1	0	0	0	0	1
	5	1	20	41	0	67
Corporate & Towns						
Management	2	0	1	0	0	3
T'site/Camps	1	0	5	9	0	15
Maintenance	1	0	6	1	0	8
Loss Control	2	0	16	3	0	21
	6	0	28	13	0	47
Business Development						
Agriculture	0	0	2	5	0	7
Bus. Development	0	0	2	6	0	8
	0	0	4	11	0	15
Govt Liaison	1	0	5	0	0	6
Community & Environment						
Management	1	0	1	0	0	2
Comm Rels	3	0	9	17	0	29

Environment	1	0	5	5	0	11
	5	0	15	22	0	42
Mine Operations						
Management	1	0	0	3	0	4
Engineering	1	0	8	2	0	11
Survey	1	0	7	5	0	13
Training	1	0	5	2	0	8
Mine Support	1	0	11	12	0	24
Production	1	0	91	63	0	155
	6	0	122	87	0	215
Mine Maintenance						
Maintenance	7	0	91	27	0	125
Projects	1	1	5	0	0	7
	8	1	96	27	0	132
Mine Technical						
Management	1	0	0	0	0	1
Geology	1	0	3	13	0	17
Geo & DeWat.	4	0	2	2	0	8
Geotechnical	1	0	2	0	0	3
Resource Dev.	1	0	3	4	0	8
Exploration	0	0	1	0	3	4
	8	0	11	19	3	41
Plant Operations						
Management	1	0	1	1	0	3
Operations	8	9	21	66	0	104
Metallurgy	2	0	10	3	0	15
Development	1	1	0	0	0	2
Chemistry	1	0	11	25	0	37
	13	10	43	95	0	161
Plant Maintenance						
Management	0	0	0	0	0	0
Mechanical	4	0	77	14	0	95
Electrical	3	5	13	2	0	23
Communications	0	1	8	1	0	10
Process Contr.	0	4	6	2	0	12
P'Station	2	3	26	8	0	39
	9	13	130	27	0	179
TOTAL	69	26	525	377	4	990

