

PAPUA NEW GUINEA REVIEW OF CURRENT LOGGING PROJECTS

CARRIED OUT UNDER THE AUSPICES OF THE DEPARTMENT OF NATIONAL
PLANNING AND MONITORING

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FINALISED INDIVIDUAL PROJECT REVIEW REPORT No 2.

TIMBER PERMIT (TP) : TP 18-2 WEST COAST MANUS
TP HOLDER : KEI BESEU KAMPANI LTD
LOGGER AND MARKETER (L&M) : SEAL (MANUS) LTD
L&M PARENT COMPANY (If Different) : RIMBUNAN HIJAU (PNG) LTD
DATE OF FIELD REVIEW : JULY 2003
DATE OF FINAL REPORT : MARCH 2004

This Final Individual Project Review Report (IPRR) has been prepared by the Review Team after undertaking a review of documents, a field assessment, and receiving feedback to a Draft IPRR distributed to stakeholders for corrections and comment. Responses were received from the following:

STAKEHOLDER	COPY DRAFT IPRR PROVIDED	RESPONSES RECEIVED
Logging Company	Yes	Yes
Timber Permit Holder	Yes	Yes
Landowner Company	(*)	
PNG Forest Authority	Yes	Yes
Dept Environment & Conservation	Yes	Yes
Provincial Administration	Yes	Yes

(*) In this case the Landowner Company is the Permit holder.

Disclaimer: It should be noted that this documents sets out the findings and views of the Review Team, and does not represent an official Government position.

FOREWORD

The Terms of Reference for this Review of Existing Logging Projects provide a broad mandate to examine the operation of logging companies within their legal and contractual obligations, and the framework within which forestry activities are planned, monitored and controlled by the relevant Government Departments/Authorities. The Review is focused on future improvements in the actions of stakeholders, and not on the pursuit of instances of poor or non-performance. Of key concern are the future achievement of sustainable timber production within a stable regulatory framework; effective environmental guidelines for logging and associated roading; adequate attention to and mechanisms for forest conservation; and sound long term benefits for the forest resource owners.

Given this broad mandate, and the extensive requirements set out in the legal and contractual documents governing each logging project, the Review Team has by necessity focussed on identifying and exploring meaningful issues. This Final IPRR focuses on project specific areas of concern, and will be used as input for the Review Team's draft Observations and Recommendations Report.

ACKNOWLEDGEMENTS

The Review Team acknowledges the support and cooperation given by PNGFA and DEC officers, Seal (Manus) Pty Ltd, Kei Beseu Kampani Ltd, the POMUTU N'drehet, the Kurti Andra LLG, the Manus Provincial Administration and the landowners of the project area.

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1. LEGAL BASIS, PARTIES AND CONTRACTUAL RELATIONSHIPS

The key legislation governing logging projects are the Forestry Act 1991 (as amended), the Environmental Planning Act 1978, and the Environmental Contaminants Act 1978 (as amended). The relevant documents enabling and prescribing Timber Permit 18-2 West Coast Manus are set out in Tables 1 and 2.

The logging project is governed by Timber Permit No. 18-2 issued to Kei Beseu Kampani Ltd, a landowner company (39% owned by the Provincial Government). Kei Beseu Kampani Ltd entered into a Deed of Agreement with Seal (Manus) Ltd (Contractor); Seal Inc. Bhd; Seal (Veneer) Ltd (Processor) and Seal (PNG) Ltd (Holding Company) on 2nd May 1988 for the term equal to the permit period (15 years) giving the contractor exclusive rights to harvest, process and sell logs in the permit area in accordance with the Timber Permit conditions. This was in accordance with the Government's approach to forestry cutting rights at the time.

The Timber Permit requires Kei Beseu Kampani Ltd (Cl. 4, 13, 14) to:

- Harvest and export a specified volume of logs each year. This responsibility has been passed to the contractor Seal (Manus) Ltd.
- Establish a veneer mill and a sawmill. This responsibility has been passed to the processor, Seal (Veneer) Ltd).
- Establish the road from Busou wharf to Yeadon Point via N'drahukeyi. This responsibility has been passed to the contractor Seal (Manus) Ltd.
- To maintain to the standards specified roads, community service facilities and utilities constructed by it at N'drahukeyi unless the Administrator of Manus approves otherwise. This responsibility has been passed to the contractor Seal (Manus) Ltd.
- To pay all royalties as specified or prescribed.
- To lodge a performance guarantee with the PNGFA Managing Director. The Deed of Agreement passes this responsibility to the contractor, Seal (Manus) Ltd, for the first three years of operation.

Under clause 6 of the Deed of Agreement, whilst the Timber Permit is not transferred or assigned, general logging and log marketing rights and obligations were transferred to Seal (Manus) Ltd, and processing rights and obligations were transferred to Seal (Veneer) Ltd, as more specifically set out below.

Seal (Manus) Ltd:

- Has accepted the exclusive rights to log and market the logs from the permit area in accordance with the Timber Permit conditions, Forestry Act, Environmental

Planning Act, Environmental Contaminants Act and approved Forest Working Plans (cl. 3, 10, 12);

- Is required to pay Kei Beseu Kampani Ltd a percentage of FOB price on produce and salvage harvested and sold from the permit area at the rates specified in Item 8 of the Agreement using the Brereton Scaling Technique within 7 days of shipment or salvage for export or domestic processing (cl. 8 (a));
- Is required to supply to the land owners of the timber permit area annually with 2,000 m³ of logs from the allowable harvest and 2000 m³ of salvage as specified in the permit (cl. 8 (b));
- Is required to take out insurance cover for amount not less than K1,000,000 for all its employees in accordance with the Insurance Act Chapter 255 and the Workers Compensation Act Chapter 179 (cl. 13);
- Is required to, upon request by the Provincial Government and the State, construct at N'drahukey buildings as generally described in Schedule "C" of the Agreement (cl. 19(f));
- Is required to employ PNG Citizens in all its ancillary and related activities except those non-citizens approved by the Labour Department and the ratio of citizens and expatriate employees shall be as specified in Annexure marked "A" (cl. 20);
- Is required to pay log export tax under the Customs Act (cl. 16(a));
- Is required to pay any fees, levies, royalties or costs due at law to the State (cl. 16(b));
- Is required to pay compensation to the land owners due at law arising from its forestry operations in the project area (cl. 16 (c));
- Is required to pay the cost of construction and maintenance of the road between Yeadon Bay via N'drahukey provided for under clause 4.6.2 of the Timber Permit within the specified standard (cl. 19 (a));
- Is required to construct and maintain when requested in writing by the Provincial Government 50% of the roads specified in clause 4.6.2(b) of the Timber Permit within the specified standard (cl. 19(a) (ii));
- Is required to use its best endeavours to promote, support and encourage local business development (cl. 22); and
- Is required to lodge a performance bond guarantee with the PNGFA Managing Director (formerly Secretary of Forests) on behalf of Kei Beseu Kampani Ltd (the permit holder) for the first three years from the permit date (cl. 38).

Seal (Veneer) Ltd:

- Is required to establish and run a rotary veneer mill at or near N'drahukeyi with the annual capacity to process 36, 000 m³; and
- Is required to take out insurance cover for amount of not less than K1,000,000 for all its employees in accordance with the Insurance Act Chapter 255 and the Workers Compensation Act Chapter 179 (cl. 13).

Seal (Veneer) Ltd was taken over by Rimbunan Hijau (PNG) Ltd, and has been renamed as RH Parts and Services Ltd on 13th September 2001.

Under clause 37 of the Agreement Seal Inc Bhd and Seal (PNG) Ltd have guaranteed and agreed to indemnify the landowner company (permit holder Kei Beseu Kampani Ltd) for any damage, loss, costs and expenses suffered by the company in the event of any failure or default by Seal (Manus) Ltd and/or Seal (Veneer) Ltd of their obligations under the Agreement.

TABLE 1 : KEY DOCUMENTS

DOCUMENT	PARTIES	DATE OF ISSUANCE/ SIGNING/ APPROVAL	DATE OF EXPIRY	DOCUMENT LOCATION
TRP Agreement	Landowners and the State	4 February 1988	3 February 2028	Provincial Forest Office, Lorengau
Timber Permit	Issued to Kei Beseu Kampani Ltd (Landowner Company) by then Minister Tom Horik	2 May 1988	1 May 2003	Held by PNGFA
Deed of Agreement	KBK; Seal (Manus) Ltd; Seal Inc Bhd; Seal (Veneer) Ltd and Seal (PNG) Ltd	2 May 1988	1 May 2003	Copy of Agreement obtained from Kei Beseu Kampani Ltd
Environmental Plan (EP)	Approved by Minister for Environment & Conservation (E&C)	30 Nov. 1988	TP period ¹	Held by DEC Archives
EP Approval Conditions	Set by Minister for E&C	30 Nov. 1988	TP period	Copy obtained from Kei Beseu Kampani Ltd
Waste Management Plan	Set by Secretary for E&C	03 rd Aug. 1998	TP period	Seal (Manus) Ltd Loang Camp
Environmental Management & Monitoring Programme	Set by Secretary for E&C	03 rd Aug. 1998	TP period	Seal (Manus) Ltd Loang Camp
5 Year Logging Plan	Approved by PNGFA Managing Director	05 Sep. 2002	04 Sep. 2007	Held by PNGFA
Annual Logging Plan	Approved by PNGFA Managing Director	27 Dec. 2002	26 Dec. 2003	Held by PNGFA

¹ TP period has expired (01/05/03). Therefore for an extension or renewal of the Timber Permit, it may be that a new Environmental Plan is required.

PNGFA's Planning, Monitoring and Control Procedures	Issued by Managing Director.	November 1995	No expiry date	Standard document available from PNGFA
PNG Logging Code of Practice (Including 24 Key Standards)	Endorsed by NEC. Observance required by Regulation	April 1996	No expiry date	Standard document available from PNGFA

TABLE 2 : ADDITIONAL (OR SUPPLEMENTARY) AGREEMENTS

DOCUMENT	PARTIES	DATE OF ISSUANCE/ SIGNING	DATE OF EXPIRY	DOCUMENT LOCATION
Agreement regarding Log Export Premium payments	Seal Inc BHD and related companies and Kei Beseu Kampani Ltd	2 May 1988	1 May 2003	Copy obtained from Kei Beseu Kampani Ltd, Lorengau
Agreement for use of land for log pond	Kei Beseu Kampani Ltd and Loap Clan	3 October 1997	Until the logging operation in Block 2 ceases	Loap Clan
Agreement for log pond Coral Excavation (karanas)	Kei Beseu Kampani Ltd and Loap Clan	9 April 1996	No date specified	Loap Clan

2. SUSTAINABILITY OF LOG PRODUCTION

This logging project was set up under the old Forestry Act when the sustainability of log production and the forest industry was not yet a specific forestry policy objective, although it is alluded to in the Constitution. The rights to harvest logs were acquired by the State in February 1988 under the West Manus Timber Rights Purchase (TRP) agreement between clan agents and the State. The Timber Permit allows the resource to be cut over a period of 15 years (May 1988 to May 2003). The net operable area of the TRP was estimated at 24,000 ha, with a merchantable volume of 1.1 million cubic metres. Hence the annual allowable cut of 72,000 cubic metres, if achieved, would have exhausted the resource by 2003.

The development was in accordance with Government policy at the time, which required the forestry sector to make a meaningful contribution to a number of national objectives such as revenue generation, greater national ownership, regional economic development and political stability. The Manus project was aimed in part at urban development (the N'drahukeyi township) and at introducing new technology (the veneer mill).

Also at the time the Manus Provincial Administration was concerned about the imbalance in development between the Eastern and Western portions of the island, with the Eastern side being much more developed. The timber industry was seen as way to correct this imbalance.

During the fifteen years of operation, approximately half of the resource has been harvested. The reasons given for the poor performance of the contractor/s include landowner disputes, adverse weather, and a lack of gravel for roads. The PNGFA notes it's observation that the landowner disputes are mainly the result of landowners wanting personal rather than community benefits. On a positive note there remains approximately 550,000 m³ available for future harvest.

Timber Permit 18 - 2 expired on 2 May 2003. An application by Kei Beseu Kampani Ltd for an extension or renewal of the permit for a further period of ten years was lodged before the expiry date, and extension was endorsed by the Manus Provincial Forest Management Committee at a special meeting held on 29th May 2003. There are conflicting legal opinions as to whether permits issued under the old Forestry Act can legally be extended under the current Act. The application for extension is currently pending further legal instructions. The PNGFA notes it's opinion that the decision regarding the extension should not be based only on a technical interpretation of the Act, but should also take into account "the economic returns to the resource owners and general community". The Review Team is unable to agree with this point of view – all acts by Government agents must be legal, and legal requirements cannot be turned aside for other considerations. If there are legitimate grounds, then an amendment of the Act is required.

The land owner company, Kei Beseu Kampani Ltd, has expressed it's view that "it is unfortunate that such legal implication will be used as an opportunity to terminate projects like ours [in] which there is a lot yet to be done especially for the benefit of resource owners".

3. FIELD WORK

The field inspection for TP 18-2 was undertaken during the period 21st to 25th July 2003. As well as meetings with logging company managers and staff, and with landowners, the field inspection involved the following:

- A transect run through a set-up prepared for logging but not yet logged (Set-up Butjo SO2-03/A5);
- An Inspection of a recently logged over set-up (Busou SO2-03/A4);
- An inspection of current logging operations;
- Inspections of areas logged in 2002 and 2001 to assess regeneration;
- An inspection of roads and bridges currently being used, and no longer being used;
- An inspection of the log pond and barge loading facilities; and
- An inspection of the logging base camp.

4. REVIEW TEAM OBSERVATIONS

4.1 LEGAL DOCUMENTS AND DUE PROCESS

The Review Team examined the legal documents underpinning the logging project as listed in Tables 1 and 2. Particular attention was paid to the observance of due process with regard to the application for, processing of and issuance of the various legal instruments.

With regard to TP 18-2 West Coast Manus, the Review Team's observations were that:

- The term of the Timber Permit expired in May 2003 and Kei Beseu Kampani Ltd's application for extension for a further 10 years is currently pending further legal instructions.
- Although not a legislative or guideline requirement, DEC expects that the Environmental Plan remains valid only for the permit period, and that any renewal of the Timber Permit requires a new or updated Environment Plan. The general manager of Kei Beseu Kampani Ltd informed the Review Team that he is yet to submit an environment plan for the Timber Permit renewal or extension.
- The takeover of the Seal group of companies by Rimbunan Hijau (PNG) Ltd in operating this project is questionable as discussions by the Review Team with Kei Beseu Kampani Ltd indicated that they were not consulted on the takeover nor was their approval given. Clause 39 of the Deed of Agreement requires prior approval in writing of Kei Beseu Kampani Ltd for any changes to the

shareholding of the contractor (Seal (Manus) Ltd); the processor (Seal (Veneer) Ltd); or the holding company (Seal (PNG) Ltd). Company searches show that Seal (Veneer) Ltd is now owned by Rimbunan Hijau (PNG) Ltd, and has been renamed RH Parts and Services, and that Seal (Manus) Ltd is now owned by Monarch Investments Ltd, which is controlled by the Rimbunan Hijau group.

Kei Beseu Kampani Ltd notes that the transfer was facilitated by the PNGFA. Seal (PNG) Ltd notes that the logging operation continues with “the full support of Kei Beseu Kampani Ltd’s board and management”.

4.2 LOGGING COMPANY

The logging contractor (Seal (Manus) Ltd), under the terms and conditions of the Deed of Agreement, is generally responsible for observing the requirements of the Timber Permit. The Operations Manager at the base camp, Loang, stated that he had no copies of relevant documents such as the Timber Permit, Deed of Agreement, Land-use Plan, etc. He did have copies of the current Five Year Plan and the current Annual Logging Plan. These are the principal documents by which his daily activities are governed.

Seal (PNG) Ltd responded that the Operations Manager’s implementation responsibilities are limited to issues covered by the Five Year Plan and the Annual Logging Plan, and that consequently he does not need additional documents. Issues arising out of the Timber Permit and the Deed of Agreement are dealt with by the company’s head office in Port Moresby.

The observations of the Review Team are that:

(a) Planning and Control of Logging

- The company has employed two forest surveyors (one expatriate and one Papua New Guinean), and that a fair effort is being made to meet the requirements of the PNGFA’s Planning Monitoring and Control Procedures with regard to laying out individual set-ups in the field prior to seeking approval to log.
- During the 100% tree marking for directional felling, two residual trees per hectare are being clearly demarcated (with a band of white paint at breast height) for protection (as seed trees and potential future crop trees).
- Desirable residual trees were also marked for protection along pre-marked snig tracks. Despite this effort by the logging company, many marked residual trees are damaged during the extraction of logs.
- Other observations included:
 - Excessive vegetation clearance along roadlines, in one particular case the clearing exceeded twice the allowed 40 metres (see plates 2 and 3). Seal (PNG) Ltd responded that in this case the road had been realigned, and that the company does not deliberately excessively clear vegetation;

- Soil entering watercourses. This is very noticeable where roads and crossings/ bridges are constructed. Members of the Review Team noted plumes of soil sediments along the shoreline at N'drehet Village;
- Decommissioned skid tracks had piles of soil across them instead of a simple small water bar or cross drain (Key Standard 21); and
- Failure to rip log landings and ensure that revegetation was successful. In some old landings ponding was observed as a result of the use of dozer blades to mound soil in an attempt at decommissioning (see plate 8).

Seal (PNG) Ltd responded to this last point by noting its lack of ripping equipment. As an alternative the company blades the surface of the landing and creates mounds of soil in which re-vegetation can take place.

(b) The Log Pond

- The currently used log pond is located near N'drahukey Village where mangroves have been removed from the shoreline and the fringing reef excavated for road and log pond surfacing. The area of excavation is approximately 150 metres square and to a depth of six metres. The Review Team could find no evidence of appropriate approvals either being sought or granted by the Secretary, DEC, as is required under the Environmental Plan Approval condition number 1 (approved in November 1988).

In 1991 Seal (Manus) Ltd applied for and was granted permission by DEC, subject to specified conditions, to construct a sub-camp and log pond at Levei to service the north-western portion of the project.

- Other Key requirements not being met were: -
 - Lack of containing bund around the fuel storage tank. Seal (PNG) Ltd has undertaken to remedy this; and
 - Lack of proper toilet facilities for national employees and their families as required under the Environment Monitoring and Management Plan. Seal (PNG) Ltd notes the existence of two latrines overhanging the sea, the recent construction of a communal toilet near the workshop, and a plan to construct more following the construction of new workers quarters. The company also notes that there has been no adverse comment from any of the PNGFA, DEC or Provincial Health officials who have visited the site during the last 12 months.

(c) The Logging Camp

- The current (Loang) Logging Camp is situated just outside the village on traditional land owned by the Loap Clan Group. There is a Lease/Rental Agreement between Kei Beseu Kampani Ltd and the Loap Clan Group for the use of the land. It serves as the base camp for Seal (Manus) Ltd, it's employees, Kei Beseu Kampani Ltd, it's employees, and the log pond. The conditions in the

camp were observed and openly discussed with the Management of Seal (Manus) Ltd at the camp, the national employees residing at the camp, and local landowners.

- A total of 90 employees attended the various meetings and the following concerns were raised:
 - Employees were concerned that they were not receiving appropriate wages, conditions of employment, or leave entitlements, particularly those with trade certificates;
 - The lack of safety equipment;
 - Employees claimed that they didn't receive payslips so that they could not identify deductions for Nasfund and other payments;
 - The low and unhygienic standard of housing for employees from areas outside the TRP. Seal (PNG) Ltd has noted its plans to build new worker's quarters. It has also pointed out that hygiene is to a large extent the responsibility of the occupants; and
 - The numerous changes in logging contractor (five over the past 15 years) has many employees worried about their longer-term entitlements.

Seal (PNG) Ltd in response requests that "the expressed concerns of the 90 employees should be supported with appropriate data given that each employee has [a] different task and terms of employment". It also notes that "employee matters are administered by the personnel section and every employee is encouraged to discuss their matters with the immediate supervisor and manager personnel section".

- The Review Team noted that other key requirements not being met were:
 - Lack of bund to contain accidental spillage around fuel tank;
 - Leakage from the valve of the fuel storage tank causing fuel to leach into adjacent sago swamp area;
 - No evidence of safety equipment (first aid kit, helmets, ear-muffs gloves, safety boots) for workshop employees and the chainsaw mill operators, and no source of fresh water for emergencies;
 - Drums of fuel and oil not confined to a single location to enable bunding. Indiscriminate fuel/oil spillage noticeable within and around the workshop area; and
 - No proper method employed in disposing of industrial and domestic waste. Instances of careless discharge of waste oil and lubricants being poured around the workshop area.

Seal (PNG) Ltd has undertaken to take appropriate action.

(d) Landowner Financial Benefits

- The principal direct financial benefit received by landowners under TP18-2 is the royalty from timber harvested.
- Seal (Manus) Ltd has provided direct cash assistance for school fees, funerals and food for special occasions. Exact amounts were not available. Seal (Manus) Ltd charges these expenses to Kei Beseu Kampani Ltd by way of a deduction from the log export premium payments (in effect a landowner advance account).
- Supplementary Agreements for the use of the Loang Log Pond and the royalty payments for the gravel/coronous are with landowners outside the project area. Under the Lease/Rental Agreement the Loap Clan Group is paid K3,600 per annum by Kei Beseu Kampani Ltd for the use of the log pond land. Under the Gravel/Coronous Purchase Agreement, the Loap Clan is paid K1.50/m³².
- Other assistance in kind such as the supply of petrol, diesel fuel, land and sea transport are provided to villagers and are accounted for by deductions from the Kei Beseu Kampani Ltd premiums.

As noted by Seal (PNG) Ltd, for all rural based forestry projects the resource owners expect the logging company, whether it be nationally or foreign owned, to assist them and to provide certain services (such as fuel) on request. Failure by the logging company to entertain this type of arrangement has been known to result in the resource owners disrupting logging operations using road blocks, or more direct damage to company assets.

(e) Landowner Infrastructural Benefits

The project commenced with considerable planning and promises contained in various documents, in particular the "Manus Island Forest Industry Development Project" prepared by Seal Inc. Bhd., which is a three volume report and includes actual samples of *Calophyllum* spp. veneer. However:

- Two key infrastructural benefits which are in The Timber Permit and Deed of Agreement have not eventuated. These are;
 - The township at N'drahukey and associated facilities; and
 - The Veneer Mill.
- A sawmill was constructed at N'drahukey by Seal (Manus) Ltd and sold to Kei Beseu Kampani Ltd for K507,141.41 in 1994. Landowners claim that this mill is non operational and has been vandalised.

² For later forestry projects set up under a Forest Management Agreement the price for gravel is as Gazetted by the Valuer General. Currently this is K1.90 /m³.

- Roads have been constructed in accordance with the Timber Permit but remain un-gravelled. Seal (PNG) Ltd notes that the reason for this is the lack of a local source of gravel, and that this also adversely affects logging production.
- Other recent constructions include:
 - A double classroom, 1 teacher's house, the Aid Post Orderly's house and a Haus Market have been constructed at N'drehet village;
 - A playing field has been constructed at N'drehet. However it requires a bit more work for it to be considered safe to play on;
 - Upgrading of the Catholic and SDA church grounds at Bundrahi village; and
 - A road to Butjou village and extension of the Lorengau road to the Kauwa river.

Seal (PNG) Ltd has provided a more extensive list of infrastructure provided since the beginning of the project.

The Manus Provincial Administration points out that the promise to develop N'druhukeyi township and a veneer mill were key reasons for awarding the Timber Permit to the Kei Beseu Kampani Ltd. In relation to the failure to develop the township and to develop a veneer mill the Administration points out that some of the contributing factors have been:

- The unavailability of secure titled land;
- The subsequent declaration of the Jaha and Kali Bay Local Forest Areas³ thereby weakening the case for a township at N'druhukeyi and eroding processor investor confidence regarding the security of log supplies (the prime Calophyllum resource was located within the Local Forest Areas); and
- Technical difficulties in peeling Manus Calophyllum.

Seal (PNG) Ltd notes that in April 1992 Kei Beseu Kampani Ltd made a decision to shelve the veneer mill, and instead to pursue construction of a commercial sawmill.

(f) Royalty Payments

- In accordance with the terms and conditions of the Timber Rights Purchase agreement, royalty payments are supposed to be paid through the respective clan agents in the village by officers of the PNGFA. Current royalties are set nationally at K10 per cubic metre of logs harvested. Seal (PNG) Ltd notes that royalty payments are included in the "consideration" paid by the logging company

³ A form of timber cutting right provided for under the Forestry (Private Dealings) Act Chapter 217, which was repealed on the coming into force of the Forestry Act 1991.

to Kei Beseu Kampani Ltd, and that it is Kei Beseu Kampani Ltd's responsibility to pay the clan agents.

- Efforts by the Review Team to substantiate the amount of royalty actually paid to landowners have been frustrated by inconsistencies in payment amounts, process and source of information.
- The Deed of Agreement between the permit holder, Kei Beseu Kampani Ltd and Seal Inc. Bhd. and related corporations contains "royalties" (with a small "r", s 16 cl (b)) and "Royalties" (with a capital "R", s 16 cl (d)). This is confusing in itself but there is further confusion as the Review Team has sighted instances within the PNGFA records where Seal (Manus) Ltd has paid royalties to the PNGFA. This has occurred when Kei Beseu Kampani Ltd has experienced cash-flow problems. The amounts are later deducted from the premiums paid by Seal (Manus) Ltd to Kei Beseu Kampani Ltd.
- The Review estimates that the amount paid in Royalty since the project commenced is in the vicinity of K3.5 million, based on logs harvested.

(g) Other Compliance Issues Observations

- The Forestry Act and Regulations require the lodgement of a Performance Bond, and delivery of an original copy to the PNGFA Managing Director. There is evidence that Seal (Manus) Ltd put a bond in place in 2001 in the form of a Bank Guarantee. The guarantee has a term of one year, and there is no evidence within the PNGFA files that Kei Beseu Kampani or Seal (Manus) Ltd have updated the bond⁴. Seal (PNG) Ltd is of the opinion that this demonstrates a failure on the part of the PNGFA to administer the Act.
- The contractor has responded to demands from the Busou landowners to construct a road to Busou Village by commencing road construction and removal of merchantable trees along the roadline with no apparent relevant approvals from either PNGFA or DEC. Seal (PNG) Ltd notes that demands by landowners for certain things to happen with or without the approval of government is a feature of any rural based industry. Given that the landowners subsequently refused to allow the logging company to take the logs cut from the road line, it is arguable that permission was not required.

(h) Company Search

A company search shows that Seal (Manus) Ltd's registration is current. It's registered office is Lot 1, Section 479, Kennedy Road, Gordons (PO Box 102, Port Moresby). It has an issued share capital of 600,000. Shareholders are Monarch Investments Ltd of Lot 1, Sec. 479, Kennedy Road, Gordons (599,999 shares) and James David Belford of Boroko (1share). It's Directors are James Sze Yuan Lau, Ivan King Tiong, Ik King Tiong and Chiong Ong Tiong. The last annual return up to 30 June 2002 was lodged on 30 July 2002.

⁴ Until the Forestry (Amendment) Regulation 2004 came into effect on 22 January 2004, there was no specific requirement that Performance Bonds be kept current after being lodged for the first time, although there is little doubt that this is what was intended.

The company is currently registered as a Forest Industry Participant under the Forestry Act 1991 (first listed in August 1993 – Registration Number FI 039).

A company search of Monarch Investments Ltd (shareholder of Seal (Manus) Ltd) show that the company has current registration. It's registered office is Lot 1, Section 479, Kennedy Road, Gordons (PO Box 102, Port Moresby). It's shareholders are Monarch Investments Pte Ltd of Singapore (819,999 shares) and Yii Ann Hii (1 share). Its Directors are Chiong Ong Tiong, James Sze Yuan Lau, Ivan Su Chiu Lu and Ik King Tiong. The company's last annual return up to 31 December 2001 was filed on 30 July 2002. The company is registered as a Forest Industry Participant (Registration Number FI 028).

RH Parts and Services Limited

A company search on this company shows the following:

- It was previously known as Seal (Veneer) Ltd;
- It's registered office is Lot 1, Section 479, Kennedy Road, Gordons, NCD;
- It's Directors are James Sze Yuan Lau, Chiong Ong Tiong, Ik King Tiong, Su Chiu Lu and Anthony Honey;
- The shareholders of the company are James Sze Yuan Lau (1), Seal (PNG) Ltd (1) and Rimbunan Hijau (PNG) Ltd (499,998); and
- The last annual return lodged with the IPA was for the year ending 31 December 2001 filed in July 2002.

Seal (PNG) Ltd

A company search on this company shows the following:-

- It's registered office is Lot 1, Section 479, Kennedy Road, Gordons, NCD (PO Box 102, Port Moresby);
- The Directors of the company are Chiong Ong Tiong, James Sze Yuan Lau, and Ik King Tiong; and
- It's shareholders are Monarch Investments Ltd of Lot 1, Section 479, Kennedy Road, Gordons, NCD (649,999) and James David Belford (1).

Rimbunan Hijau (PNG) Limited

A search of the company was arranged and this revealed the following: -

- The company was originally incorporated on 3 March 1986 with 3,000,005 issued and paid up shares;

- Its registered office is at Lot 1 Section 479 Kennedy Road Gordons (P. O. Box 102 Port Moresby);
- Its directors are Chiong Ong Tiong, James Sze Yuan Lau, Hiew King Tiong, Thai King Tiong, Ivan Su Chiu Liu and Ik King Tiong;
- The shareholders are Rimbunan Hijau Sdn Bhd of 11 Mission Road, Sibul, Sarawak, Malaysia (360,000 shares), Habacus Trading Pte Ltd of 11 Collyer Quay The Arcade Singapore (360,000 shares), Gotcha Company Ltd of 1501 Hutchinson House Hong Kong (2,280,000 shares), Hiew King Tiong (1 share), Ik King Tiong (1 share), Thai King Tiong (1 share), Yung King Tiong (1 share) and Thomas Bruce Gall of 20 Churchill Street Mont Albert Victoria Australia (1 share);
- The company's last annual return lodged with the IPA was for the year ended 30 June 2002.

It is obvious from the information shown above that the operating companies on the Manus West Coast project are essentially Rimbunan Hijau Group companies. Whilst Seal (Manus) Ltd and Seal (PNG) Ltd are owned by Monarch Investments Ltd, the registered address is that of Rimbunan Hijau (PNG) Ltd. The following persons serve as directors on both Monarch and Rimbunan Hijau – Chiong Ong Tiong, James Sze Yuan Lau, Ivan Su Chiu Liu and Ik King Tiong. RH Parts and Services Ltd, (formerly Seal (Veneer) Ltd), is also owned by Rimbunan Hijau.

4.3 PNG FOREST AUTHORITY (PNGFA)

The PNGFA is responsible for ensuring that the requirements of the project Planning, Monitoring and Control Procedures are followed. This includes the 5 Year Logging Plan, the Annual Logging Plan, and the approval and clearance of individual logging set-ups. The approval and clearance of set-ups requires the completion of a set-up logbook by the PNGFA Project Supervisor.

The observations of the Review Team are that:

- The Provincial Forest Officer is provided with a vehicle, which is unroadworthy, having a 360,000 km reading on the odometer and requiring a screwdriver to start the engine. On a more positive note the Project Supervisor for the West Coast Manus TRP, has a brand new vehicle.
- The Project Supervisor is located at "Si'ilin", which is a central location for his duties, which include two LFAs (Jaha and Kali Bay). When required to visit Loang he informed the Review Team that he accepts accommodation provided by the Contractor at Loang Base Camp, as there is no suitable accommodation provided by PNGFA. The Review Team noted the presence of a PNGFA transit office/housing unit at Loang and were informed by the PFO Manus that the key was lost.
- The first visit to the project site by the regional forest inspector this year was on 27-29 May 2003.

4.4 DEPARTMENT OF ENVIRONMENT AND CONSERVATION (DEC)

DEC is responsible for monitoring logging company compliance with the Environmental Plan and the Environmental Plan Approval Conditions.

The observations of the Review Team are that:

- Whilst the project is active, the Environmental Plan has been archived.
- DEC last visited the site in April 2003 when it undertook a joint compliance monitoring and inspection visit with the logging company. DEC's main concerns are the lack of annual reporting to DEC, and the lack of bunding around fuel storage facilities. With regard to the logging operations the report mostly states that "no adverse impact is noted".

DEC also visited in July 2001 following a request from the Loang clan members to assess the impacts of fringing reef excavation at the Loang base Camp.

- The Review Team observed that DEC does not have a regular scheduled monitoring programme for this project. DEC however notes that it has "a good understanding with Rimbunan Hijau for annual monitoring".
- The Environmental Plan approval conditions not being met were:
 - The Loang Base Camp and Log Pond were established without any form of approval from the Secretary, DEC. Seal (PNG) Ltd notes that the Environmental Plan was approved in 1988, and does not require DEC approval;
 - The Review Team found no evidence of approval from the Secretary of DEC for the coral extraction for roading and use around base camp/log pond. DEC notes that it is aware that this is happening, and that it is facilitating the appropriate permit; and
 - The agreement between Kei Beseu Kampani, the Manus Provincial Government and the Seal group of companies operating in the project area to provide funding for the implementation of the environmental monitoring programme has not been met to date.
- Conditions of the Environmental Management and Monitoring Programme (EMMP) not being met were:
 - Lack of adequate toilet and sanitary facilities for national employees. DEC notes that the use of latrines overhanging the sea is now being discouraged; and
 - There is no Environmental Monitoring Officer at the logging site, a condition of the EMMP.

4.5 LANDOWNER COMPANY

The Landowner Company is Kei Beseu Kampani Ltd. In theory the Landowner Company represents the landowners, and on their behalf holds the Timber Permit. Under the Timber Permit conditions, and the Deed of Agreement with Seal (Manus) Ltd, Kei Beseu Kampani Ltd is paid K28.00 per cubic metre of log harvested. K10.00 of this is Royalty, leaving K18.00 per cubic metre for the landowner company. There is an additional “surplus” paid to the landowner company by Seal (Manus) Ltd, which is based on 15% of the funds remaining after K60.00/M3 has been paid to Seal (Manus) Ltd for logging costs, and log export taxes (approximately 35% of FOB) have been paid.

- A company search shows that Kei Beseu Kampani Ltd has current registration. Its registered office is Sect. 35, Lot 67, Lorengau PO Box 148, Lorengau, Manus Province. The list of Directors appear to be representatives of each village of the project area. A total of 1,497 shares have been issued to 40 Business Groups each holding 25 shares and 522 shares held by Manus Provincial Government. The last annual return (for the year January to December 1999) was filed in July 2000.
- The company is currently listed as a Forest Industry Participant under the Forestry Act 1991 (first listed in August 1993 – Registration No FI 018).
- Kei Beseu Kampani Ltd shareholding is made up of 66% forest resource owners, through clans or groups of clans, and 34% held by the Manus Provincial Government.
- Despite a considerable amount of income (estimated to be in excess of K7.2 million, based on amount of timber harvested) there has been very little tangible development in the project area.
- Landowners have reported instances of inappropriate use of landowner company funds, for example one overseas trip involved 70 landowners plus company directors travelling overseas on a “marketing” exercise.
- The landowner company does hold some valuable assets and investment, for example shares in the Harbourside Hotel, a new sawmill (worth K120, 000), and an office block and residence in Lorengau, and vehicles. Other landowner benefits delivered by the company include:
 - Supply of building materials for the construction of schools, churches and aid-posts in the project area;
 - Provision of water tanks for schools and aid posts;
 - Provision (for a period of time) of school fee subsidies for children from the project area; and
 - Cash donations to church groups, women groups and schools.

A national audit of landowner benefits in 1998 by Groome Poyry Ltd found that "gross mis-management of Kei Beseu Kampani Ltd led to the fall of a once prosperous company" and that "a large slice of the premium paid to the company was expended in Administrative expenses". Landowners in the Timber Permit Area share these concerns.

It is the opinion of the Review Team that the current Board and management of Kei Beseu Kampani Ltd has begun to take appropriate steps towards a more sustainable approach to both the management of the forest resource and to the management and disbursement of income from the logging operation.

5. LANDOWNER VOICED CONCERNS

Landowners were consulted mostly in groups but also as individuals. Kei Beseu Kampani Ltd noted that the discussions were not representative as only two of six villages were involved. The PNGFA notes that landowner views should not be used to draw conclusions, as they are often slanted towards achieving specific agendas.

Groups consulted included two meetings with Landowners at N'drehet village and one meeting at Leveli village to obtain feedback on the Financial Benefits received so far from the project. Besides the above meetings separate meetings were held with different clan groups and women from the project area. Landowners consulted included:

- Landowners N'drehet village;
- Women N'drehet village;
- Men and Women Leveli village;
- Landowner Company; and
- Landowners N'drehet village (log pond land owners).

The observations of the Review Team with respect to the relationship between the landowners, their forests, the logging company, and concerns expressed by the landowners are:

- There are many matters relating to the project, the Timber Permit, other contracts, the responsibilities of the Landowner Company, and the landowners rights and responsibilities that the general landowners do not fully understand. It is of serious concern to the Review Team that there is no ready source of independent advice to landowners.

The Manus Provincial Administration notes that information on many of the matters raised in this report has been given to landowner representatives through the Annual General Meetings of Kei Beseu Kampani Ltd, and further that it is the responsibility of the representatives to pass on this information to the members of the land owning group that they represent. It notes that this may be where the communication is breaking down.

- Landowners expressed dissatisfaction over the benefits that they were receiving from the harvesting of their trees, claiming to be receiving only timber Royalties whilst few other benefits were being provided by the contractor and Kei Beseu Kampani Ltd.

Kei Beseu Kampani Ltd responds that the landowners benefit from the royalty payment, and the K18/m³ paid to the company, and that the company once nearly went bankrupt because of the level of assistance given to landowners.

- There was particular confusion over the existence or otherwise of any “reforestation levies”, and regarding whose responsibility it was to carry out reforestation. Landowners observed that the resource is being rapidly depleted and there has been virtually no effort by either the contractor or the landowner company to ensure a future supply of timber within the project area.
- Landowners stated that they were unaware of the rate and amount of premiums received by Kei Beseu Kampani Ltd for the timber harvested and what the money was being used for. Kei Beseu Kampani Ltd noted that landowner representatives are made aware at shareholder meetings.
- Concern was expressed about the proposed Timber Permit extension and the proposal for the revised Deed of Agreement. There was some uncertainty about whether the revisions would provide landowners with meaningful long-term benefits.
- Landowners requested that an independent audit of Kei Beseu Kampani Ltd be undertaken so that they could see where monies paid to the company had been invested or spent. However it appears that an audit was undertaken in 2002, and that the outcomes were presented at an Annual General Meeting.
- Concern was raised over the large volume of reject logs that were left at the log pond, being unsuitable for either log export or for sawmilling. These logs are destined to be wasted (see plate 7).
- The log pond owners expressed dissatisfaction with the rate per cubic metre of coral that they were receiving for the mining of their reef for road surfacing.
- Women expressed concern that funding requests for women’s projects have not been considered favourably in the past by the contractor or the landowner company.
- Concern was raised over the deterioration of the reefs adjacent to the log pond and N’drehet Village.
- There was general and serious concern expressed over the behaviour of some of the expatriates employed by Seal (Manus) Ltd and other logging contractors in the west coast area. These concerns were that some expatriate employees enter into “de facto” relationships with (particularly young) local girls and often left the girls with children with no maintenance provisions when the fathers are

repatriated overseas, or transferred to other logging operations in Papua New Guinea.

- There was also concern that some expatriate employees were engaged in businesses such as buying and selling of sea cucumber and vanilla which are outside the terms for which they have been employed.
- Landowners expressed gratitude for the Review Team's visit but were disappointed that the review was being conducted after 15 years of the commencement of logging operations with very little tangible benefits for landowners from the operations. Kei Beseu Kampani Ltd has noted that it has been seeking PNGFA assistance for a project review since the mid 1990s, but that support has not been forthcoming.

Seal (PNG) Ltd added its view that the landowner's concerns are real, but that the national Government needs to contribute to stimulating other economic activities in the west coast of Manus if there is to be lasting development from the revenues from the logging operations.

6. PROVINCIAL GOVERNMENT DISTRICT OFFICE

A representative of the relevant District Office of the Manus Provincial Administration was located and invited to join the field work. A debriefing session was held with the Manus Provincial Administration and Provincial Government, prior to the Review Team's departure from the province. Relevant comments offered by the Provincial Government/Administration representatives were:

- There has been insufficient attention to monitoring of the logging operation and the terms and conditions of the Timber Permit by relevant government departments, particularly PNGFA and DEC.
- Should the Timber Permit for Manus West Coast be extended or renewed, the Provincial Government would like project reviews carried out on an annual basis.
- The Manus Provincial Government is concerned that logging operations in the Province are having a detrimental effect on the reefs surrounding the island
- The Manus Provincial Government lacks powers to monitor and take corrective measures to ensure that the Permit Holder and the Contractor are complying with the conditions of the Timber Permit.
- There had been insufficient landowner awareness prior to commencement of the project of the positive and negative effects that the logging operation would have on the environment, the landowners and the Province in general.
- The President of the POMUTU N'drehet, Kurti, Andra Local Level Governments sought consideration from the Kei Beseu Kampani Ltd for provision of financial resources for community development projects within the project area.

7. OBSERVATIONS REGARDING SILVICULTURE

The quality of the logging operation (in particular observation of the 24 Key Standards) has a significant impact on the ability of the forest to produce a second yield of logs (from the current residual trees), and to produce logs in the longer term (from regeneration after logging). The PNGFA points out that the forest resource is dominated by *Calophyllum* sp, rather than the mix of tropical hardwood species typically found elsewhere in Papua New Guinea. It further points out that this may warrant consideration of site specific silvicultural standards, rather than the blanket cutting of all trees with a diameter breast height of 50 cm or more as required under the Timber Permit.

The Review Team observations in this regard are that:

- Trees of merchantable size tend to be concentrated along ridge tops, which are also sensible locations for logging roads and snig tracks. The topsoil along the ridge tops is shallow (although not measured, the Review Team estimates that the ridge top had less than 20cm topsoil) and is easily damaged during felling and extraction of the logs.
- The stand density of merchantable trees in the West Manus Timber Rights Purchase area is much higher than that normally found in logging operations in Papua New Guinea (45 m³/ha compared to an average of 20 - 25 m³/ha for the rest of the country).
- The Timber Permit requires the felling of all merchantable trees above 50 cm dbh, except for excluded trees and other trees (listed), which have been marked by landowners.
- Felling of all merchantable trees above 50 cm dbh in the project area inevitably results in considerable peripheral damage to undersized trees.
- Observations in the field and from topographical maps indicate that significant areas within each set-up are left unlogged; either due to excessive slope (>30°), or due to non-existence of trees of merchantable size. These areas provide valuable refuge for plants and animals to recolonise logged-over areas.
- Where snig tracks were denuded of topsoil, seedling germination and growth was slow compared to other areas of similar altitude. There was evidence of “sun scorch” of young *Calophyllum* spp seedlings; this should be taken into consideration in any “Timber Stand Improvement” carried out (ie, the normal technique of clearing around merchantable seedlings trees should be modified to provide some shelter for the *Calophyllum* spp seedlings).
- Fires during the 1997/8 El Nino weather event have killed even large residual trees.

The permit holder, Kei Beseu Kampani Ltd, observes that “the Timber Permit did not consider the *Calophyllum* resource to be a special case [requiring] appropriate harvesting technology and silvicultural management practices”. The Manus Provincial

Administration is of the view that “the PNGFA should not concentrate all its efforts on industrial monitoring but expand into forest management”. Seal (PNG) Ltd notes that this report “simply highlighted what has been known by field operators for many years”.

8. BROAD RECOMMENDATIONS FOR TP 18 – 2 MANUS WEST COAST

Manus Island has a unique floristic composition, with many areas dominated by a single genus, *Calophyllum*, which often comprises as much as 80% of the standing commercial volume, particularly in the west.

The ecosystem represented within the Timber Rights Purchase area is therefore of local, national and international significance. The rivers and streams within the area are also ecologically significant and the waters surrounding Manus Island are an important source of cultural and economic benefit to the islanders.

Given the above findings of the Review Team it is recommended:

- That immediate and serious consideration be given to clause 6.17.3 of the Timber Permit, which allows the Managing Director of the PNGFA to “reserve such trees as he considers necessary for silviculture purposes”, and that negotiations are held between the various stakeholders with the aim to establishing a system for marking such trees for retention.
- That the permit holder, Kei Beseu Kampani Ltd negotiate with the contractor a new “Deed of Agreement” which sets out the roles and responsibilities of each party in a clear and transparent manner. Issues such as “Royalty” payments, agricultural development, reforestation and infrastructure levies/requirements and Landowner Company premiums should be negotiated prior to the renewal or extension of the Timber Permit.
- That the permit holder and contractor agree on a resource replacement schedule which should include a combination of establishment of plantations of commercial species, plantations of multipurpose trees and natural Timber Stand Improvement.
- That baseline studies of ecologically sensitive areas such as any proposed new or re-established log ponds be included in the Environment Plan and Environmental Monitoring and Mitigation Programme for the Timber Permit renewal or extension.
- That Kei Beseu Kampani Ltd and Seal (Manus) Ltd respond to the concerns noted in section 5 of this Report during their negotiations regarding the new ‘Deed of Agreement’.
- That the contractor ensures that all road construction personnel strictly adhere to the maximum allowable road clearance of 40 metres. The PNGFA Project Supervisor must strictly monitor this requirement.
- That the contractor revegetates all decommissioned log landings.

- That the contractor and landowner company increase their efforts to locate an alternate source of road surfacing material and rehabilitate the area excavated at the Loang Log Pond, in accordance with advice from DEC.
- That the contractor ensures that all logs that have been designated for sawmilling are transported to the sawmill site (see plate 6).
- The National Forest Board should with appropriate technical, legal, forestry and environmental advice take decisive steps to deal with saved projects under the Act particularly as the term of the Manus project has expired, taking into account issues of past performance of the permit holder, social acceptability and sustainability of the available resources.

In addition to the above:

- The PNGFA noted it's wish to see the Manus Provincial Administration draw up a provincial land use plan within which forestry activities can be considered.
- The Provincial Administration noted it's wish to see the following recommendation also considered:
 - That the PNGFA recognise and accept their primary functional responsibility over forest and forestry development in the country and ensure that prompt and decisive actions are taken during the life of the project so that Timber Permit 18-2 conditions are met;
 - That DEC recognise and accept it's primary functional responsibility over the environment and environmental resources of the country and ensure that prompt decisive corrective actions are taken so that the environmental conditions of Timber Permit 18-2 are met;
 - That in recognition of its primary functional responsibility for the forest resources and forestry development in Manus, the PNGFA take appropriate forest conservation and management measures to ensure that current and future generations continue to derive ecological, economic and social benefits from this Calophyllum dominated forest system; and
 - That the PNGFA should not concentrate all its efforts on industrial monitoring but expand into forest management in particular reforestation and community forestry and ensure that a reforestation officer is recruited to carry out this function in Manus.
- Seal (PNG) Ltd has undertaken to discuss those issues relevant to it's operations with Kei Beseu Kampani Ltd.

9. BROADER FORESTRY SECTOR ISSUES FOR PNG FOREST AUTHORITY AND DEPARTMENT OF ENVIRONMENT AND CONSERVATION CONSIDERATION

The following is a list of issues identified by the Review Team during its work on TP 18-2 West Coast Manus, which are of broader concern than this specific project. These will be addressed as forestry and conservation sector issues in the Observations and Recommendations Report to be produced by the Review Team towards the completion of the Review.

- Residual tree marking is a component of Key Standard 15 of the Planning Monitoring and Control Procedures manual, but is not included in the Logging Code of Practice. The Review Team considers that marking (for protection) of desirable residual trees should be incorporated into the LCOP but that the wording in the PFMC be changed to allow for marking of residuals only where commercial trees are marked for felling along snig tracks and adjacent to main road alignments.

The PNGFA notes that a committee has been established to review the LCOP.

- Consideration should be given to revising the minimum size limits for some commercial tree species and for a more general implementation of the provision for marking trees for retention for silvicultural purposes. The PNGFA noted that there were some discussions on this issue in 1999/2000, but that the PNG Forest Industry Association, which was on the relevant committee, vetoed any increases in the minimum size limit.
- More input from Local Level and Provincial Governments should be sought during the planning phase for forestry project development. This should include discussions on infrastructure planning and monitoring.
- The key Departments of Labour and Employment, and Social Welfare and Development, need to be more pro-active in monitoring the activities of expatriates employed in logging operations.
- The Classification of Occupations, produced by the Labour and Employment Department which lists the types of occupations restricted to nationals should be more specific than it currently is, for example the list states that “Forestry Workers and Loggers” code 6141, are occupations “prohibited to foreigners”.
- There is a need for more “awareness” on the negative aspects, along with appropriate mitigation measures, as well as the positive aspects of timber harvesting operations, prior to entering into any agreement with landowners for project development. This “awareness” should include provision of advice to landowners on their rights and responsibilities and wise use of the monetary benefits that flow from logging operations.
- The system used for collecting and collating data on timber royalties by the PNGFA requires considerable improvement.

Seal (PNG) Ltd has commented that:

- It has had considerable professional association with officers of the PNGFA and DEC and has found the officers to be very committed to their jobs. It is of the view that the lack of adequate resources provided to these institutions by Government has had a tremendous [negative] impact on the capacity of these institutions to carry out their responsibilities; and
- As a recipient of government regulatory measures and directives, Seal (PNG) Ltd wishes to encourage dialogue with government on some of the issues raised by the Review Team.

APPENDIX 1: SELECTION OF PERTINENT PHOTOGRAPHS