



FOREST MANAGEMENT CERTIFICATION REPORT

SECTION A: PUBLIC SUMMARY

Project Nr.:	9205-GY		
Client:	BARAMA CO. LTD		
Web Page:			
Address:	Barama Co. Ltd Land of Canaan, East Bank Demerara PO Box 10480, Georgetown, Guyana		
Country:	Guyana, South America.		
Certificate Nr.	SGS-FM/COC-2493	Certificate Type:	Forest Management
Date of Issue	17.02.2006	Date of expiry:	16.02.2011
Scope:	Forest Management of 570,000 ha of tropical natural forest in Compt. 4 & 5 of the Barama concession area in the Northwest Region of Guyana for the production of hardwood timber.		
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Evaluation dates:			
Main Evaluation	28 Feb – 4 March 2005		
Close-out of CARs	29 Aug – 3 Sept 2005		
Surveillance 1			
Surveillance 2			
Surveillance 3			
Surveillance 4			

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INTRODUCTION

The purpose of the evaluation was to evaluate the operations of Barama Co. Ltd against the requirements of the QUALIFOR Programme, the SGS Group's forest certification programme accredited by Forest Stewardship Council.

1. SCOPE OF CERTIFICATE

This report presents the results of an assessment of Barama Company Ltd (BCL) forest management operations in Northwest Guyana, Guyana, South America (Tropical Forest Zone) carried out by SGS QUALIFOR during the period 28 February – 4 March 2005. The total area of BCL concession is about 1.6 million hectares, however, the assessment only covers management of Compt. 4 and 5, with a total area of about 570,000 ha.

The purpose of the assessment was to evaluate the operations against the requirements of the QUALIFOR Programme, the SGS Group's forest certification programme accredited by Forest Stewardship Council.

The Assessment covered all forest management operations on the following forest areas:

Name of holding	Forest type *	Production area (ha)	Conservation area (ha)	Forest composition **	Species composition	Average Est. Annual Production (m3)
Compt. 4	Natural	349,495	25,856	Broad leaf	Baromalli, greenheart	na
	Tropical				Purpleheart	
Compt 5	Natural	202,956	6,097	Broad leaf	Baromalli, greenheart	150,000
	Tropical				Purpleheart	
Total		552,451	31,953			

List of Timber Product Categories	
Product	Notes
Round wood Kiln dried timber Sawn timber Plywood	Barama Co. Ltd is currently selling round logs, sawn timber and plywood.
Veneer	The company is also setting up a veneer plant in Buckhall which will be completed in the next 2 years to enable it to produce and sell hardwood veneers.
Totals	

Description of FMUs:				
Description	Ownership	Area (ha)	Longitude E/W	Latitude N/S
Natural tropical forest concession	Private	584404		

Size of FMUs:		
	Nr of FMUs	Area (ha)
Less than 100ha		
100 to 1000 ha in area		
1001 to 10000 ha in area		
More than 10000 ha in area	2	584404
Total	2	584404

Total Area in the Scope of the Certificate that is:	
	Area (ha)
Privately managed	584404
State Managed	
Community Managed	

Composition of the Certified Forest(s)	
	Area (ha)
Area of forest protected from commercial harvesting of timber and managed primarily for conservation objectives	31953
Area of forest protected from commercial harvesting of timber and managed primarily for production of NTFPs or services	
Area of forest classified as "high conservation value forest"	
Total area of production forest (i.e. forest from which timber may be harvested)	552451
Area of production forest classified as "plantation"	0
Area of production forest regenerated primarily by replanting	
Area of production forest regenerate primarily by natural regeneration	

List of High Conservation Values	
Description	Notes
Biological diversity	<ul style="list-style-type: none"> ▪ Conservation of threatened, endangered, rare, endemic or unique (TEREU) species ▪ Maintenance of viable populations of native fauna and flora ▪ Connectivity of landscapes and ecosystems
Water supply	<ul style="list-style-type: none"> ▪ Domestic water uses ▪ Boat transportation
Water quality	<ul style="list-style-type: none"> ▪ Potable water
Timber production	<ul style="list-style-type: none"> ▪ Construction wood for local community and small scale commercial needs
NTFP	<ul style="list-style-type: none"> ▪ Collection of NTFPs
Hunting and trapping	<ul style="list-style-type: none"> ▪ Harvest of wildlife for personal use or small scale commercial sales
Cultural identity	<ul style="list-style-type: none"> ▪ Forest products for ceremonial purposes

Annual Timber Production				
Operation period	Compt. #	Area (ha)	Maximum Annual Sustainable Yield (m ³)	
			Projected	Actual
2004-2008	Compt 5	36,532 ha	182,660 m3	
2009-2017	Compt 4	34,950 ha	314,546 m3	
Totals				

Approximate Annual Commercial Production of Non-Timber-Forest-Products				
Product	Species		Unit of measure	Total units
	Botanical Name	Common Name)		
Na	na	Na	na	Na

2. COMPANY BACKGROUND

2.1 Ownership

Barama Company Ltd Guyana, South America, (BCL) has a concession of 1.6 million hectares of forest on Northwest Region Guyana through a Timber Sales Agreement (TSA) # 04/91 with the Co-operative Republic of Guyana.

BCL which was established under the Companies Act 1991 of Guyana is a joint venture company between Samling Corporation of Malaysia and Sunkyong Limited (now known as SK Global) of South Korea. The investors concluded an investment contract with the Guyana government to invest in the forestry sector both in the harvesting of timber from its 1.6 million ha in the northwest Guyana and downstream processing of wood products. The Company has established and operates a plywood mill with monthly output capacity of 10,000 m3 of high quality plywood and a sawmill with a monthly output of 1,000 m3 at its site at Land of Canaan, East bank Demerara.

The company now has applied to SGS Qualifor Programme for assessment of its forest management system covering Compartment 4 and 5, with total area coverage of 584,920 ha (or 36.5% of the 1.6 million ha concession). The area in Compt 1, 2 & 3 (called Region 1) was harvested between 1992 to year 2002 before the operation was shifted to the current site at Buckhall on the bank of Essequibo River. Compartment 6 and 7 will only be operated 10 or 15 years from now.

2.2 Company Key Objectives

Objective	Notes
Commercial	
To adhere to sound and ethical management, business and industrial practices to promote the forest industry in Guyana for domestic and export market	
Social	
To be a responsible corporate citizen by complying all laws and regulations of the country, including international treaties and conventions	
To honour and respect the integrity and exclusivity of all Amerindian Lands legally held	
To allow indigenous people to pursue their traditional lifestyle without hindrance and allow them to benefit from the use of the company's forest infrastructure for communication, transportation and other legal pursuit	

Objective	Notes
To further social and economic welfare of local communities by providing equal opportunities for employment and community outreach programme	
To be sensitive and responsive to the rights and needs of nearby communities and other genuine stakeholders through appropriate consultations, dialogue and dispute resolution to foster good stakeholder relationships	
To employ qualified Guyanese and to train Guyanese for jobs at all level while ensuring safety, health and welfare of workers	
Environmental	
To adopt sustainable forest management and practices on forest resources entrusted to the company to ensure that the resources shall continue to provide multiple functions for economic, social, environmental, ecological and scientific benefits to Guyana.	

2.3 Company History

As described above, BCL was established under the Companies Act 1991 of Guyana and is a joint venture company between Samling Corporation of Malaysia and Sunkyong Limited (now known as SK Global) of South Korea. The Company has established and operates a plywood mill with monthly output capacity of 10,000 m³ of high quality plywood and a sawmill with a monthly output of 1,000 m³ at its site at Land of Canaan, East bank Demerara.

The company was operating from Port Kaituma between 1991 – 2002 before shifting the operation to Buckhall at the Essequibo river to facilitate harvest from Compartment 4 and 5 of the concession area. A sawmill and a veneer mill is under construction at Buckhall which will employ an additional 150 to 200 people.

2.4 Organisation Structure

The Barama company organisation comprises forest operations and mill operations. Managing Director of the company is in-charge of overseeing the overall operation of the company. The second layer of the management comprise of three General Managers with the following portfolios:

- ❑ Forest Operations
- ❑ Corporate Affairs
- ❑ Factory Operation

The Management Representative entrusted in coordinating FSC certification of the FMU is the Forest Planning Manager whose main responsibility is planning of forest resource management including social-ecological aspect of the operation. Forest Operation Manager, on the other hand is responsible for the mobilizing, organising and managing the equipment, manpower, facilities and other resources for the production of logs. Both personnel, whom report to the Forest Operations General Manager, are responsible for ensuring all activities are carried out according to the law and regulation, and all license, plan etc are pre-approved by the relevant authorities.

At the operational level, the following personnel are appointed;

- ❑ Camp Production Manager
- ❑ Production Supervisor
- ❑ Senior Forester-In-Charge
- ❑ Camp Administration Manager

Contractors were appointed for carrying out harvesting operation. The contractors have to abide by the planning conducted for every individual harvesting block.

At the time of assessment, BCL has about 1,100 full time workers both in the upstream (forest operation) and downstream (sawmill, plywood mill and administration) sector.

2.5 Ownership and Use Rights

Barama Company Ltd was granted the 1.6 million hectare of forest concession in northwest Guyana by the Guyanese government through an investment contract signed in 1991. The summary details of the agreement are as follows:

Type of concession	Timber Sales Agreement (TSA)
Reference No.	TSA 04/91
Date of Issue	16 th October 1991
Date of Expiry	15 th October 2016 (renewable for 25 years)
Area of TSA	1,670,012 ha (original area)
Amended TSA area	1,611,195 ha dated January 2004 after excision of Amerindian Reservation Areas.

The concession is subject to the provision of the Forest Act Chapter 67-01, the Forest Regulations and terms and conditions contained in the Concession Agreement. BCL has further made commitment to RIL system stipulated in Guyanese Forestry Commission (GFC) Code of Practice.

2.6 Other Land Uses

The area in Region 1 (Compartment 1, 2 and 3) has been subject to mining activities by both the private sector and individuals and BCL has no involvement in or control over these activities. A significant size of areas within the whole concession has been excised and designated as Amerindian Reservation Areas, as follows:

Table 2.6: Amerindian Reserves within the BCL concession area

Reserve	Village Location	Area (ha)	Est. population
Koriabo	Barima River	12,191	545
Chinese Landing	Barama River	8,459	37
Kokerite	Barama River	5,191	276
Kurutuku	Cuyuni River	13,302	200
Baramita	Barama River	20,186	1,308
Arakaka/Matthews Ridge Settlement	PK Ridge & Barima River	7,704	3,63
Totals		67,033	5,529

A new requirement by the GFC, demands a total of 30,000 acres of land in Region 1 to be released to the Port Kaituma Forestry Organisation to provide access to private forest land. This is a standard nation-wide measure applied to all concession holders in Guyana, as part of social programme to increase socioeconomic status and livelihood of the local communities living in and around a forest area.

All the areas mentioned above are identified and adequately mapped in the FMP. None of the areas are located in or near Compt. 4 and 5, which is being assessed for FSC certification.

Areas east of Compartment 5 belong to another concession company. Barakat Timbers & Trading Company was given a state forest permission to harvest a total of 77,183 ha of forest area located north of the access road to Compartment 5. N Sukul and Sons was granted wood cutting lease for 26,258 ha of forest bordering Compartment 5 located south of the road alignment. Both companies have entered into an agreement with BCL for harvesting and timber purchase only. BCL has stated their commitment to fully implement the same operation systems in the other areas. Other concessionaires along the access road are Mazharally & Sons and a few other small operators.

2.7 Non-certified Forests

As a mature forestry company in Guyana, BCL has ventured into joint ventures with a few local companies to manage harvest operation and buying timber from the designated allocated areas under each company. At the time of assessment, BCL had a legal association with the concession holders as tabulated in Table 2.7 below.

Table 2.7: List of other concession areas in Guyana where BCL has interest

Company	Type of concession	Legal arrangement	Size (ha)	Projected annual harvest volume (m3)
Barakat Timbers & Trading Co. Ltd	State forest permission	Harvesting contract	77,183.68	35,000
Guyana Sawmills Ltd	TSA	Harvesting contract	108,709.87	40,000
N. Sukul & Sons	Wood cutting lease	Harvesting contract	26,258.53	15,000
Toolsie Persaud Ltd	TSA	Harvesting contract	122,966.0	5,000
Barama Housing Inc.	State Forest Exploratory Permit	Wholly owned subsidiary of BCL	47,314.00	No logging permit yet

Ownership of all concession areas listed in the above table (apart from Barama Housing Inc.) belongs to the partner company. BCL signed a harvesting agreement with the company and does not possess legal long term rights to the area. Nevertheless, BCL is using RIL method for harvesting in those areas particularly in the Barakat Timbers & Trading Co. Ltd concession area. Barama Housing Incorporated was granted an exploratory permit by the Guyanese Forestry Commission (GFC) after a routine call for public tender to the proposed area. Harvesting permit has yet to be issued for operation in said area.

BCL management is committed in adopting a phased approach in bringing other areas into FSC certification. Management system practiced in BCL concession will be gradually copied into the management of other areas.

3. FOREST MANAGEMENT SYSTEM

3.1 Bio-physical setting

The Barama concession area comprises 1.6 million ha which is predominantly flat or undulating lowland without any significant topographic features. It is covered by a predominantly dryland mixed forest type, intermixed with swamp forest of mora and palm and riverine floodplain. The western part of the concession is hillier, reaching about 180 m above sea levels.

Three major rivers flow through the concession. The southern half of the concession is (drained by) in the water catchment the Cuyuni River which flows eastward and into the Mazaruni near its confluence with Essequibo. The Barama River drains the water catchment in the northern half, flowing easterly to join Barima River flowing north to the Atlantic Ocean. The Waini drains the mid-eastern portion of the concession flowing northwards to the Atlantic just east of the Barima River.

The area normally experiences two wet seasons occurring between May to July and November to January. During the wettest season, the area could receive up to 500 mm of rain per month, while during dry season the average rainfall is less than 240 mm per month.

Over 6000 species of plants have been identified and described for Guyana and 100 are known to be used commercially.

The Guiana region lies on the edge of the Amazonian forest block, and although it contains a number of endemic plant and animal species, it is relatively the poorest region for biodiversity. The fauna of Guyana so far recorded over 1200 vertebrate species including 728 species of bird, 198 mammals, 137 reptiles and 105 amphibians. According to the IUCN classification, there are 10 endemic, 14 rare/vulnerable and 1 species that has been recorded as extinct. 144 of the known species are listed under CITES.

Most soils in the concession are highly leached clay soils, nutrient poor, easily compacted, highly erodible and require careful management. A national soil survey conducted by the FAO in 1960s described the following:

- ❑ 60% of the TSA has deeply weathered and highly leached brown sandy clay barns and gravely reddish brown laterite of low fertility
- ❑ 35% comprises of well drained brown sandy soils of low fertility found on gently to moderately rolling topography mainly along the Cuyuni River and in the Barima and Barama headwaters
- ❑ 5% consist of deep, sterile excessively or poorly drained white sands on gentle slope and brown sandy gravel soils on steep slopes found mainly around Mathews Ridge.

In Compartment 5, sandy soil with quite limited clay content was observed along the main road.

In the area of Region 1 (Compartment 1, 2 & 3) gold mining is a significant activity which occurs throughout Guyana in areas with crystalline basement rock. There is a long history of mining and migration up the Barama and Barima rivers since the gold rush in the 1930s. It is the mainstay of the economy in the area especially after Barama made a decision to transfer the operation to Buckhall (Essequibo Region) focussing on harvesting from Compartment 5. Environmental damage caused by mining can be significant, as evidence through air surveillance by the audit team, where a mining field located in N Sukul and Sons concession area (southeast of Compartment 5); it was observed that the whole area was cleared by the mining. Ponds were created and soils were dug out and top soil was totally washed away. Without proper rehabilitation programme, the area will remain unproductive for a very long period of time.

As described earlier, mining in Guyana is carried out both by large conglomerates as well as individuals, both legal and illegal. Barama Company has no interests in the mining industry and is not involved in mining in any of the forested areas of Guyana.

The biggest threat to biodiversity in Guyana is wildlife trading with Guyana and Suriname being the only two countries in South America that officially allow trading of wildlife. Data from Guyana Bureau of Statistics shows that over the past 5 years, official earnings from the export of wildlife have been increasing rapidly from US\$131,300 in 1999 to US\$2,401,500 in 2003. Parrots are the most popular animal being traded. The World Wide Fund for Nature (WWF) estimated that in 1999, the revenue from parrot export alone was close to US\$1 million. Other exports include fish, reptiles (snake, lizards, caiman and alligators), plants, large animals (anteater, sloth, and jaguar), monkeys, songbirds and eagles.

3.2 History of use

Management history of the area was briefly described in the FMP where the area from upper Cuyuni towards the coast along the Barima and Barama Rivers may possess some archaeological interest. Thousands of years ago, the rivers formed the main trading route and communication for the indigenous people who settle within the area.

In the late 1900s: Arakaka was a major centre with gold mining as the main activity operated by the British. The Second World War halted the operation which resulted in stalling of the growth of the local economy.

Between 1959 – 1969: North West Mining Co. established a manganese mine at Matthew Ridge that employed about 600 people. The manganese ore was transported to Port Kaituma via a rail line prior to export to Trinidad. The government then established an agriculture scheme in Port Kaituma in 1969 including a cassava mill which ran until 1977. A hydro-power scheme was proposed for the Barima River in 1986, but this was never implemented. In 1977, through an Act of Parliament, Matarkai Development Authority was established to start a regional system for developing the area, however, due to shortage of fund, no activity was undertaken, and the authority was dissolved in 1997.

By then, in 1992, after getting the TSA agreement, Barama had started their logging operation in the concession base in Port Kaituma. This was the first logging operation in the area which brought development and employment back to the people living in the area. The company built basic amenities such as housing and health facilities as well as a community hall in the area. Electricity was also generated by the company.

In 2002, the company made a decision to move the operation to Buckhall, near the mouth of the river Essequibo. This is to allow harvesting operation in Compartment 5 and 4 of the concession. The Port Kaituma area is left under the management of Regional Development Authority. All the facilities developed by BCL were handed over to the authority including the road. But with very limited funds, the authority was reported to having difficulties in managing the area.

There have been studies highlighting the negative impact that the opening up of this area has had on the local community and how the infrastructure encouraged unregulated flow of migration. Though BCL did improve the road network and the housing and energy supply, the majority of the inward migration was due to mining activities. Region 1 is not within the scope of this certification assessment.

3.3 Planning process

Management of the forest concession in Guyana comprises the following:

Strategic planning covering the background, conditions and plans for the entire concession for the entire duration of the agreement

This plan was prepared at the early stage of the agreement. This comprehensive document covers:

- all operational aspects of the programme;
- the basis for annual harvest; and
- details of the initial 1 and 5 year plan.

Outlines are also given for BCL's commitment to environmental safeguards and the security of designated Amerindian community lands.

Forest type, distribution, and land-use for the entire Barama concession are as follows:

Table 3.3a: Forest type and land-use distribution in the entire BCL concession area

Codes	Description	Gross area(ha)	Exclusion areas (ha)					Net area (ha)
			Int. buffer	Amerindian reserve	Settlement area	Biodiversity area	Water bodies	
1	Mixed forest undulating hill	855,220	18,865	40,581	361	35,802	0	759,791
1b	Mixed forest flat to undulating	107,565	737	1,812	0	4,726	0	100,290
1c	Mixed forest deeply dissected	340,342	1,040	9,854	5,650	14,571	0	270,133
1h	High hills	175,003	334	980	0	7,816	0	165,873
1L	Clump Wallaba	16,848	0	0	0	758	0	16,090
2a	Wallaba	6,954	0	0	0	313	0	6,641
3b	Mora	31,872	0	2,777	0	1,309	0	25,838
	Sub total commercial forest	1,533,804	20,796	56,004	6,011	62,295	0	1,385,698
	Sub-total non commercial forest	77,391	1,374	3,325	1,693	0	12,643	58,356
	Grand Total	1,611,195	22,170	59,329	7,704	65,295	12,643	1,444,054

For management purposes, the whole concession was divided into 7 compartments, each designed for 5 or more years of operations. Initial planning was for the area to be managed on a 25 year cycle, however, after evaluation in cooperation with ECTF backed by the growth data obtained through PSPs set up during the first 7 – 8 years operation, it was revised to 40 year rotation. Harvesting sequence schedules for the period 1993 to 2032 (29 years) are as tabulated below:

Table 3.3b: Harvesting sequence planning for BCL concession

Year	Compt. #	No. of years	Compt. area	Gross operable area (GOA)	Net operable area (NOA)	Annual cut area/yr
1993-2001	1, 2 & 3	9	581,758	191,500	172,350	34,470
2004 - 2008	5	5	210,843	202,956	182,660	36,532
2009 - 2017	4	9	378,596	349,495	314,546	34,950
2018 - 2022	6	5	218,806	204,833	184,350	36,870
2023 - 2027	7	5	221,612	216,740	195,066	39,013
2028 - 2032	1, 2 & 3	5	581,338	191,500	191,500	34,470

GFC's forest management plan guidelines prescribe an annual allowable cut of 0.33 m³/ha/yr with a maximum yield of 20 m³/ha for a 60 year rotation practice. If 25 year rotation is practiced then the maximum cut should be only 7.5 m³/ha. Based on the experience gathered through operation in Region 1 and recommendation made by ECTF, BCL has adopted a different approach where only commercial trees above 50 cm dbh will be felled using a 40 year cycle. Following the GFC's prescription, the maximum allowable cut under the BCL 40 year cycle system is 14 m³/ha.

Operational planning detailing the operations and activities to be carried out within a 5-year period

For meeting this requirement, BCL has prepared a 5 year forest management plan for Compartment 5 covering the period of 2004 – 2008 and this has been prepared following the format specified by GFC and with the intention of meeting compliance to the FSC requirement. The 5 year FMP has been submitted and approved by GFC. FMP for Compartment 4 will be prepared prior to harvesting operation which is expected to commence in 2009 or after completion of harvest in Compartment 5.

The gross area of Compt. 5 is 210,843 ha, of which 5,026 ha including 1,045 ha water bodies are non-commercial area, and hence the total commercial area is 204,027 ha including 745 ha that was logged in 2003. From the total commercial forest, 182,660 ha are considered operable after 10 % deduction for buffer/protection zones.

Taking into consideration the allowable annual cut and 40 year harvesting cycle, net annual operable area is 36,171 ha. With 14m³/ha allowable cut, estimated yield from a net annual operable area of 36,171 ha in Compartment 5 is 506,394 m³. However, with experience of an average harvest in the concession to date is 8.2 m³/ha (or two trees/ha), estimated yearly harvest from operation in Compartment 5 is in the region of 300,000m³.

Annual areas and projected productions under the 5 year management plan for Compt. 5 are as follows:

Table 3.3c: Projected annual production from Compartment 5

Year	Net operable area (ha)	Volume (m ³)	Cutting intensity (m ³ /ha)
2004	26,509	177,343.00	6.7
2005	42,674	318,771.00	7.5
2006	40,914	339,177.00	8.3
2007	38,221	355,625.00	9.3
2008	34,342	343,431.00	10.00
Total	182,660	1,534,347.00	

The low cutting density is based on the fact that BCL is now harvesting only 35 commercial species (50 cm dbh and above) from a total of 127 species found in BCL area. There is the possibility that the number of species harvested will, based on market demand, increase over time. Species such as Limonaballi, Burada, Wallaba and Dakamalli are also showing market acceptance. As such, for planning purposes, estimate of the average harvest potential for Compt. 5 is projected to be increased to about 10 m³/ha in 4 years time.

The management system being adopted is targeted at low harvest while maintaining a high degree of species and structural diversity through natural regeneration and there are no plans for rehabilitation. Reduced Impact Logging (RIL) methods are used for harvesting operations in Compartment 5.

The 5 year plan also made a commitment that 20 PSPs will be established throughout Compartment 5 for the purpose of measuring stand density prior to harvest and measuring damage as well as residual stands condition after harvest. In the long term, the PSP will be used for measuring growth of the area.

Biodiversity area (1,071 ha) and buffer-zones (estimated to be about 10 % of the Compartment) will not be logged.

Annual Plan (AP)

Annually, a work plan is prepared, as part of monitoring of performance of the previous year, as well as planning for the following year. For the operation in Compartment 5, BCL has prepared an Annual Plan of Operations 2005.

It was recorded that in 2004, a total of 81 blocks with gross area of 8,100 ha have been logged. A total of 70,956 m³ of logs was produced, with an average production of 8.76 m³/ha.

Apart from planning for blocks to be harvested for 2005, the annual plan also includes harvesting planning of blocks earmarked for 2004 being carried over to 2005. Monthly harvest planning and estimate on production volume for operation in 2005 are as tabulated in Table 3.3d below:

Table 3.3d: Estimate production volume in 2005

Month	Total number of blocks	Gross area (ha)	Net area (ha)	Projected volume @ 8.4 m ³ /ha
Carry over from 2004				
January	37	3,700	3,330	27,972.0
February	35	3,175	2,858	24,003.00
June	40	3,890	3,501	29,408.4
Harvesting blocks earmarked for 2005				
March	58	5,785	5,207	43,734.6
April	50	5,160	4,644	39,009.6
May	51	5,225	4,874	40,937.4
August	56	5,680	5,112	42,940.8
September	55	5,480	4,932	41,428.8
October	56	5,815	5,205	43,724.856
November	67	6,680	5,945	49,939.68
December	75	7,590	6,755	56,741.264
Grand Total	616	61,915	55,724	468,077.00

The annual plan also contains estimates on volume of harvest for each individual species. 55.4 % of the trees to be felled are categorised as plywood species, comprising 86,438 trees with a volume of 259,314 m³. The remaining 44.6 % are mixed hardwood species where 69,587 trees are estimated to be felled generating 208,762 m³ of logs. The majority of the species are Baromalli (49.6 %), maho (3.7 %), greenheart (15.2 %), purpleheart (7.8 %) and mora (4.8 %). Average volume of each tree felled is estimated in the region of 3.0 m³.

Roads to be constructed, machinery to be used, number of workers and camp facilities to be established during the annual period are also tabulated in the plan.

Comprehensive Harvesting Plan (CHP)

Prior to harvesting of a logging block, comprehensive harvest planning is carried out for each logging block (100 ha). The CHP comprises : identification of productive area, a resource inventory of the productive area, identification of harvestable trees, buffer zone, steep slope as well as non-productive

areas. Road and skid trails alignment together with locations where bridges and culverts to be built are also indicated on the CHP.

100 % inventory of the harvestable trees will be carried out where each tree is identified on the ground and mapped in the CHP. Road and skid trails alignment are plotted on the CHP together with actual buffer zones and the non-productive areas.

Actual number and volume of trees to be felled in each block are known prior to the harvesting operations being initiated in the area. These are documented and form an important part of the CHP.

Monitoring

Monitoring is continuously conducted during and after harvesting operation. A closing report is prepared for each harvested areas or logging block. The report contains statistics of the harvest level, extent of roads and skid trails constructed, residual stand condition and environmental elements such as drainage etc.

3.4 Harvest and regeneration

Since the start of operation in 1993, BCL has extracted the following timber volumes from the concession area:

Table 3.4a: Volume of timber extraction between 1993-2003

Year	Compt. #	Area logged (ha)	Volume harvested (m3)	Average volume/ha
1993	1 & 2	5,500	38,425	6.99
1994	1 & 2	22,900	166,997	7.29
1995	1 & 2	28,900	192,590	6.66
1996	1 & 2	29,200	186,562	6.39
1997	1, 2 & 3	32,800	244,330	7.45
1998	1, 2 & 3	28,976	160,448	5.54
1999	1, 2 & 3	21,750	160,254	7.37
2000	1, 2 & 3	22,400	134,737	6.02
2001	2 & 3	27,300	184,847	6.77
2003	5	745	5,761	7.73
	Total	220,471	1,474,951	6.69

Estimates on future harvest (Compartment 5 and year 2005) are as tabulated in Table 3.3c and described under section 3.3 of this report.

In compliance to GFC guidelines, the harvested areas will be allowed to regenerate naturally without any silviculture treatment. Selective felling itself is a silviculture treatment whereby a small number of mature trees are removed, releasing space and canopy opening to stimulate growth of residual stands. Treatment such as liberation thinning and enrichment plantings will not be carried out.

GFC in cooperation with DFID is carrying out research on the best practices for tending to forest stand in order to maintain the composition and growth of the area. Permanent sample plots (PSPs) are being established in various areas as part of the effort to study growth pattern of different forest types. In Compt. 5, BCL made a commitment to established 20 PSPs (4 have be set up) to contribute to the GFC national PSP programme.

Following the GFC procedure, compartment level inventory sampling of 2% is carried out to identify and quantify the available resources in the area, particularly tree species composition and distribution, diameter class and potential timber volume.

100 % sampling of a 100 ha logging block is carried out using strip lines. All merchantable species over 50 cm dbh within 50 metres both sides of each transect are enumerated, marked and tagged with tree numbers on green tag. Locations of the trees are marked within the quadrates of 25 metres

square on the grid map at 1:4,000 scale. Individual tree locations are captured on alpha-numeric grid reference and converted through a GIS programme into X and Y coordinates.

Positions or locations of residual future crop trees of commercial species (30 – 49 cm dbh) are not marked on the map but their species, diameter classes and number are recorded. Protected trees or mature trees with prohibition constraints are not marked but their number, species, diameter class and prohibition constraints are recorded.

The method for calculating AAC as described by GFC in the CoP is based on the following:

- ❑ Estimated mean annual increment of 0.33 m³/ha/yr
- ❑ Recommended 60 yr cycle (though for certain forest types if growth data exist this may be altered)
- ❑ Sustainable yield (therefore) of 20m³/ha/yr

The AAC calculation is a simple volume method whereby net operable area (NOA) in a concession is multiplied by 20m³ and divided by the cycle. Barama's total NOA (over the whole concession) is derived 1,247,129 ha. As such, by GFC method, total allowable volume from the whole concession would be 24,942,580 m³ and the AAC (based on 60 year rotation) would be 415,709 m³/yr.

However, BCL has adopted a 40 year cycle (approved by GFC) based on the results of PSPs established by ECTF (carried out in Region 1) that estimate the growth of 17 m³/ha/yr. BCL has been operating for 11 years in the concession where 220,174 ha have been logged. The AAC, as such was calculated based on net area of 1,048,972 (minus logged over area) and estimated increment of 17.35 m³/yr giving a total allowable volume of 18,200,546 m³. The AAC calculated on the remaining 29 years is thus 576,754 m³/yr. This is less than the AAC based on GFC increment and the agreed 40 year cycle for the whole concession which would be 623,564 m³/yr.

The fact is that the actual current harvest rates (in Compartment 5) average 8.5m³/yr giving an actual annual production of 307,454 m³, which is well within the allowable range.

As far as infrastructure is concerned, Barama has constructed a total of 1,587.9 km of various categories of roads throughout the concession area, details are as follows:

Year	Compt. #	Area harvested (ha)	Roads constructed (km)			
			Main	Secondary	Feeder	Total
1993	Compt 1 & 2	5,500	46.0	11.1	37.1	94.2
1994	Compt 1 & 2	22,900	31.2	9.5	67.7	108.4
1995	Compt 1 & 2	28,900	60.6	73.9	141.0	275.5
1996	Compt 1 & 2	29,200	51.3	46.5	195.8	293.6
1997	Compt 1, 2 & 3	32,800	19.6	18.62	137.7	175.92
1998	Compt 1, 2 & 3	28,976	29.38	52.38	107.07	188.83
1999	Compt 1, 2 & 3	21,750	15.68	37.84	106.66	160.18
2000	Compt 1, 2 & 3	22,400	43.21	38.86	138.35	220.42
2001	Comp. 2 & 3	27,300	-	-	-	-
2003	Compt 5	745	42.79	1.15	26.93	70.87
	Total	220,471	339.76	289.95	958.31	1,587.92
	Right of way (ha)		1,698.8	1,159.40	2,874.93	5,733.13
			Road area density by % of area harvested – 2.6 %			
			Road linear density by meter per hectare of area harvested – 7.2 m/ha			

Future planning for infrastructure development in Compartment 5 is tabulated below:

Period	Road distance (km)	Bridges	Culverts
Constructed as at Sept. 04	156.20	26	70
Oct – Dec 2004	68.40	8	18
2005	255.40	10	74
2006	255.35	19	55
2007	250.10	18	64
2008	136.50	4	29
Total	1,121.95	85	310

Prior to moving of operation from Port Kaituma (Region 1) to Buckhall, an 88 km of road was constructed connecting Buckhall to the concession. The construction of the road was carried out after an EIA report was produced and approved by the Environmental Protection Agency (EPA) and GFC. There were some disputes on the usage of the road with other concessionaires along the alignment. BCL is using formal channels in resolving the issue and it is done in a transparent manner through full consultation with the authorities.

In the meantime, the road is open for all parties operating in the area. As a matter of ensuring security, Barama has erected two security posts; on the border of Compartment 5 and the other one is near the entrance to the Buckhall log pond.

3.5 Monitoring processes

Monitoring process of BCL operation occurs at macro and micro level. At macro level, monitoring on the commercial and administrative level is conducted. These include monitoring of harvest level from each compartment, manpower utilisation, financial cost etc on annual basis. Results of the monitoring are tabulated in the annual report as well as in the annual plan of operations which form the basis for further planning.

At micro level, as part of the RIL method, with emphasis on pre-harvest planning, proper implementation and post-harvest operation, monitoring is conducted daily for each logging block by BCL staff. Each block is formally closed out as the contractor pulls out the final logs from the area. Under this system, a close-out report is prepared for each area when harvesting has been completed. The close-out report summarizes the actual field operations in the area that consists of the infrastructure developed, list of trees felled and list of trees not felled etc. Damage levels in each block are also calculated. A special survey team has been formed to carry out the task. The report produced by the team will also contain remedial measures to be taken if required.

As described earlier, PSPs are being established as part of programme to monitor damage levels due to harvesting operation as well as to measure regeneration of the forest on a long-term basis. This will be an important contribution to the GFC's national PSP programme aiming at compiling real data on impact of forestry operation and forest growth.

The field staff will carry field book and record observation on the presence of wildlife through direct sightings, droppings, foot prints, sound or other means. Data captured will be keyed into a centralised record which eventually and over the long-term, will demonstrate the presence, density or movement of the wildlife within the area.

The FMP described that monitoring of the river system in the Essequibo River will be carried out as part of meeting the EIA requirement for Buckhall. To ensure water quality of rivers, creeks and streams in the forest is not adversely affected by logging, a monitoring programme was established. Water quality parameters monitored include, coliforms, turbidity, oil and grease and pH.

At the time of major CAR close-out visit, it was observed that water quality monitoring has been carried out at five different locations. No proper analysis of the results have been carried out to date but generally, the water sampling shows that the stream passing through the N Sukul and Mazharally concession carry heavy siltation and containing heavy metals such as iron and mercury, two elements mainly associated with mining activities. It is a public knowledge that an active mining operation is ongoing upstream of that sampling station. Results of the other sampling points do not show any significant heavy metal and siltation.

Monitoring of the health and safety of the workers will also be carried out. This will be done through the establishment and implementation of Occupation Health and Safety Committee for Forestry Operations, OH&S Committee for Marine Operations and OH&S Committee for manufacturing Operations.

For monitoring social issues within the nearby local communities, joint Community Relations Committee will be established. The Committee which will meet on quarterly basis will discuss current issues and resolve any arising conflicts.

4. SOCIO-ECONOMIC AND ENVIRONMENTAL CONTEXT

4.1 Social aspects

With a total population of about 770,000 people and land area of 215,000 sq. km, the Guyana population density is about 3.5 per square km. In 1992, it was reported that 85% of the population is living below the poverty line, but in 2004, the figure reduced to 35%. Per capita income of the country has risen from US\$231 in 1992 to US\$900 in 2004 with inflation rate currently at 4 %.

Seventy five percent of Guyana is still under forest cover which is divided into state forests, state lands, Amerindian lands and private property. State forests comprise approximately 13.8 million hectares of the total forest cover (or four fifths of the total forest area). This can be classified into permanent production forests, permanent protection forests, biodiversity reserves, reserve forests, multiple use forests, permanent research forests and conversion forests.

Over the past decade, the contribution of the Forestry sector to Guyana's GDP remained lower than that of the Mining and Agriculture sectors, with an average of about 4 %. Comparisons on the contribution of forestry sector to the GDP between 1993 to 2002 are as follows:

Table 4.1: Contribution of forestry sector to Guyana GDP between 1993 to 2002

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
GDP at factor cost (G\$m)	4,104	4,450	4,676	5,048	5,360	5,270	5,426	5,352	5,474	5,536
Forestry	117	197	228	230	264	200	226	189	195	180
% of forestry	2.9%	4.4%	4.9%	4.6%	4.9%	3.8%	4.16%	3.53%	3.56%	3.25%

Source: GFC (2003) Forestry in Guyana Quarterly Market Report: 2003/4 and 2003 summary report.

Based on the data reported in the ESIA report prepared by ECTF in 1993, the population of Northwest area is made up of Amerindian (9,768), mixed (7,024), Negro (1,238), East Indian (473) and others (13). The population is rural base, with an average household size of 5-6 people. The report noted that there is constant movement of people within the area, particularly men who continuously look for employment. The main centres of population in the BCL area concession area are Port Kaituma, Mathew's Ridge, Arakaka, Koriabo, Kariako & Kokerite and Aurora & Makapa Hills. The combine population of the first three settlements were reported to be approximately 3,163. In addition to the above, scattered through the forest are small Carib and Sebai groups (outside the concession).

Although part of but specifically excluded from the TSA by law, there are five Amerindian Community Reserves and one settlement area or portions located within the Barama concession boundary, as follows:

- Koriobo – estimated population 545
- Chinese landing – est. population 37
- Kokerite – est. pop 276
- Kurutuku – est. pop 200
- Baramita – est. pop 1,308
- Arakaka/Matthews Ridge Settlement – est. pop. 3,163

There are no communities living in Compt. 4 and 5, but there are small scattered communities of agrarian families living along the west bank of Essequibo River not very far from Buckhall. The urban

centre for operation in Buckhall is Parika, located on the east bank of Essequibo River. Supenaam, located north of Buckhall on the west bank of Essequibo is the closest town to Buckhall.

The Amerindian settlements in the vicinity of Buckhall are communities of Cabacaburi and the adjoining communities of Wai Waro, Macaseema and Yaromai (approximately 1500 residents) as well as, St. Monica's/Karawab (approximately 512 residents), located by the riverbank of the Pomeroun River.

There are the ethnically mixed community of Caria Caria (approximately 360 residents) on the Essequibo River, Bethany (400) residents located 14 km from road linking Buckhall – Barama concession and Akarakuru (approximately 28 residents) located near the David Blair's concession. There are also communities living on West Great Trootli Island (150 residents), on the Essequibo River.

Interviews carried out during the main assessment with the community leaders in Cabacaburi indicated that while they are far away from BCL's compartments 4 and 5 they will assert their rights to the usage of the Pomeroun River which is used for washing, transport, and in some cases drinking. Thus, they suggested that as with other forest operators agreement must be reached regarding the schedule movement of barges so as not to cause disruptions to their daily lives. As a response to a recent water pollution incident, BCL has distributed water tanks to the affected communities.

BCL currently employs about 1,100 people with 400 in logging, 100 in sawmilling, 550 in the plywood mill and 50 in the head office. More than 70 % of the supervisory staff in the manufacturing divisions are now Guyanese. Skilled foreign workers are still required to ensure quality of the product output however; the company is gradually replacing them with locals after proper training and appropriate transfer of knowledge and skill. Minimum wages for Guyana is G\$3,000 per month (about US\$24) and the Barama is paying G\$7,500 (US\$60).

Based on discussion with community leaders during the main assessment, people from adjacent communities are given opportunities based on qualification and requirement. Some local employees have found it difficult to be away from home for long periods and prefer to return home daily since they have young families. Some of the local employees left their job with Barama due to the above-mentioned incompatibilities.

4.2 Environmental aspects

As described earlier, the BCL concession is predominantly dryland mixed forest types, with intermixed marsh forests of mora and palm. The Guiana region lies on the edge of the great Amazonian forest block, and although it contains a number of endemic plant and animal species, it is relatively speaking, the poorest region for biodiversity. In global terms, however, this forest is still very rich.

The Barama concession area does contain several species that are endemic to Guyana such as the greenheart (*Chloridium rodiei*), Wamara (*Swartzia leiocalycina*), Sarabeballi (*Vouacapoua macropetala*) sand baromalli (*Catostemma fragrans*) and Ituri wallaba (*Eperua grandiflora*). Of the 29 species of mammals in Guyana listed as endangered under CITES Appendix 1 and II, a number are known to occur in this concession, including the jaguar. The species however, was not adequately listed in any of the Barama planning documents.

The biggest threat to biodiversity in Guyana is wildlife trade, which is also the most important NTFPs. Guyana is the only two Latin American countries that legalise wildlife trade. Annual revenue from legal exports of wildlife is estimated to be between US1.2 – US2.0 million.

The trade has posed a number of complex problems to the authorities. While it is recognised that the wildlife resources are an important part of the national patrimony and contribute significantly to the livelihood of a large segment of the society, the administration of the trade has been quite controversial. The controversy seems to originate from a number of institutional weaknesses, indiscretions and improprieties on the part of officials and negative socio-economic and environmental issues.

While the authorities are taking various steps to control wildlife trades, Barama has introduced procedures that prohibit hunting and trapping of wildlife in its concession. Workers who are involved in such an activity will be dealt with. The endemic and threatened tree species will be identified during the 100 % tree inventory prior to harvest. Such a tree will not be identified for felling. In addition, natural

areas are set aside as biodiversity reserves, buffer zones and non productive area, which will not be logged or disturbed in any way.

4.3 Administration, Legislation and Guidelines

The following table lists the key national legislation, regulations, guidelines and codes of best practice that are relevant to forestry in the commercial, environmental and social sectors. This list does not purport to be comprehensive, but indicates information that is key to the forestry sector.

Legislation and regulation	Notes
Amerindian Act	
Amerindian Lands Commission Act	
Environment Protection Act	
Taxation and Trade Regulations	
Forest Act	
Labour Act	
Mining Act	
National Occupational Health and Safety Act	
National Parks Commission Act	
State Lands Act	
Wildlife Act	
Guidelines and Codes of Best Practice	Notes
GFC Code of Practice 2002	

In Guyana, the most important piece of document pertaining to forest and forestry is the Guyana Forestry Commission (GFC) Code of Practice (2002) [CoP]. The CoP contains practices and sets of standard for forest management and operation, which have been developed based on ongoing research and practical experience. In legal terms, the cop should be regarded as:

- GFC's vision on what constitutes satisfactory felling extraction, road building and other timber harvesting practices
- GFC's requirements for preparation of forest management and operational plans and its implementation.

Guyana is one the 6 producer countries claimed by ITTO which are 'managing their forest sustainable at the forest management unit level'. ITTO has also forwarded assistance to Guyana for conducting forestry research and training.

At national level, Guyana is signatory to a number of Organisation of International Trade (OIT). Guyana is also a signatory to the ILO where an agreement was signed in 1989. Guyana also has also signed (1992) and ratified (in 1994) the United Nations Framework Convention on Climate Change.

The Amazon Cooperation Treaty (ACT) was signed in 1984 by Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname and Venezuela. It was agreed that in order to achieve overall development of their respective Amazonian territories, it was necessary to maintain a balance between economic growth and conservation of the environment

Reporting to ITTO is the responsibility of the Government, led by the Guyanese Forestry Commission (GFC). The GFC also carried out monitoring on timber and wood products trade volume for reporting to ITTO.

The United Nations Convention on Biological Diversity was adopted, signed, ratified and entered into force in 1992 by the Guyanese government with the Environmental Protection Agency as the implementing agency. In order to fulfil the obligations under the Convention, a number of mechanisms were implemented at the national level, including the establishment of Environmental Protection Agency in 1996, the resuscitation of the National Biodiversity Committee in 1997, the Biodiversity

Action Plan also in 1997 as well as establishment of Iwokrama International Centre for Rainforest Development.

5. CHANGES IN MANAGEMENT, HARVESTING, SILVICULTURE AND MONITORING

The following table shows significant changes that took place in the management, monitoring, harvesting and regeneration practices of the certificate holder over the certificate period.

Description of Change	Notes
SURVEILLANCE 1	
SURVEILLANCE 2	
SURVEILLANCE 3	
SURVEILLANCE 4	

6. PREPARATION FOR THE EVALUATION

6.1 Schedule

The Main Evaluation was carried out between 28 February and 4 March 2005. This examined the management systems and identified any gaps that might preclude certification. Information gathered was used to plan the main evaluation. Key stakeholders were identified

The main assessment has resulted in the issuance of four major CARs. As a standard procedure under SGS QUALIFOR programme, all major CARs must be adequately closed prior to recommendation for certification under the FSC certification. At the Clearance of Findings Audit visit was then carried out between 29 August and 2 September 2005.

6.2 Team

The table below shows the team that conducted the main evaluation and the independent specialist(s) that were selected to review the main evaluation report before certification is considered.

Evaluation Team	Notes
Team Leader Main Evaluation	Has a post graduate qualification in environment and natural resource management, more than 15 years experience in environmental and forestry related field both at international and local level. The team leader is fluent in English and has logged in more than 50 days of forest management auditing using FSC requirement.
Local Specialist (Forestry & Environment)	Has a PhD in Forestry, more than 10 years experience in forestry or related field at international level and has been living and operating in Guyana for more than 5 years.
Local Specialist (Forest operations)	Has a degree in forestry and more than 7 years experience in forest management and auditing in both plantation and natural forest. Highly experience forester and familiar with

	commercial forestry operation, worker's health and safety as well as equipment and machinery used.
Local Specialist (Social)	Has a PhD in Sociology. Over fifteen (15) years professional accomplishments in teaching and research at the national, regional and international levels in a range of areas relating to governance, social development, institutional building and public policy issues. Involved in many social research programmes at international and local levels.
Lead Assessor for Clearance of Findings Visit	A Qualifor lead auditor for forest management and chain of custody with more than 10 year experience at international level. Prime area of expertise in environmental related field but also knowledgeable in social and stakeholders consultation.
Peer Reviewers	Notes
Peer Reviewer 1	Has a PhD in forestry, more than 20 years experience in internationally forestry work, and currently works as a freelance forestry consultant.
Peer Reviewer 2	Has a post doctorate degree in Biology, more than 30 years experience in botany and forestry, particularly on reduced impact logging practice in tropical forestry, and currently works as a Professor in a University.
Peer Reviewer 3	Has a DPhil degree in anthropology, more than 30 years experience in sociology at internationally level, and currently works at a research institution.

6.3 Checklist Preparation

SGS Qualifor has drafted a forest management standard for Guyana in a checklist form dated February 2005. The standard follows the format of the new Qualifor forest management standard which is a checklist for auditing the FSC Principles and Criteria. The Guyana standard also incorporates elements contain in the third draft standard for forest management developed by the Guyana National Initiative for Forest Certification (GNFIC).

The draft standard/checklist has been circulated to local stakeholders prior to the main exercise. The assessment and its reporting is made based on this Qualifor forest management standard for Guyana.

A checklist was prepared that consisted of the documents listed below. This checklist was prepared by adapting the QUALIFOR generic forest management checklist.

This adaptation included canvassing comments from stakeholders 4 weeks before the field evaluation. A copy of this checklist is available on the SGS Qualifor website, www.forestry.sgs.com.

Standard Used in Evaluation	Effective Date	Version Nr	Changes to Standard
SGS Qualifor: Generic Forest Management Standard (AD33-GY) adapted for Guyana	February 2005	01	New Standard

6.4 Stakeholder notification

A wide range of stakeholders was contacted 4 weeks before the planned evaluation to inform them of the evaluation and ask for their views on relevant forest management issues. These included environmental interest groups, local government agencies and forestry authorities, forest user groups, and workers' unions. Responses received and comments from interviews are recorded under paragraph 13 of this Public Summary.

7. THE EVALUATION

The Main Evaluation was conducted in the steps outlined below.

7.1 Opening meeting

An opening meeting was held at Georgetown, Guyana, on 28 February 2005. The scope of the evaluation was explained and schedules were determined. Record was kept of all persons that attended this meeting.

During the major CAR close-out visit, a similar process was followed with an opening meeting held in Georgetown on 30 August 2005 with the MR and again on 31 August 2005 at Buckhall involving relevant operational crews.

7.2 Document review

A review of the main forest management documentation was conducted to evaluate the adequacy of coverage of the QUALIFOR Programme requirements. This involved examination of policies, management plans, systems, procedures, instructions and controls.

7.3 Sampling and Evaluation Approach

A detailed record of the following is available in section B of the evaluation report. This section does not form part of the public summary, but includes information on:

- Sampling methodology and rationale;
- FMUs included in the sample;
- Sites visited during the field evaluation; and
- Man-day allocation.

7.4 Field assessments

Field assessments aimed to determine how closely activities in the field complied with documented management systems and QUALIFOR Programme requirements. Interviews with staff, operators and contractors were conducted to determine their familiarity with and their application of policies, procedures and practices that are relevant to their activities. A carefully selected sample of sites was visited to evaluate whether practices met the required performance levels.

Field sites visited during the main assessment were as follows:

Site Name	Description
Block 15V	Observe overall planning particularly tree marking, road and skid trail alignment etc.
Block 8AE	Visit to verify accuracy of tree measurement and overall implementation of procedure for setting up PSPs.
Block 18A1	Pre-harvest planning. Skidding and tree felling. Harvestable tree identification. Buffer zone.
Road	Road construction, erosion control etc.
Logging camps	Check on workshop, skid tanks and general camp hygiene
Log pond at Buckhall	Discussion held with Mr Calvin Peters, GFC Resident Forest Officer, stationed at Buckhall on chain of custody issues
Villages in the north of Buckhall	Interviews communities in Cabacaburi, Karinap. Caria Caria
Community living south of Buckhall	Interview communities on Troolie Island
Aerial survey	Looking at general impact of the RIL. Ascertaining location of communities. Boundary for possible encroachment into the concession. Road from Buckhall to the concession.

During Clearance of Finding visit conducted in August – September 2005 the team visited the main roads (M1 & M2) and a few active blocks. The team also conducted interviews with a number of stakeholders and local communities.

7.5 Stakeholder interviews

Meetings or telephone interviews were held with stakeholders as determined by the responses to notification letters and SGS discretion as to key stakeholders that should be interviewed. These aimed to:

- clarify any issues raised and the company's responses to them;
- obtain additional information where necessary; and
- obtain the views of key stakeholders that did not respond to the written invitation sent out before the evaluation.

Nr of Stakeholders contacted	Nr of Interviews with		
	Amerindian & community	Government & NGOs	Industry & private
MAIN EVALUATION			
89	7	6	3
CLOSE-OUT OF MAJOR CAR			
10	5	1	4
SURVEILLANCE 1			
SURVEILLANCE 2			
SURVEILLANCE 3			

Responses received and comments from interviews are recorded under paragraph 13 of this Public Summary.

7.6 Summing up and closing meeting

At the conclusion of the field evaluation, findings were presented to company management at a closing meeting. Any areas of non-conformance with the QUALIFOR Programme were raised as one of two types of Corrective Action Request (CAR):

- Major CARs - which must be addressed and re-assessed before certification can proceed
- Minor CARs - which do not preclude certification, but must be addressed within an agreed time frame, and will be checked at the first surveillance visit

A record was kept of persons that attended this meeting.

8. EVALUATION RESULTS

Detailed evaluation findings are included in Section B of the evaluation report. This does not form part of the public summary. For each QUALIFOR requirement, these show the related findings, and any observations or corrective actions raised. The main issues are discussed below.

8.1 Findings related to the general QUALIFOR Programme

PRINCIPLE 1: Compliance with law and FSC Principles	
Criterion 1.1	Respect for national and local laws and administrative requirements
There was no evidence of non-compliance to the local laws observed in Barama current operation in Compartment 5. Macro (for the whole concession, including Compartment 4) and micro (Compt. 5) planning	

was carried out as stipulated by requirement made by the GFC. There was no evidence of non-compliance with national laws or administrative requirements. On the issue of environmental permitting that was raised by several stakeholders, the situation was found to be as follows:

- ❑ BCL commenced operations in the northern part of their TSA concession prior to the establishment of the EPA and the EP Act. As such, they were not required at the time to undertake an EIA for their logging or processing operations.
- ❑ Nevertheless, an EIA was conducted in 1993 which covered a range of potential environmental and social issues and scoped the entire concession, though emphasis was on the northern section where operations would be concentrated at the time.
- ❑ An environmental management plan was completed for the Buck Hall site which dealt specifically with the construction and operation of new facilities at Buck Hall.
- ❑ An EIA had been conducted and approved for the construction of the new road from Buck Hall to the concession.
- ❑ An environmental permit had been issued by the EPA on 28 March 2003. The permit specifically covered the construction and operation of a road from Buck Hall to the concession and the construction and operation of an integrated wood industries complex (excluding sawmill and veneer plant).
- ❑ On 9 February 2005, EPA notified BCL that an EIA would not be required for an integrated wood products complex at Buck Hall, though an EMP should be prepared to detail measure to mitigate environmental impacts of the project. This decision was subject to a 60 day public consultation period.

The evidence suggests that forest managers were well aware of, and complied with, the relevant codes of practice and operational guidelines. Legal and other documents were made available to authorized company staff and the assessment team.

Relevant guideline for forest operation in Barama is 'Code of Practice for Timber Harvesting, Guyana Forestry Commission (November 2002). The Code described the planning requirements, exclusion areas, construction works, logging operation, post harvest activities, operational and camp hygiene as well as health & safety and social issued.

Based on communication and observation made during the assessment, in general, Barama personnel are knowledgeable on the compliance to the Code.

Criterion 1.2 Payment of legally prescribed fees, royalties, taxes and other charges

The forest concessionaire company has to pay the following fees:

- ❑ Annual acreage fee
- ❑ License fee (for processing/industries)
- ❑ Royalties (based on species)
- ❑ Export commission (2 % of the FOB price of the products)

Evidence was produced to show payment of relevant fees and royalties. There is no reason to believe that the company will not be able to continue payment of fees, though there are no long-term budget that made specific provision for this.

Criterion 1.3 Respect for provisions of international agreements

The CITES Convention was adopted by Guyana in 1973 and came into force in 1977. As part of fulfilling its obligation under the Convention, the Guyanese government enacted a Species Protection Regulation in 1999, followed with establishment of a Scientific Authority and a Management Authority.

It was described in the 5 yr FMP for Compt 5 that Guyana does not have any internationally listed ERT species, but Greenheart (*Chlorocardium rodiei*) is a potential CITES Appendix II listing. It also described that Barama area does contain several tree species that probably endemic to Guyana such as the Greenheart, Wamara (*Swartzia leiocalycina*, *Sarabebballi* (*Vouacapoua macropetala*), Sand baromalli (*Calostemma fragrans*) and Ituri wallaba (*Eperua grandiflora*).

There are 29 mammal species in Guyana listed under Appendix I and II of CITES and a number, including the jaguar, could be found in Barama area.

The forest managers displayed an awareness of the relevant conventions and agreements and maintained a set of appropriate documents in the office. Controls to ensure compliance are in place through management procedures and adherence to plans and guidelines.

Based on discussion held, it was found that Barama officers are knowledgeable on the requirement of the Biodiversity Convention and its compliance. Similarly, they are knowledgeable on the ITTA and ITTO and were involved in its research and projects. At least three BCL staffs are qualified RIL trainers; a product from an ITTO supported projects in Guyana.

Criterion 1.4 Conflicts between laws and regulations, and the FSC P&C

There was no conflict between laws and regulation of the country with the FSC P&C. Guyana Forestry Commission (GFC) has been encouraging and facilitating forestry companies in Guyana to move towards FSC certification. The GFC CoP which incorporate RIL elements were designed to comply with FSC requirement.

As described earlier in this report, Guyana in one of the only two countries in South America that allow trade of wildlife. BCL however, has established a procedure where no hunting of wildlife is allowed in its concession area. Workers who are involved in such an activity are subject to disciplinary measures.

A significant issue in Guyana is mineral exploitation that takes precedence over forestry. If minerals are found in an area, mining takes priority over forestry, leaving no scope for implementing sustainable forest management in the affected areas. In Compartment 4 & 5, there are no current mining activities.

Criterion 1.5 Protection of forests from illegal activities

Illegal felling of trees is not a problem in Guyana. There was no settlement inside the concession area apart from the company's own logging camps. The remoteness of the concession area and lack of incentives for illegal logging is one of the main reasons why illegal logging is a non-issue in Guyana.

Security post with guards manning the security gate was observed at the entrance to the only road into the concession. Observation during an aerial surveillance of the FMU (Compartment 5) did not detect any illegal harvesting activity or encroachment into the FMU.

Road access to the FMU is along a road constructed by BCL which runs through two other concessions before entering BCL's area. Entry to the road is primarily via BCL's 500 acre lease at Buck Hall and vehicular traffic along this road is strictly monitored by a checkpoint before entering BCL's concession.

During the visit, which included ground and air surveillance, there was no evidence of any illegal activity occurring within the FMU.

At present, only one Resident Forest Officer (GFC field personnel), instead of two, is available to monitor BCL operation. The same officer, with two assistants also monitors Barakat and N Sukul & Sons concession.

Criterion 1.6 Demonstration of a long-term commitment to the FSC P&C

A well documented policy (issued by senior management) is available and is posted around the various logging camps and head office as well as incorporated into the Forest Management Plan document. The policy makes the following commitments:

- adopt good forest management and practices for achieving FSC forest certification and chain of custody
- be a responsible corporate citizen by complying with all local laws and regulations and international treaties and conventions.
- Adhere to sound and ethical management, business and industrial practices and promote forest industry
- Honour and respect integrity and exclusivity of all Amerindian Lands and allow indigenous people to pursue traditional lifestyle and allow them to benefit from the company's facilities and further their social and economic welfare by providing employment and community outreach programmes.
- Be sensitive and responsive to the rights and needs of nearby communities and other stakeholders through consultation and dispute resolution.
- Employ qualified Guyanese and training them on the job at all levels and to ensure the safety, health and welfare of workers.

It was also apparent that the message is not effectively communicated to all levels of the workforce. Interviews with tree fallers, tractor operators and log scalers in the field showed a lack of knowledge of FSC but some knowledge of Low Impact Logging methods and reasons for these methods (**Minor CAR-001**).

BCL's interest in other areas of its concession, and other local concessions, was declared and it was stated that BCL has a long-term commitment to managing all forests under its direct or indirect control in the spirit of FSC P & C.

In addition, the worldwide interests of one of the parent companies, Samling, were also declared. The

evaluation team, however, the audit team was not presented with written document declaring a global commitment to FSC P & C. These areas do not fall within the scope of certification as defined by the FSC policy on partial certification.

Whilst the policy statement mentioned earlier covers Barama operation in Guyana, it does not provide for a time frame/schedule for bringing in other areas under its management for certification (**Minor CAR-002**).

PRINCIPLE 2: Tenure and use rights and responsibilities

Criterion 2.1 Demonstration of land tenure and forest use rights

In 1991, Barama was granted with a forest concession totalling about 1.6 million hectare of forest in Northwest Guyana by an Investment Contract dated 16 October 1991 and a Basic Agreement dated 14 August 1991 (TSA 04/91) with the Co-operative Republic of Guyana for the purpose of supplying timber logs for Barama's downstream plywood and sawmilling industrial complex. The Concession was granted for a period of 25 years and renewable for another period of 25 years.

The original cutting cycle was 25 years following the validity period but later was changed to 40 years following recommendations made by the Edinburgh Centre of Tropical Forest (ECTF) based on research analysis which indicated the optimum cutting cycle.

The concession is subjected to the provisions of the Forest Act Chapter 67:01, the Forest Regulations and terms and conditions as contained in the concession agreement. Barama is also committed for its forest operation to follow RIL techniques stipulated in the GFC Code of Practice and committed Comp. 4 & 5 to be managed according to FSC P & C.

Criterion 2.2 Local communities' legal or customary tenure or use rights

The whole concession area was licensed to BCL and several Amerindian Reserves have been identified and excluded from the concession. There are no communities within Compartment 4 & 5 and as such, there are no claims for land rights. There are Amerindian reserves in Compartment 4, but it is not part of the concession. While the Amerindian (the indigenous peoples of Guyana) communities of Cabacaburi and the adjoining communities of Wai Waro, Macaseema and Yaromai (approximately 1500 residents) as well as, St. Monica's/Karawab (approximately 512 residents), on the Pomeroon River, did not provide maps of their lands, they were generally satisfied that from their leaders' explanation, the documentation regarding their lands are adequate and satisfactory. The community use the Pomeroon River for livelihood but, due to the distance, they do not venture as far as the Barama concession.

Similarly, the ethnically mixed community of Caria Caria (approximately 360 residents) on the Essequibo river expressed satisfaction with regards to their lands though maps were not provided. Bethany (400) residents, located 14 km from road linking Buckhall to the concession, also do not have a problem with their land status which has no relevance to the BCL concession.

Criterion 2.3 Disputes over tenure claims and use rights

Barama has developed a procedure for community relation and dispute resolution. Section 14.9 of the Operation Manual described procedures for Social communication, dispute resolution, CRO; monitoring etc. however is inadequate/inappropriate with regards to addressing this indicator.

At the time of main assessment, the draft procedure for communication and dispute resolution however was yet to be finalised even though the Community Relation Committee had been established. Based on the observation made during the main assessment and interviews carried out, the procedure is not yet finalised and fully implemented (**Minor CAR 003**). It should be noted that efforts has been made on the part of Barama to prepare the draft procedure and take it to the Committee for discussion. The procedure will be ironed out and the finalised document will be produced and used with agreement from all parties concern.

To date there are no records of dispute apart from the issue of road construction from Buckhall to the concession raised by a stakeholder.

The 88 km road has been constructed by Barama to access its Compartment 5 from Buckhall after approval given by GFC (EPA permit # 19990524-BCL 00 dated 28 March 2003). Most of the road was aligned through the A. Mazharally & Sons (AMS) concession (TSA No. 6/85) before going through N Sukul concession prior to entrance to Compt. 5.

AMS contends that BCL has not constructed the road but only upgraded the existing road within the AMS concession area and as such, BCL does not have a right to claim the road as a 'Barama road' and should not place conditions on use of the road by others.

The case has been brought to the authority for resolution while both parties continue to use the facility.

BCL is now leaving it to the authority to resolve the issue, but continue to actively engaging with AMS for an

amicable solution.

Barama's Buckhall location has a neighbouring community, Akarakuru (approximately 28 residents) near David Blair's concession, whom, during community consultations, indicated that there is an unresolved matter under litigation in the Guyana High Court. (Also see CARICAD Report May 2003 p. 16 par. 2 and 3). GFC has provided a replacement area to the David Blair concession however; the company claims that this was insufficient. The claim is still being considered by the GFC.

PRINCIPLE 3: Indigenous peoples' rights

Criterion 3.1 Indigenous peoples' control of forest management

The most recent and comprehensive document on all aspects of policy etc. in Guyanese society is the National Development Strategy for Guyana (1996 Draft, finalised in 2000). Vol III, Chapter 22 deals with Amerindian Policies and points out that "the laws of Guyana include provisions that preserve the special place Amerindians take in Guyanese Society as first inhabitants of Guyana." All the relevant legislation past and present are covered.

Indigenous peoples in Guyana are defined as the Amerindians comprising the following tribes: Akawaio, Arawaks or Lokonos and mixed Arawaks ("boveanders"), Arekuna, Caribs or Karinya, Makushi, Patamona, Waiwai, Wapishana and Warau. The above mentioned law has guaranteed their rights over land classified as Amerindian Reserves in Guyana.

Throughout the BCL 1.6 million hectare concession, there are a number of Amerindian Reserves, as described in the earlier section of this report. There are no communities within Compartments 4 & 5.

Criterion 3.2 Maintenance of indigenous peoples' resources or tenure rights

Impacts on the community from the BCL operation was described in an Environmental and Social Impact Assessment carried out by ECTF in 1993 for the whole concession. While the report contain some recommendations for mitigating the impact, the report is general in nature, may be outdated and does not focus on Compartment 5 which is being evaluated for certification. There was lack of specific baseline data, assessment of impacts, mitigation measures and monitoring system for safeguarding social impacts in the FMP document (**Major CAR-004**).

Consultations have been held with communities identified under 2.2 and West Great Trooli Island (150 residents), on the Essequibo River. A Joint Community Relations Committee, involving BCL and representatives of the respective communities, was launched at an inaugural meeting held on February 20, 2005. However the procedures developed is yet to be finalised (**Minor CAR-003**) and the impacts on the community as a results of the operation has yet to be adequately documented (**Major CAR-004**).

According to community representatives, no Amerindian community rights are affected in terms of this criterion.

Consultations with one captain and community at Cabacaburi, indicated that while they are far away from BCL's compartments 4 and 5 they will assert their rights to the usage of the Pomeroon River which is used for washing, transport, and in some cases drinking. Thus, they suggested that as with other forest operators agreement must be reached regarding the schedule movement of barges so as not to cause disruptions to their daily lives. They also remarked on BCL's response to a water pollution incident when the company distributed water tanks. There is documentation to support this.

Lack of social impact assessment that describe the traditional elements of Compartment 5. Environmental and Social Impact Assessment carried out by the ECTF (June 1993) covering the whole concession with focus on Region 1 has identified Amerindian communities within the concession. The settlements were legally recognised where the boundaries are laid out on papers and the community has title to the settlement. These areas are excluded from the TSA area.

The ECTF report also identified potential impacts of employment, economic development and changing population structure of the area due to Barama operation.

As far as Compartment 5 is concern, there is no Amerindian land located within the area. In Compartment 4, there are 1,119 ha of Amerindian Reserves within the Compartment but it is not part of the concession as all reserves have been excised from of the concession.

Notes on close-out of Major CAR-004

Barama Company Limited (BCL) hired three consultants (with environmental, economic and social expertise) to carry out an environmental and social impact analysis of the operation in Compartment 5. A report dated June 2005 detailing the socio-economic and environmental profile of the area was produced. This report also tabulates potential impacts and measures/action recommended to be taken to mitigate the anticipated impact.

The findings of this study have been incorporated into a revised 5-Year Forest Management Plan (FMP) for Compartment 5. Section 12.1 and 12.2 of the revised FMP describes the existing environmental status of the

Compartment including animals that are likely to be found in the area as well as the rare, threatened and endangered species listed for Guyana. Section 12.3 focused on the high conservation attributes of the forest.

The study described the social elements of the area, which have been incorporated into Section 14 of the revised FMP. This section provides baseline information, as well as a map showing the location of the communities surrounding the concession area. This section also further elaborates on the company activities that may potentially impact on the livelihood of these communities and the proposed mitigation measures for these impacts. The feedback from the local community is also included in the revised FMP.

During the course of the clearance of findings assessment, the SGS lead auditor and local specialist visited the local communities (including two Amerindian Captains on the Pomeroon River) to discuss these issues and confirm that such consultation was indeed carried out. It was confirmed that a joint Community Relation Committee (CRC) was established and is now up and running. The people interviewed felt that this forum was a good and practical mechanism for them to provide input in order to benefit from the company's operation in the area.

Major CAR 04 was closed on the basis of this study, the revised FMP which provided more focus on environmental and social elements as well as the verification achieved through community consultation. In future surveillance visits, the implementation of recommended mitigatory measures must be monitored

Criterion 3.3 Protection of sites of special cultural, ecological, economic or religious significance to indigenous peoples

Although part of but specifically excluded from the TSA by law, there are five Amerindian Community Reserves and one settlement area or portions surrounded by the Barama concession boundary, as follows:

- Koriobo – estimated population 545
- Chinese landing – est. population 37
- Kokerite – est. pop 276
- Kurutuku – est. pop 200
- Baramita – est. pop 1,308
- Arakaka/Matthews Ridge Settlement – est. pop. 3,163

As described in the earlier sections, none of the villages or settlement located in or near Compartment 4 and 5. There are three Amerindian communities located outside Compt. 5 to the east in the Pomeroon River (Karawab, St Monica and Kakaburi). Small scattered communities of individual agrarian families live along the west bank of the Essequibo River near Barama's main camp at Buckhall. The TSA map No. 1 (at 1:500,000 scale) shows the location of these communities.

There are no known special sites within the concession area, particularly in Compartment 4 and 5.

No evidence of involvement of stakeholders during the formulation of company policy apart from government authority (i.e. GFC).

Working plans are available that identify the topographical elements as well as rivers and road alignment.

The contactors working on site were able to identify elements marked/depicted on the plan.

Criterion 3.4 Compensation of indigenous peoples for the application of their traditional knowledge

No evidence of use of traditional knowledge for forest operation. Locals were hired by BCL in forest operations and are paid wages subjected to the terms stipulated in the employment agreement with the company.

The representatives of TAAMOG and National Amerindian Democratic Foundation (NADF), attended consultations on 2005-02-28, held at Barima Room, Le Meridien Pegasus. As forest certification is a new issue in Guyana, the following recommendation was made by Amerindian group representatives as part of ways to enhance relationship with the communities:

- that organisations must be provided with the information gathered from community consultations
- there is need for a Liaison Office within BCL
- there is need to develop MOUs with communities re. contracts, employment etc.,
- that the current mapping system must be simplified and maps made available to communities for their awareness on the location of their land with regards to the concession.

PRINCIPLE 4: Community relations and workers rights

Criterion 4.1 Employment, training, and other services for local communities

There is currently no active Trade/Labour Union at the Buckhall location, but there is a worker's union for BCL employee at the factory. People from adjacent communities re given employment opportunities in the respective areas identified, however, some have found it difficult to be away from home for long periods and prefer to return home daily since they have young families resulting in some of these employees eventually leave the job..

Barama does employ some contractors and there is a documented system for doing this. Local Guyanese contractors are employed (e.g., mensuration crew met during the visit). The audit team viewed the contracts for the mensuration (inventory & survey) team and confirmed that the document has been signed by both parties.

On the job training is provided by Malaysian counterparts for local worker's etc. in aspects they are not familiar with e.g. machinery operation, mechanical repairs and maintenance. Additionally, records show that three bursaries (valued at \$30,000 to 40,000) have been awarded by BCL to students from local communities who have performed well at the last Secondary School Entrance Exams. This award program will continue to assist to BCL workers and others in the local communities in defraying school expenses.

It was observed that tree felling team comprise of an experience tree feller from Malaysia with a local assistance being trained by the leader. The local will take over as he gained more experience, skills and confidence.

All communities visited during the main assessment acknowledged the support of BCL in providing medical assistance and other support when required. Also in areas of schooling (e.g. donations of sports items to several communities and \$40,000 to help with the construction of a sanatorium at St. Monica's school and hardwood for catwalk at Caria Caria school) and pure water supply amenities (supply of water tanks to mitigate pollution problems).

As described, there were no settlements within or near, Compt. 4 and 5. The access road built and maintained by Barama (from Buckhall to the Concession boundary) is used by local communities as well as contractors working for other concession.

Interviews with the workers showed that appropriate salaries/wages were paid and there was no evidence of significant disputes.

There were no adolescents observed working at any of the Barama operations.

Criterion 4.2 Compliance with health and safety regulations

A thorough and practical H&S policy and manual is in place. These guidelines/ regulations are readily available in the Barama head office and at the Buck Hall logging camp. A Joint Workplace Occupational Health and Safety Committee has also been established at Anawa/Buckhall.

Barama has a comprehensive SOP (Standard operating procedures) for high risk forest tasks that covers the use of PPE and emergency procedures. A number of workers were observed not using any form of PPE. A log bucker at Buckhall camp was observed bucking logs with only normal footwear and no other safety equipment. However, workers operating in the forest (tree fellers, skidding team etc) were observed to be using adequate PPE such as shoes, hard helmets, ear protector, gloves etc.

There was a lack of documented Hazard Identification available. Also observed was the lack of communication equipment to ensure the objectives of the health and safety policy are met (**Minor CAR-005**). At the felling place there was no means to communicate directly with base camp in an emergency.

Evidence showed that most of the Barama staff have been trained in various aspects of the job and training records were available. However, it was difficult to check the entire records as they were not centralised. The training is ongoing and carried out together with the Guyana Forestry commission.

Training schedules and records were viewed at Buck Hall log camp. Similarly, copies of skills certificates were also viewed at Buck Hall log camp.

It was described in the FMP that the company will continue on-the job training for local Guyanese. Currently, more than 70 % of the supervisory staff in the manufacturing divisions are now Guyanese. 24 supervisory and skilled operators have been trained in RIL under a 6 week practical training carried out in July – August 2003 conducted by the Forestry Training Centre (FTC) in collaboration with GFC and URS. At least three members of the BCL staff are certified for RIL under the GFC.

In mid September 2004, 11 forest surveyors were trained on skid trail and log market (temporary log yard) planning and alignment and 8 tree fellers with their accompanying team members were trained in directional felling.

Barama staffs that were interviewed, understood the ILO requirements and were compliant. Machines and equipment were in good working order through out the Barama concession.

However, as described earlier, at the felling site there was no means to communicate directly with base camp in an emergency (**Minor CAR-005**).

Barama management had a commitment to ensure PPE was being used. Some workers were observed without their protective gear at the workshop, which indicate a need for better enforcement of company procedures.

A policy is available that regulates the recording and investigation of accidents at the work place. Accident records showed no evidence that investigations have been carried out for the two main incidents at Barama in the last 12 months (**Minor CAR-005**).

A full time medic and clinic is located at the major Log pond at Buck Hall. This clinic has an inventory of sound basic medical supplies and has some basic preventative medicine for control of Malaria and such diseases.

The medical personnel on site (Medex) indicated that there are adequate medical facilities to deal with routine accidents and illnesses. However, serious cases are referred to the Woodlands Hospital or the Medical Arts Centre. Good mess facilities and fresh food and vegetables were available to all staff at the 2 log camps visited. Malaria, diarrhoea and water borne diseases are constant threats to workers and their families. Of 44 smears taken at Buckhall between January and March 01-03-05 there were 13 positive cases of malaria. The Caricad Report includes a comparison of BCL wages and salary structure rates with their competitors, and indicates that BCL can do more to improve their competitiveness for human resources.

Criterion 4.3 Workers' rights to organise and negotiate with employers

While this indicator is accepted by BCL there is currently no Labour Union representation at the Anawa/Buckhall location. The Guyana Labour Union (GLU), which operates at Land of Canaan location, has shown interest in providing representation for the Anawa/Buckhall location. At the time of assessment, there were no records of meetings, etc that allowed evaluation of the effectiveness of the company's open door policy for employment.

Criterion 4.4 Social impact evaluations and consultation

While the Caricad Report (op cit) provides some pertinent information with regard to this indicator there was no specific SIA has been carried out for the area currently operating, since it was not required for BCL (See section 1.4). Additionally, results of the evaluations of social impact were inadequate and not incorporated in the planning documents.

As described in various sections of this report, Environmental and Social Impact Assessment for the whole concession was carried out in 1993 by ECTF. While the report adequately described the environmental and social status of the concession then and described the potential impacts with recommendations for mitigation measures to be in place, the data is considered outdated and mainly focused in Region 1 (Compartment 1, 2 & 3).

Current harvesting operation is concentrated in Compartment 5, where no detailed description on the social scenario of the compartment is available. A social impact assessment of the current operation is required and need to be incorporated into the FMP (**Major CAR-004**). In the absence of an SIA, adequacy on the compliance to this indicator couldn't be adequately verified. Stakeholders' lists at the international and national level are available.

A Joint Community Relations Committee was launched on February 20. The meeting was attended by the representatives from BCL, community leaders from Alik, Akarakuru, Bethany, Western Great Troolie Island, Western Hogg Island and Caria Caria. Notable absentees were representatives from St. Monica/Karawab; Kabakaburi, and the Social Impact Amelioration Program (SIMAP) officer at Charity.

On 7th February, a public forum was held by BCL attended by about 50 persons from various backgrounds. The forum was aimed at providing updated information on Barama's operation, the company's effort to achieve FSC certification as well as its future planning to the stakeholders. BCL kept records of the attendees and issues discussed at the forum.

The main assessment team has met with a number of representatives of local NGOs including the Amerindian groups during the assessment. The team also conduct interviews with local communities living in Kabakaburi, Caria Caria etc. The Minutes of the meeting was made available and issues raised were adequately addressed as borne out in audit consultations.

In summary, the issues highlighted by the member of NGOs during the discussions could be categorised as follows:

- dispute resolution process
- chain of custody issue

- justification for the concessions rights given to Barama
- opportunities for locals in employment and sub contract work
- down stream value added activities
- relation with indigenous group
- external ownership of the company
- implementation of RIL
- compensation to ex worker
- harvesting of NTFPs

The Amerindian group present has raised positive comments on Barama operations claiming it has brought development to Port Kaituma providing social amenities and employment. Barama started operating in Region 1 in 1993 where the company developed basic infrastructures and provide economic rejuvenation into the area. The company purchases products from locals and appointed a local liaison officer who helps in understanding as well as resolve any local conflicts.

There was an issue of relocation and compensation for the people involved however it was done through the Regional Democratic Council (RDC) comprising local leaders. The decision on the location and type of compensations to the affected communities was made by the RDC and BCL facilitated the implementation.

After the Company left, Port Kaituma slowly degrade to the situation prior to Barama (before 1993) due to the mining operation which does not contribute to the community. The infrastructure was left to be maintained by local council (RDC).

It is company policy to continue to contribute towards national development by providing job opportunities and technological know-how in the industry to the local people. Currently BCL provides employment to 1,200 Guyanese (300 in forest operation and 900 at the plywood factory), and this will increase further with a plan for operating a sawmill with at least 6 band saws in Buckhall.

Notes on close-out of Major CAR-004

See description under Criterion 3.2.

Criterion 4.5 Resolution of grievances and settlement of compensation claims

It was described in the FMP that a Joint Community Relations Committee will be established as part of resolving dispute between the company and local communities. The joint committee is consist of the following:

- 2 members appointed by the Company
- 1 member nominated by the local council
- 1 member nominated by the Ministry of Amerindian Affairs
- 3 to 5 members from each of the affected communities nominated by the communities concern, with one female.

It was observed during the main evaluation that the draft procedure for communication and dispute resolution was not finalised. The joint community relation is in place however the current draft procedure for communication and conflict resolution is inadequate and does not reflect the actual system being developed (**Minor CAR-003**).

The procedure should include stakeholder consultation as through the Joint Community Relations Committee.

There are records to show that water tanks were provided by BCL to communities on the Pomeroon river following a complaint about water discoloration.

PRINCIPLE 5: Benefits from the forest

Criterion 5.1 Economic viability taking full environmental, social, and operational costs into account

Selective logging silviculture with Reduced Impact Logging is being practiced and ground and air observations indicate that the damage to the residual stand is well within reasonable limits. Planning and record keeping at the block level is impressive and appropriate technology is in used.

There was no specific reference in a budget for future environmental or social costs, not in the FMP or any other documents. The management does not have provision for accounting the cost for environmental and social programmes within the current FMU management planning (**Minor CAR-006**)

The company is putting forward investment to develop wood processing facilities at Buckhall.

In Compt. 5, a total of 224.6 km of roads have been constructed up to September 2004. During the same period, 34 bridges and 88 culverts have been put in place to facilitate crossing over streams.

Criterion 5.2 Optimal use and local processing of forest products

BCL has an effective marketing strategy that does include promotion on utilisation of many species traditionally classed as "lesser-known". At a public forum, BCL disclosed that of its average monthly log production of 13,000m³, approximately 27% goes for local or export sale in the raw form. Of the remainder, approximately 63% is processed in to plywood and 10% into sawn lumber for the local and exports markets.

The company also utilises non-traditional tree species in an under-developed, remote and depressed region of Guyana. The logs are processed into plywood, a high value added commodity for sales in the export market of the Caribbean, Latin America, USA and EU. Barama currently accounts for approximately 55 % of the total value of forest products exported from Guyana annually.

As described earlier, the company is now developing a sawmill (with 2 break-down saw 4 band-saws) and a veneer mill (with 2 production lines) at Buckhall. The saw mill is estimated to consume about 4,000 m3 of logs per month while the veneer is about 5,000 m3 per month. The company is also planning to set up kiln drying (KD) facilities and moulding plants within Buckhall industrial area. As part of the overall long term regional development plan, a new township will be established not far from the current camp site to house the workers as well as amenities for the local community.

Criterion 5.3 Waste minimisation and avoidance of damage to forest resources

Harvest planning and logging practice carried out following the GFC guidelines observed on the ground provide evidence of good felling technique to minimise waste and breakage. Inventories of harvestable trees carried out prior to harvest, are used to assess log quality. Logs are removed from the site and log markets (temporary log yard) as fast as logistics and weather conditions allow. There was no evidence of log wastages on the ground. Hollow logs felled are utilised for making culverts etc.

Operators were interviewed and seen during the extraction process and techniques were of a high standard in directional extraction. As described above, the pre-felling inventory (tree identification and marking) determined the quality of each tree to be felled. Poor quality trees will be spared from harvest, as evident in block 8AE and 18A1 where some trees above diameter cutting limit were not marked for felling due to its trunk quality (hollow, crooked etc).

Observation of operations showed that the extraction staff understood and were carrying out sound waste minimisation methods. Tree tops and branches were left to rot on-site.

Stock rotation at Barama is by way of a surge yard at the half way mark of the concession and the Buckhall log pond. This allows reliable and consistent log uplift and no log deterioration was observed in the forest area.

Log delivery documentation was viewed and found to be accurate. Each log carries two numbers: one is the Barama internal green card #, the other being GFC TP #.

Criterion 5.4 Forest management and the local economy

Over the past decade, the contribution of the forestry sector to Guyana's GDP remained lower than that of the Mining and Agriculture sectors, with an average of about 4 %.

BCL' mission described in the FMP is 'to be the largest and most efficient producer of high quality plywood and other wood based products in the region and contribute significantly to the economical and social development of Guyana'. As described under Criteria 5.2, Barama currently accounts for approximately 55 % of the total value of forest products exported from Guyana annually. BCL produced logs for plywood and sawtimber production as well as for log export. Plywood produced are for local and export sales. The company sawmilling operation produces dressed lumber, rough sawtimber as well as sawtimber for internal use and decking.

BCL currently is employing about 1,100 people in the factory, forest operation and administration. With the plan for establishing sawmill and veneer mill in Buckhall, number of employment will be increased. Expansion of Buckhall will contribute significantly to the local economy.

The company is not harvesting NTFPs as the license is only for timber harvesting. The ECTF report provides description on NTFPs normally harvested in Guyana but the similar information was not incorporated into the FMP for Compartment 5.

Based on secondary information, currently the most commercially important NTFPs in Guyana are Kufa (*Clusia spp.*), Nibbi (*Heteropis flexouosa*), Tibisiri (*Mauritia flexouosa*), manicle palm (*Euterpe spp.*), crabwood oil (*Carapa guianensis*), and balata (rubber from bulletwood tree *Manilkara bidentata*).

Criterion 5.5 Maintenance of the value of forest services and resources

The 5 year FMP for operation in Compartment 5 clearly identifies the biodiversity reserves, buffer zones and watershed for protection. There was no evaluation on the NTFPs has been carried out and no mention of the resource in the FMP document.

Reduced Impact Logging currently being practiced (following the GFC CoP) provides protection to the environment. Buffer zones and steep slopes are protected from harvesting. Measures are in place to minimise erosion and damage to residual stands.

Criterion 5.6 Harvest levels

The AAC was calculated according to the principles laid out by the GFC, although in a rather convoluted manner. The actual AAC was based on increment figures from a GFC growth and yield model (GEMFORM) which utilizes data from other forests in Guyana to predict the effects of various harvest levels. The resulting AAC is slightly lower than that allowed by GFC generic figures. Actual current harvest levels fall well below the theoretical sustainable cut.

In collaboration with ECTF, 37 PSPs were established in Region 1 (Compt. 1, 2 & 3) for collecting information on stand volume and growth, yield and defect data. The analysis of the data obtained was carried out in cooperation with Tropenbos-Guyana Programme with the primary aim to compare growth of the most common species and to analyse the response to canopy opening. The study conclude the following:

- average diameter increment of Baromalli was 3.6 mm/yr.
- kauta and black kakaralli have the slowest growth of less than 2.5 mm dbh/yr
- Waiki, kurokai, haiariballi and trysil grow fastest at more than 4 mm dbh/yr.

Estimated annual increment for Guyana forest is 0.33 m³/ha/yr. PSPs are currently being laid out in the FMU and it is recommended that once more detailed information on stand increment is available it should be formally linked back to the models and compared with actual growth and yield.

The method for calculating AAC as described by GFC in the CoP is based on the following:

- Estimated mean annual increment of 0.33 m³/ha/yr
- Recommended 60 yr cycle (though for certain forest types if growth data exist this may be altered)
- Sustainable yield (therefore) of 20m³/ha

The AAC calculation is a simple volume method whereby net operable area (NOA) in a concession is multiplied by 20m³ and divided by the cycle.

Barama's total net operable area (NOA) over the whole concession, derived from figures in the FMP as: 1,247,129 ha

By the GFC method, total allowable volume would be 24,942,580 m³ and the AAC (based on 60 year rotation) would be 415,709 m³/yr.

However, the calculation given in the FMP is a little different for the following reasons:

1. Based on available data, a cycle of 40 years has been used (and accepted by GFC)
2. PSP data has been used in a growth model to calculate a more locally appropriate annual volume increment (roughly 17 m³/ha/60 yr)
3. Barama is already 11 years into the cycle

The AAC was calculated on a net area (minus the area already worked) of 1,048,972 ha and the estimated increment of 17.35 m³/yr to give a total allowable volume of 18,200,546. The actual production was subtracted from this (there was no need to do this if the allowable volume had been calculated on a net remaining area figure - but the effect is to reduce the AAC, not increase it) and the AAC calculated on the remaining 29 years to give 576,754 m³/yr. This is less than the AAC based on the GFC increment and the agreed 40 year cycle for the whole concession which would be 623,564 m³/yr.

The above method used was based on the recommended procedure and the final AAC is well within the acceptable limit. The actual current harvest rates of average 8.5m³/yr giving an actual annual production of 307,454 m³ - clearly within the allowable range.

Net annual operable area (average) for the next 29 years is 36,171 ha. As such, projected annual production at an average of 8.5 m³/ha based on 35 – 45 species is 307,454 m³.

Based on cutting intensity of 8.4 m³/ha, projected annual felling areas and annual allowable cut volume for

Compt. 5 is estimated as follows:

Year	Gross area	Net area	Volume (m3)
2004	30,423 ha	26,509 ha	222,672 m3
2005	52,104	42,674	358,457
2006	46,331	40,914	343,678
2007	43,091	38,221	321,058
2008	38,894	34,343	288,482
TOTAL	210,843	182,660	1,534,347

During planning, 100 % of the harvestable trees (trees to be harvested) will be identified and marked on the ground. The location of the trees is also mapped in the CHP. Each tree is identified with the BCL green card and GFC card. Sample measurement made on the ground shows that all trees marked for felling are above 50 cm dbh. Only good quality trees of the commercial species were marked.

It was observed that trees were also being removed for road construction and bridge construction with no clear procedure for recording the removal of these products. It was stated in the field that these species were non-commercial, but were not recorded anywhere (**Observation 01**).

PRINCIPLE 6: Environmental impact

Criterion 6.1 Environmental impacts evaluation

Though potential environmental impacts are addressed in a general way in the 5 year forest management plan for compartment 5 (2004 -2008)., and for specific activities in the EIAs and EMPs listed under Criterion 1.1, there is an absence of specific baseline data, list of reference to ERT species, assessment of impacts, mitigation measures and monitoring system for safeguarding environmental and social impacts of all activities associated with the logging operation (**Major CAR-004**).

As described elsewhere in this report, Environmental and Social Impact Assessment report was prepared for the whole concession in 1993 by the ECTF. The report, though contain appropriate data and provide recommendations on mitigation measures to be taken, the information tabulated may be outdated and does not focus on the current area of operation (Compartment 5).

Site specific assessment (ESIA) with regard to the Buckhall establishment and its operation was done. EIA for the construction of road from Buckhall to the concession area was also prepared.

The above mentioned EIA reports described the existing environment of the area prior to the project as well as anticipate the impacts on the environment and communities living in and around the area. The report also proposed measures to be taken to mitigate the impacts.

No specific EIA has been carried out for the current forest operation (Compt. 5). Chapter 12 of the 5 year FMP does include a section on environmental measures, however it is inadequate to address the required elements listed above.

While potential impacts were identified in the ECTF report, Caricad Report and Buckhall ESIA report the evaluations were inadequate to form plans.

The Environmental Conservation Measures section in the FMP does not describe the potential impacts of the forestry operation on the environment even though some mitigation (for example for erosion control) was incorporated into the procedures.

Notes on close-out of Major CAR-004

See description under Criterion 3.2.

During the visit to close-out CARs, it was observed that there was a lot of earthwork occurring along the main logging road (M2) where burrow pits were constructed as a source for materials for road surface. Similarly, it was observed that within Compartment 5 log markets (temporary log yard) were poorly sited along feeder roads. This has resulted in soil erosion that eventually flows into streams. There was no evidence of site specific assessments of potential environmental impacts were carried out prior to the commencement of certain site-disturbing operations (**Minor CAR-014**).

Criterion 6.2 Protection of rare, threatened and endangered species

RTE species have not been properly addressed in the FMP or specifically for the FMU in any other document made available. Also, landscape-level considerations are not readily evident (e.g. marked on maps) (**Major CAR-004**)

During the clearance of findings visit, it was noted that Barama Company Limited (BCL) hired three consultants (with environmental, economic and social expertise) to carryout an environmental and social impact analysis of the operation in Compartment 5. A report dated June 2005 detailing the socioeconomic and environmental profile of the area was produced. This report also tabulates potential impacts and measures/action recommended to be taken to mitigate the anticipated impact.

The findings of this study have been incorporated into a revised 5-Year Forest Management Plan (FMP) for Compartment 5. **Major CAR 04 was closed** based on the basis of this study, the revised FMP which provided more focus on environmental and social elements as well as the verification achieved through community consultation. In future surveillance visits, the implementation of recommended mitigatory measures must be monitored.

In accordance with national guidelines, 4.5% of the total FMU area has been identified as permanent biodiversity reserves and clearly marked on maps. In Compartment 4, a total of 24,374 ha have been earmarked as biodiversity reserve while in Compt. 5, 1,071 ha has been set aside for the same purpose. In addition to these reserves, other areas are set aside such as catchment reserves, waterway buffer zones and high terrain protection areas.

Based on the recent GIS mapping carried out during planning, 2.4% of the 210,843 Compt. 5 is non operable (excluding 1,045 ha of water bodies). 1,071 ha (0.5 %) is set aside as biodiversity area, 20,296 ha (or 10%) is buffer zone while 745 ha (0.4%) has been logged over. For Compt. 4, apart from the biodiversity reserve (24,374 ha) a total of 1,521 ha of the area is non productive forest (excluding 2,087 ha of water bodies).

Barama works closely with GFC and other regulatory authorities during planning of the operation. ECTF has assisted in setting up PSPs in Region 1 and carrying out research activities. The company also works closely with NGOs such as WWF. Protected trees or mature commercial trees with prohibition constraints are not marked for felling but their number, species, diameter class are recorded.

There are no known internationally listed endangered or rare tree species in Guyana. Greenheart (*Chlorocardium rodiei*) is a potential CITES Appendix II listing. Some endemic species include greenheart, wamara (*Swartzia leiocalycina*), sarabeballi (*Vouacapoua macropetala*), sand baromalli (*Calostemma fragrans*), ituri wallaba (*Eperua grandiflora*) and *Mora* spp.

There are also 29 mammals species in Guyana listed as endangered under CITES Appendix 1 and II where a significant number does occur in BCL concession, including the jaguar.

As described earlier BCL has clear policies that prohibit illegal trapping, hunting or gathering in the FMU. Trapping, hunting and killing / capturing wildlife is prohibited in BCL operation area. A number of tree species are identified for protection following the GFC CoP. Protective measures for RTE species are described in the BCL standard operation procedures.

It was however observed that even though trees are identified for retention, they are not adequately marked either on the block maps or on the ground. The planning process assumed that all trees not marked for felling are supposed to be spared from felling.

Observed during the assessment that buffer zones are mapped at the logging block level and marked on the ground for protection during harvesting operation. No intrusion of buffer zone was observed where no marking of trees for harvest in such an area.

Criterion 6.3 Maintenance of ecological functions and values

The low intensity of logging operations practiced by BCL ensures that ecological functions and values, including regeneration, remain largely intact. Based on previous studies, average regeneration rate of individual species and average for all species are known and used for estimates on sustainability as described elsewhere in this report.

In cooperation with GFC, 20 PSPs will be established in Compartment 5. Four PSPs have been set-up to date, and the remaining 16 will be set up soon. The purpose of the PSPs are to estimate the following:

- standing volume of all trees and commercial trees in the area prior to harvest,
- logging damage due to harvesting operation,
- residual stands immediately after harvest,
- measure growth of the residual trees in the long term.

No silviculture treatment is being practiced by BCL after harvesting. The forest is left to regenerate naturally. The GFC Code of Practice require the following:

- Blocks closure – blocks should be closed once logging has been completed and allowed to enter only during the next cycle.
- Road surface should be maintained in good condition. Log culverts to be removed to prevent clogging.
- Restore waterflow to its original watercourse.
- Remove all waste particularly non-biodegradable area.

BCL Procedure (FSC-9) describes requirements for post-harvest controls and these include activities for restoration of damaged areas. As described earlier, no silviculture treatment will be carried out in BCL area.

During the close-out major CAR visit, the audit team observed that the burrow pits and log market remains exposed for very long time. There was also no evidence of rehabilitation of skid trails (above 20 % slope) to minimise erosion. Overall, there was inadequate programme and implementation of procedures for restoration of degraded sites within the current management system practiced by BCL (**Minor CAR-015**).

Criterion 6.4 Protection of representative samples of existing ecosystems

As described under criterion 6.2, 4.5 % of the concession area are set aside as biodiversity area. In Compt. 4, 24,261 ha has been set aside as biodiversity area while in Compt. 5, 1,071 ha has been earmarked for the same purpose. There are also non-productive areas in the form of waterlogged, steep slopes etc that will not be harvested and will be left on its own.

Comprehensive harvest planning at logging block level further identifies and zoned areas into productive and non-productive. Areas along stream and permanent water flows will be set aside as buffer zone, similar with those areas on steep slope, that will not be felled. Based on the fact that only two or three trees will be felled per hectare and only 7.2 m of roads and skid trails to be constructed (or 2.6% of the area), leaving more than 90 % of the area left untouched and will remain under natural condition.

Criterion 6.5 Protection against damage to soils, residual forest and water resources during operations

Standard Operating Procedures do exist for, among others, environmentally sensitive operations. These meet or exceed the national CoP. In order to be more effective these may be made more “user-friendly” for example by incorporating more diagrams and case-study examples.

The planning and execution of logging operations at the block level, based on RIL procedures, was found to be impressive, accurate and effective.

There was evidence of adherence to the procedures in logging operations and in most aspects of road building. However, the management of surface drainage and erosion control was generally poor on existing roads, bridges and the in-transit log pond at 70km. Specific measures were inadequate to dissipate water energy and manage movement of silt, particularly around bridges where siltation and blockages, resulting in ponding and tree mortality. There were also inadequate measures such as cross-drains, effluent channels and silt traps. Lack of planning and implementation of regular maintenance was also evident.

Buffer zones along water courses were marked on maps and on the ground. Storage sites of fuel and oil on-site were not adequately bunded and lack of written procedure for dealing with accidental spillages.

There was an extreme lack of erosion control planning and implementation comprising all road construction and subsequent maintenance. Guidelines and methodologies for the protection of water courses from silt run off are not sufficient (**Major CAR-007**). The assessment team observed direct discharge of surface runoff into streams without silt traps (observed within Compt. 5 especially at water crossing - bridge / culverts). Evidence of water ponding as well as complaints of muddy water downstream by stakeholders.

Inadequate procedures (SOP Document 5, section 4.1) and lack of implementation of mitigation measures to prevent siltation flowing into the natural water courses during and after road construction. Direct discharge of surface runoffs into stream without silt trap observed within Compt. 5. Evidence of water ponding as well as complaints of muddy water downstream by stakeholders (**Major CAR 007**).

Buffer zones are identified on the ground and marked on the map. Field checks shows that the buffer zone is well marked in the field. No evidence of violation. No evidence of spillage.

However, the audit team observed lack of bunding for skid tanks to contain possible fuel spillage at various locations throughout the forest operation and inadequate handling of empty containers. Incorrect fuel containers for transporting fuel (**Minor CAR-008**). Empty containers lying around and skid tanks were not properly bunded to contain spillage, tree fellers using Coke bottles for transporting fuels.

Notes on close-out of Major CAR-007

Barama Company Limited has revised the Standard Operating Practice (SOP) Document 5, pertaining to the road survey, construction and maintenance to include the following elements:

- ❑ The provision of roadside drains and turn-outs on all roads on gradients of more than 4 %. It is documented that turn-outs shall not be more than 50 m intervals for gradients less than 8 %, and 30m for gradients more than 8%. In addition, it specifies that if it is not possible to construct a turn-out on the uphill side of the road, a cross culvert should be constructed to divert drain water to the other side of the road where a turn-out exists.
- ❑ Side drains and turn-outs near a creek, stream or river shall end at least 50 m away from the water course with a suitable silt trap of 1 m deep and 1 m wide not less than 2m length.

The procedure is also well illustrated with clear graphic road specifications including a diagram on a typical road approach to a stream/river crossing. It also includes a description of the monitoring and maintenance requirements of these silt traps.

In addition, a new procedure, SOP/Doc.3A entitled "*Detailed Block Harvesting Plan*" was also formulated describing procedures for identifying and marking of buffer zones, log markets, skid trails etc and measures to be taken to minimize environmental impacts.

During the field visit, it was observed that silt traps were constructed at many location along the main (M1 and M2) and feeder roads outside as well as inside Compartment 5. It was confirmed with main assessment team members that roadside drainage had much improved, with numerous side drains and turn-outs to channel surface runoffs onto the forest floor and not directly into the stream. Roads were well cambered and compacted. Numerous silt traps were constructed along the road verges, according to the above specifications. Some of these traps were evidently effective, but some were sited inappropriately too close to perennial watercourses, with the loose excavated material piled adjacent to the trap, hence serving as a source of sediment. Silt trap maintenance was evident, and bridges and culverts were also maintained to prevent clogging and damming of the area.

Major CAR 07 was closed on the basis of the following:

- a) The immense progress with road maintenance and drainage that was clearly evident through site inspection, and the number of silt traps that had been constructed,
- b) The improved procedures to assist with the setting of basic standards and minimum requirements, and
- c) The fact that the new roads will be constructed according to the new procedures, and will be vastly superior to the old roads. This has already apparently already been initiated, but was not verified in field.

The remaining problems evident along the roads are as follows:

- a) The construction of numerous borrow pits and log markets along the sides of the roads. These borrow pits and log markets were constructed without site specific assessments of the environmental impacts, and the result was that some sites were situated on steep slopes and this lead to erosion. Minor CAR 14 was raised in this respect.
- b) The lack of a programme for the restoration of such sites mentioned above. This includes management and monitoring of such sites. Minor CAR 15 was raised in this respect.
- c) Buffer zone encroachment at water crossings. Evidence of this was primarily machinery operating close to stream banks, resulting in riparian zone disturbance and sedimentation of the water course. Minor CAR 16 was raised in this respect.

The assessment team stressed the importance of dealing with the protection of the water resource holistically in terms of issues greater than road drainage alone, and recommended 6-monthly surveillances with specific attention to the above issues until the company's internal monitoring and training was strong enough to deal with prevention and/or mitigation of the above issues.

Criterion 6.6 Chemical pest management

Pesticides are not routinely used in the FMU. The management plan states that in the case of high volume of log stock at the log-pond Basiment 500 and Dragnet may be used to prevent attack by wood-boring insects. These chemicals are used for timber preservation only.

Spraying against mosquito infestation and subsequent risk of malaria is done on a bi-annual basis, though details on chemicals or spraying practice used was not observed. The management plan states that in and around camps, measures are taken, such as removal of containers that could create standing water breeding sites, to reduce the amount of mosquitoes.

Waste oil and fuel are classified as hazardous chemicals. Waste oil is re-used for chainsaw. Unusable and excess waste oil will be collected and stored in drum. There are no facilities for recycling or disposal of waste oil at present.

As described above, Basiment 500 and Dragnet are used only during high volume of log stock in log pond. Apart from that there is no other chemical used during the operation.

Future use of other chemical will be subjected to GFC and EPA guidelines.

Criterion 6.7 Use and disposal of chemicals, containers, liquid and solid non-organic wastes

There were no correct containers for transporting fuels and oils around the Barama concession by hand. Larger sledge tanks in the forest for machines are not contained within a bunded area that are on site for some time, and the large 10,000 gallon diesel tank at the mid way yard was leaking and had the ability to enter a water course because of the lack of a bunded area. Inadequate bunding for skid tanks to contain possible fuel spillage at various locations throughout the forest operation and inadequate handling of empty containers. Incorrect fuel containers for transporting fuel (**minor CAR-008**).

According to the management plan, waste oil is reused where possible on chainsaws. Excess waste oil is stored pending approved disposal methods by the EPA. Garbage is collected in pits and regularly burnt or buried.

Observed lack of bunding for skid tanks to contain possible fuel spillage at various locations throughout the forest operation and inadequate handling of empty containers. Also observed use of improper containers for transporting fuel (for example, a tree feller use Coke bottle for transferring fuel) which could results in misidentification and misuses. Empty containers lying around and skid tanks were not properly bunded to contain spillage. (**Minor CAR-008**).

Good waste collection facilities were observed at the Buck Hall camp.

Criterion 6.8 Use of biological control agents and genetically modified organisms

Not applicable

Criterion 6.9 The use of exotic species

Not applicable

Criterion 6.10 Forest conversion to plantations or non-forest land uses

There is no plan for conversion to plantation in the entire BCL concession.

PRINCIPLE 7: Management plan

Criterion 7.1 Management plan requirements

Currently, a 5-yr management plan and an annual operations plan are available for Compartment 5. Planning documents for Compartment 4 will be prepared for submission GFC approval prior to harvesting operation which is envisaged to take place beginning 2009.

Both current plans for Compt. 5 have been approved by the GFC according to their regulations and guidelines. The plans are generally comprehensive and relevant, and accompanied by appropriate maps, though as has been indicated elsewhere (Principles 6, 8 and 9) environmental (and social) assessments and impacts, monitoring and high conservation forests are inadequately covered (**Major CAR-004**).

The management objective are described as follows:

- To adopt sustainable forest management practices and to ensure economic, social, environmental, ecological and scientific benefits to Guyana.
- Be responsible corporate citizen by complying to all laws and regulations of the country, international treaties and conventions
- To adhere to sound and ethical management, business and industrial practices while promoting the forest industry in Guyana
- To honour and respect the integrity of the Amerindian land and to allow indigenous people to pursue their traditional lifestyle and benefit from the company's operation for their social and economic wellbeing.
- Sensitive and responsive to the rights and needs of nearby communities and other stakeholders through consultation, dialogue and fair dispute resolution
- Employ qualified Guyanese and train them for job at all levels as well as ensure the safety, health and welfare of the workers.

The FMP adequately described the status of the concession area in terms of physical, biological of the ecosystem but does not include evaluation and identification of HCV of the forest (**Major CAR-013**).

The FMP described the BCL as a business entity and the ownership status of the concession area, through TSA. The basic strategy of BCL is to operate the concession on sustained yield basis using selective logging system by extracting a few commercial trees above 50 cm dbh in each hectare (the GFC CoP diameter limit is 35 cm dbh). Currently the company is harvesting about 2 trees/ha or 8.5 m³/ha leaving sufficient residual trees for regeneration (The GFC CoP limits average logging density to 10 trees/ha).

Based on the result of Management Level Inventory for Compartment 5, the cutting cycle of 40 years has been set with approval from GFC.

Detail calculation of sustainability is as tabulated under checklist 5.6.2.

Harvest of the concession began in 1993 based in Port Kaituma prior to moving to Buckhall. Harvesting sequence schedule for the next 29 years detailed in the FMP are as follows:

Year	Compt. #	Compt. Area	Net area	Annual cut (ha/yr)
2004-2008	Compt. 5	210,843	182,660	36,532 ha
2009-2017	Compt. 4	378,596	314,546	34,950
2018-2022	Compt. 6	218,806	195,066	36,870
2023-2027	Compt. 7	221,612	195,066	39,013
2028-2032	Compt. 1,2,3	581,338	172,350	34,470

When BCL was operating in Region 1, permanent sample plots (PSP) were established in cooperation with ECTF as part of an effort to measure growth. The results of the analysis have been used to revise the cutting cycle from 60 to 40 year rotation.

As part of its contribution to the GFC national PSP programme and the company's own effort to measure damage and re-growth of the forest, in the current area (Compt. 5), BCL is planning to set up 20 PSPs. As at the time of main assessment, 4 PSPs have been established to date.

Comprehensive harvest plan (CHP) is prepared for each 100 ha block on a 1:5000 scale map. All trees to be harvested, rivers system, road alignment, buffer zones and areas not productive for operation are identified. The CHP is the main planning document at the logging block level to guide felling and extraction of logs from the area. It also contain harvestable tree list.

In 2005, 616 blocks are scheduled to be harvested. 148 blocks carry-over from the areas allocated for harvest in 2004, with a net area of 13,050 ha and estimated production of 109,620 m³. The remaining 468 blocks are those allocated under year 2005 with total net area of 42,674 ha and estimated production of 358,457 m³.

The annual plan also contains estimates on production by each species. From all the 616 blocks to be harvested in 2005, it was estimated that 55.4 % of the production are for plywood while the remaining are for mixed hardwood (MHW) which will be utilised by the sawmill or export direct to buyers.

Observed during the main assessment that trees to be protected were not identified on the pre-harvest map or the ground. The skidding team has the ability to make decision to cut commercial trees above cutting limit not tagged with green tag. The trees felled may actually have been intended to be retained by the enumeration team of the logging block. (**Minor CAR-009**).

The identification of trees for protection and communicating it the harvesting team is important since the audit team observed that the harvesting team could make a decision to cut an untagged commercial tree they saw in the field if the tree is good. Such a tree may be not tagged by the inventory team for protection purposes.

Trees were also observed to be felled (normally non-commercial trees) for building bridges etc. These trees were not predetermined and the felling of such trees were not recorded (**Minor CAR-010**).

Records of such felling are important to know exactly how many trees have been felled in an area for calculation of sustainability. Volume to be replenishes within the cycle period should be equal or more than the volume removed.

Criterion 7.2 Management plan revision

The management plan is revised every 5-yrs according to GFC regulations, and the Manager (Forest Planning) has been identified as having overall responsibility for the plan. No previous management plan existed for the FMU so it was not possible to judge the level of incorporation of monitoring or scientific developments. This

needs to be done explicitly with further revisions of the plan.

The annual plan, according to GFC guidelines, makes clear reference to performance in the previous year as well as plans for the coming year. There was evidence of a clear linkage between the two, for example in carrying over blocks un-logged into the programme for the next year.

There is evidence of activities being engaged in response to the social environment and to promote corporate social responsibility.

During the visit to close-out the major CARs, it was observed that BCL has revised the FMP to address issues highlighted as non-compliances during the main assessment.

Criterion 7.3 Training and supervision of forest workers

BCL has a training programme for all levels of its workers. Evidence of training courses taken by workers was provided. It was commendable that BCL had made good use of the recently established national Forestry Training Centre in planning and delivering key aspects of forest management training.

Based on available records, BCL staffs attended the following courses:

- Harvest Planning Course
- Directional Felling Practices & Skidding theory and practice
- RIL Training Course;
- Training of Trainers on RIL.

The above mentioned courses were carried out by the Forestry Training Centre Inc. in cooperation with GFC, TFF, ITTO, DFID, URS etc.

All staff have either completed or are registered to attend the GFC supported training (ref. records at Buck Hall camp). There is strong evidence of this training in the field and demonstrated with the local Forestry commission officer and the Barama staff working collectively on issues and sharing information

There was no evidence of a long term strategic training plan. However, it was described in the FMP that the company conduct in-house (on the job training) as well as sent the employee (and contractors) to be trained by FTC on specific area such as RIL, road construction etc.

Transfer of technology occurs through utilisation of machinery and technology via skilled foreign counterpart/ workforce employed by the company.

Criterion 7.4 Public availability of the management plan elements

A public summary of the management plan is available on request. There is evidence that Barama also circulated the summary at briefings and public consultation for a. Record of attendance and minutes of the meetings are maintained.

The summary of management plan should to be made more accessible to the public, for example via a web-site.

PRINCIPLE 8: Monitoring and evaluation

Criterion 8.1 Frequency, intensity and consistency of monitoring

While monitoring is addressed briefly in the management plan, an operation of the size of BCL should have a separate monitoring programme which must identify all elements of the operation to be monitored (see Criterion 8.2), procedures for monitoring and protocols for analysis, presentation and incorporation of results.

The FMP has a section on 'monitoring and research', but does not adequately address the monitoring requirements for social and environmental elements. There is inadequate evidence of monitoring that has been carried out and incorporation of the results in future planning. Inadequate description of procedures and implementation for monitoring the environmental and social elements (**Major CAR-012**).

BCL has made a commitment to the national PSP programme by committing to establish 20 PSPs in Compt. 5 where four have been established to date. It is recommended that the number of PSPs planned be increased, though only after a specific review of the PSP programme (which should deal with issues of PSP size and location, procedures for measurement and data analysis). Current procedures are based on the published guidelines of Alder and Synott (1992). It is a recommendation that simplified procedures be developed by BCL for its monitoring unit and incorporated into the SOPs.

A minor gap was observed in the measuring protocols in the established PSPs which should be rectified. There are no clear procedures for the establishment and measurement of the PSPs. Currently, most of the dbh measurement of trees in PSP in block 18AE was found to be inaccurate (**Minor CAR-011**).

All trees above 10 cm dbh in the 1 ha plot were measured in July 2004. The plot was marked on the map using GPS point. Standard forms are used for recording the measurement made and other details of the plot. The trees were marked with red paint and numbered using metal plate. The location where measurement was made was not properly marked possible reason for error in the reading.

Notes on close-out of Major CAR-0012

Section 13.3 of the FMP has been revised and elaborated upon to identify and describe actions to be undertaken by Barama in order to monitor the effects of its operations at Buck Hall and Compartment 5. This includes:

- Past and current research activities in the concession
- The establishment of Permanent Sample Plots (PSPs)
- Plans for monitoring the impacts of logging activities

A monitoring plan has been drawn up for Compartment 5, which covers physical, biological and socio-economic parameters, as described in the table below:

Parameters monitored	Frequency of monitoring	Location of monitoring
Air quality: SP Fumes from fuel	Biannually	<ul style="list-style-type: none"> ▪ Transit log yard ▪ Km 100 on Buckhall road
Water quality Temperature PH Conductivity CoD Turbidity Oil and grease TSS	Quarterly	<ul style="list-style-type: none"> ▪ Issosoro where Pomeroun and Issosoro rivers meet ▪ Pomeroun river at St Monica and Kabakaburi ▪ Essequibo river at Karia Karia, Buckhall, Akarakaru ▪ In Compartment 5 where Kopang and Kutauau rivers flow into Cuyuni river
Biological: Canopy opening, Retention of seed and keystone species, and Biodiversity Reserve integrity	Annually	<ul style="list-style-type: none"> ▪ Active logging areas ▪ PSPs ▪ Aerial surveillance
Waste management: Waste management plan Record keeping Waste accumulation and disposal	Biannually Weekly review of record	<ul style="list-style-type: none"> ▪ Transit log yard ▪ Km 100 on Buckhall road
Mining: Number of mining camps Type of mining Area coverage Vehicle movement	Quarterly by aerial surveillance	<ul style="list-style-type: none"> ▪ Logging area ▪ Accessible area particularly area proximate to waterways
Wildlife: Wildlife hunting and trapping	On observance	<ul style="list-style-type: none"> ▪ Transit log yard ▪ Km 100 camp ▪ Compartment 5 logging operations ▪ Concession security gates
Health & safety: ERP H&S Programmes	Biannually Monthly (QC)	<ul style="list-style-type: none"> ▪ Transit log yard camp ▪ Km 100 ▪ Compartment 5 logging operations

Equipment efficiency		
Auditing of Industry: EPA; Guyana Forestry Commission	Annually	<ul style="list-style-type: none"> ▪ Administration office in Georgetown

Standard operational procedures for monitoring the different elements are described in SOP/Doc. 13. The document describes procedures for monitoring of PSPs, post harvest block inspection, rapid ecological surveys, water quality monitoring, social aspect monitoring and conservation and protection. A monitoring unit has been established within the Forest Planning Department which will be responsible for all aspects of the planning, coordinating and implementation of the monitoring plan.

Water Quality Monitoring: It was verified that BCL had recently (August 2005) carried out water quality monitoring at five locations and the results were available. No proper analysis of the results have been carried out to date but generally tests show that the stream passing through the N Sukul and Mazharally concession carry heavy silt loads and contain heavy metals such as iron and mercury, the two elements mainly associated with mining activities. It is a public knowledge that an active mining operation is ongoing upstream of that sampling station. Results of the other sampling points do not show any significant heavy metal concentration or siltation.

Post Harvest Monitoring: After completion of harvest, the logging block will be closed formally and a post-harvest block inspection (PHBI) will be carried out. The PHBI facilitates a management audit of logging practices, and will detect negligence and identify any damage and remedial action necessary. The report produced by the PHBI (SEU Form No. 04) allows for the calculation of real area loss and damage to the area as well as enumeration of actual harvest intensities and number of remaining trees not felled in each logging block.

Mean annual increment and damage: Monitoring of logging damage and re-growth is being carried out through the establishment of Permanent Sample Plots (PSPs). At the time of the evaluation to close out major CARs, twenty (20) PSPs have been established in Compt. 5 following procedures described by GFC. All trees with a diameter of greater than or equal to 20cm (dbh) will be measured annually in these PSPs.

Biodiversity: Rapid ecological assessments will be carried out by the survey and inventory team during the management level inventory as well as during the PSP inventory. Findings and observations on wildlife sightings in the area are recorded on SEU form # 2. In the long term, the data will be useful for assessment of potential changes in biodiversity, as well as composition, density, and movement patterns of wildlife and anticipating the possible impact of logging activities on specific species.

Social Issues: On the social side, interviews and questionnaire were distributed through the social committee to gather information on the effectiveness of social programmes carried out by BCL. The results are being collated and analysed by the social team and will be used for future planning. Monitoring on health and safety aspects of the operation were also carried out. The same questionnaire and interview method were applied to about 10% of workers through an established Committee.

Illegal Activities: A bi-annual aerial reconnaissance survey is planned to monitor encroachment, mining activities, biodiversity areas and possible poaching. Areas detected with such potential threats will be mapped and ground verification will be carried out. If the issue cannot be dealt with internally, a report to the local authority will be submitted. Warning signs have been posted at appropriate locations throughout the concession area to ward off poaching and other illegal activities. Security posts have been erected at the entrance to the concession, and these posts are manned on 24 hour basis to prevent unauthorized entry to the area.

With the actions taken as described above **Major CAR-012 is closed.**

Criterion 8.2	Research and data collection for monitoring
<p>A 100% pre-harvest inventory is carried out in all blocks and yields of all forest products harvested are recorded at the block level. Post-harvest monitoring is carried out with the help of a checklist to assess the quality of the logging operation, the condition of the log market, skid trails and the logged stand.</p> <p>Other monitoring is inadequate (see also comments under Criteria 8.2). Records of annual harvest made are available, as described elsewhere in this report.</p> <p>According to GFC guidelines, a 2% resource inventory needs to be carried out to identify areas to be excluded from logging, to demarcate annual coupe and estimate volume to be harvested from the unit area.</p> <p>100 % pre-harvest inventory is carried out at logging block level to identify every tree to be harvested from the area. The inventory also allows collection of information (i.e. topography, etc) for mapping. No identification of trees for retention however was made.</p> <p>Previously, in Region 1 area, monitoring and research was carried out in conjunction with ECTF focusing on</p>	

understanding growth and yield and effects of different types of silviculture interventions on second cycle yield. No monitoring has been undertaken. However, as described under 8.1.2, PSPs were established in collaboration with GFC as part of monitoring floristic changes in the area following harvesting operation. PSPs will also allow monitoring on growth of the forest.

Data on wildlife are collected using notes in the field book used by workers working in the area. The workers will record all wildlife sighted in the area whether the footprint, sound, direct sightings, droppings etc.

BCL also has developed a monitoring format (based on GFC CoP) to carry out monitoring of effects after logging. As part of requirement of Buckhall EMP, the company also will monitor water quality in Essequibo River every 6 month. Biological analysis of the potable water supply will be undertaken monthly to ensure that there are no contamination. Water quality monitoring at other location will be carried when necessary. Parameters to be monitored include coliforms, turbidity, oil and grease and pH. Results of recent water quality monitoring are tabulated under criteria 8.1.

It is described in FMP that a joint community relations committee (CRC) will be established comprising members of the community and the concessionaire as well as representative from Ministry of Amerindian and local councils. The committee will meet quarterly as part of monitoring process on the social and community needs. The forum also could be used for resolving disputes (if any).

Health and safety of workers will also be monitored. A medical centre has been established at Buckhall staffed by a qualified Medex. The centre is equipped to deal with small cuts, bruised, malaria and other illnesses as well as to provide routine check-up for staff. It will also handle first aid for major accident prior to transfer to other medical facilities.

Criterion 8.3 Chain of custody

All logs produce carry two numbers; one is the GFC green tag number and the other one is BCL log number. Procedure for numbering is well described in the company's procedure as well as in the GFC CoP.

Log produced in a logging block will be transported to a transit camp prior to hauling to Buckhall. All logs leaving the block will be recorded by BCL. At the transit camp, GFC will issue a 'trip chit and 'removal permit' for each truck leaving the transit camp to Buckhall. The trip shit and removal permit contain details of each log number being transported, TSA # and block #. Logs arrived at Buckhall will be segregated accordingly into a lot. Logs will be barged out using 'transhipment permit' issued by the GFC personnel stationed at Buckhall, together with 'log list'.

At present the log list does not have reference to the GFC transhipment permit number even though the documents (transhipment permit and log list) were clipped together. Other details such as TSA # and the block # should also be indicated on the log list (**Observation 02**).

The chain of custody for the logs ends immediately the logs are loaded onto the barge that go for export or transported to the Barama sawmill or the plywood mill. The chain of custody system at the processing facilities or the log importer then should continue the traceability of the material.

Criterion 8.4 Incorporation of monitoring results into the management plan

There was evidence to suggest that the results of the post-harvest assessments were incorporated into future implementation (e.g. by interviewing the logging crew if there were found to be serious discrepancies between the plan and actual performance). However, there seemed to be no other formal mechanism of incorporating monitoring results, such as they were, into the plan (though admittedly it was difficult to judge properly as there was no previous plan for the FMU).

Monitoring results from operation in Region 1 are being used for improvement in operation in Compt. 5.

Criterion 8.5 Publicly available summary of monitoring

No summary records available to date. Refer Criterion 8.4.

PRINCIPLE 9: High Conservation Value Forests

Criterion 9.1 Evaluation to determine high conservation value attributes

Apart from a short section in the management plan that listed the generic HCVs, the identification and demarcation of HCVFs in the FMU has not been adequately carried out.

There is a clear lack of identification of high conservation value forests (HCVFs) within the BCL concession that includes a consultative process, involving various stakeholders in identifying the HCVF attributes. (**Major CAR-013**)

The system for maintenance and monitoring the HCVF attributes within the concession is not well described.

The management planning documents currently does not include identification of the HCVF that has been carried out through consultation with relevant stakeholders

Notes on close-out of Major CAR-0013

An expert consultant, from WWF Guyana, was engaged to assist in the assessment of high conservation value forests in the area. In May 2005, the consultant carried out extensive consultation with local communities in the Pomeroon and Essequibo River communities, international and local NGOs, Amerindian groups as well as government agencies to discuss the concept of HCVFs and their possible relation to the BCL operation in Compartment 5 of the concession.

The following Stakeholder groups were consulted during the HCVF assessment process:

Stakeholder Groups consulted	Number participants
Pomeroon River communities <ul style="list-style-type: none"> ▪ Kabakaburi ▪ St Monica ▪ Karawab 	14
Essequibo River communities <ul style="list-style-type: none"> ▪ Bethany ▪ Akarakuru ▪ Buckhall ▪ Troolie Island ▪ Karia Karia ▪ Alik ▪ Western Hog Island 	31
Conservation International	2
Guyana Forestry Commission	3
Guyana National Initiative For Forest Certification	15
Environment Protection Agency	3
World Wildlife Fund/Guianas Program	1
Amerindian People's Association	3
Guyana Organisation of Indigenous Peoples	3
Guyana Geology and Mines Commission	2
Total	77

Stakeholders identified a wide variety of forest uses, services and values important to them and these are illustrative of high conservation values from forests in Guyana. The primary uses and concerns expressed by these stakeholders are included in the following materials and services:

Category	Primary values	Concern and risk from forest management
Biological diversity	<ul style="list-style-type: none"> ▪ Conservation of threatened, endangered, rare, endemic or unique (TEREU) species ▪ Maintenance of viable populations of native fauna and flora ▪ Connectivity of landscapes and ecosystems 	<ul style="list-style-type: none"> ▪ Disturb the presence and population status through FM activities ▪ Increased access for hunting and wildlife trapping ▪ (no validation data exist to evaluate the impact of BCL activities on TEREU species or habitat in compartment 5)
Water supply	<ul style="list-style-type: none"> ▪ Domestic water uses ▪ Boat transportation 	<ul style="list-style-type: none"> ▪ Increased in seasonal flooding due to upstream changes in forest condition.
Water quality	<ul style="list-style-type: none"> ▪ Potable water 	<ul style="list-style-type: none"> ▪ Increased in sedimentation and pollutants

		<ul style="list-style-type: none"> ▪ Decrease in freshwater fishes
Timber production	<ul style="list-style-type: none"> ▪ Construction wood for local community and small scale commercial needs 	<ul style="list-style-type: none"> ▪ Limiting access to traditional forested area
NTFP	<ul style="list-style-type: none"> ▪ Collection of NTFPs 	<ul style="list-style-type: none"> ▪ Reduction in NTFPs
Hunting and trapping	<ul style="list-style-type: none"> ▪ Harvest of wildlife for personal use or small scale commercial sales 	<ul style="list-style-type: none"> ▪ Decline in wildlife
Cultural identity	<ul style="list-style-type: none"> ▪ Forest products for ceremonial purposes 	<ul style="list-style-type: none"> ▪ Restrict access ▪ Decline in products

As a result of the consultation, the assessment has made the following observations:

- Communities consulted still use forest extensively for subsistence and small scale commercial needs
- None of the changes in forest conditions which may affect their current uses directly attributed to BCL operation
- No one contacted had ever visited BCL Compt. 4 and 5
- BCL can contribute more benefit to downstream communities and can include measures in its management practices to retain HCV of its forest for future benefits

The study concluded that the whole Compartment 5 is considered to be HCVF, but that, in general, the existing BCL forest management activities do not have significant impact on the HCV of the forest. Nevertheless, the study provides several recommendations on management and monitoring measures to be taken to safeguard the HCV of the forest.

The elements described in the consultant's report have been incorporated into the revised FMP. Table 21, 22 and 23 under Section 12.3.5.1 of the revised FMP tabulates the recommended activities and guidance for the management and monitoring measures to be taken to ensure the maintenance of HCV of the area.

New procedure doc SOP/Doc.13 for monitoring describes that monitoring of HCVF should include the following parameters:

- Integrity of large area landscape values against unplanned land-use changes
- Conservation of critical watershed areas, natural drainage, erosion control, protection of water qualities
- Conservation of natural habitats and migratory corridors, and
- Conservation of biodiversity

Methodology for monitoring the above mentioned values are as follows:

- Conduct half yearly aerial reconnaissance over designated biodiversity conservation area and areas within concession that are prone to third party encroachment
- Areas detected with such threats shall be located by GPS and plotted onto a map
- Use commercially available satellite photos to detect possible large scale encroachment
- Post warning placards against illegal logging, encroachment and poaching at potential entry points along the road and navigable river
- 24 hr security guards at entry point to the concession preventing unauthorized entry to the area.

The biodiversity area is clearly identified on the FMU map. River buffer zone and areas above 40% (15 degree slope) of more than 2 ha, are identified on the comprehensive harvest plan (100 ha logging block plan), where logging is prohibited. During the field visit, the audit team verified the implementation of such planning where trees initially identified and marked for harvest by the enumeration team on the plan (Block 7AN), but located within a buffer zone, were not felled during the harvesting exercise.

Major CAR-013 is closed; however, the need for maps to indicate the location of categories of HCVs in and around the FMU was raised as **Minor CAR 17**.

Criterion 9.2 Consultation process

BCL need to include other stakeholders including local NGOs and local communities in identifying HCVF within the concession. At this, present time, for discussion on HCVF, BCL only initiate discussion with GFC but not with other stakeholders.

As described under Criteria 9.1, during the HCVF assessment, various groups have been consulted, including NGOs, local communities and government agencies.	
Criterion 9.3	Measures to maintain and enhance high conservation value attributes
See notes under Criteria 9.1.	
Criterion 9.4	Monitoring to assess effectiveness
See notes under Criteria 9.1	
PRINCIPLE 10: Plantations	
Criterion 10.1	Statement of objectives in the management plan
Not applicable	
Criterion 10.2	Plantation design and layout
Not applicable	
Criterion 10.3	Diversity in composition
Not applicable	
Criterion 10.4	Species selection
Not applicable	
Criterion 10.5	Restoration of natural forest
Not applicable	
Criterion 10.6	Impacts on soil and water
Not applicable	
Criterion 10.7	Pests and diseases
Not applicable	
Criterion 10.8	Monitoring of impacts, species testing and tenure rights
Not applicable	
Criterion 10.9	Monitoring of impacts, species testing and tenure rights
Not applicable	
Criterion 10.10	Plantations established in areas converted from natural forests after November 1994
Not applicable	

9. CERTIFICATION DECISION

SGS considers that Barama Company Ltd's forest management of Compt. 4 & 5 of forest concession in Northwest Guyana can be certified as:

- i. There are no outstanding Major Corrective Action Requests
- ii. The outstanding Minor Corrective Action Requests do not preclude certification, but BCL is required to take the agreed actions before April 2006. These will be verified by SGS QUALIFOR at the first surveillance to be carried out about 6 months from the date of the issuance of the certificate. If satisfactory actions have been taken, the CARs will be 'closed out'; otherwise, Minor CARs will be raised to Major CARs.

- iii. The management system, if implemented as described, is capable of ensuring that all of the requirements of the applicable standard(s) are met over the whole forest area covered by the scope of the evaluation;
- iv. The certificate holder has demonstrated, subject to the specified corrective actions, that the described system of management is being implemented consistently over the whole forest area covered by the scope of the certificate.

10. MAINTENANCE OF CERTIFICATION

During the surveillance evaluation, it is assessed if there is continuing compliance with the requirements of the Qualifor Programme. Any areas of non-conformance with the QUALIFOR Programme are raised as one of two types of Corrective Action Request (CAR):

- .01 **Major CARs** - which must be addressed and closed out urgently with an agreed short time frame since the organisation is already a QUALIFOR certified organisation. Failure to close out within the agreed time frame can lead to suspension of the certificate.
- .02 **Minor CARs** - which must be addressed within an agreed time frame, and will normally be checked at the next surveillance visit

The full record of CARs raised over the certification period is listed under section 11 below.

The table below provides a progressive summary of findings for each surveillance. A complete record of observations demonstrating compliance or non-compliance with each criterion of the Forest Stewardship Standard is contained in a separate document that does not form part of the public summary.

SURVEILLANCE 1	
Issues that were hard to assess	
Number of CARs closed	__ Outstanding CARs were closed.
Nr of CARs remaining open	__ Outstanding CARs from previous evaluations were not closed.
New CARs raised	__ New Major CARs and __ Minor CARs were raised.
Certification Decision	<p>The forest management of the forests of _____ remains certified as:</p> <ul style="list-style-type: none"> ▪ The management system is capable of ensuring that all of the requirements of the applicable standard(s) are met over the whole forest area covered by the scope of the evaluation; and ▪ The certificate holder has demonstrated, subject to the specified corrective actions, that the described system of management is being implemented consistently over the whole forest area covered by the scope of the certificate.
SURVEILLANCE 2	
Issues that were hard to assess	
Number of CARs closed	
Nr of CARs remaining open	
Nr of New CARs raised	
Certification Decision	
SURVEILLANCE 3	
Issues that were hard to assess	
Number of CARs closed	
Nr of CARs remaining open	

Nr of New CARs raised	
Certification Decision	
SURVEILLANCE 4	
Issues that were hard to assess	
Number of CARs closed	
Nr of CARs remaining open	
Nr of New CARs raised	
Certification Decision	

11. RECORD OF CORRECTIVE ACTION REQUESTS (CARS)

CAR #	Indicator	CAR Detail					
		Date Recorded>		Due Date>		Date Closed>	
001	1.6.2	Date Recorded>	4 March 2005	Due Date>	1 st surveillance	Date Closed>	dd MMM yy
		Non-Conformance:					
		Inadequate communication of the policy statement to sub contractors and workers operating within Compartment. 5.					
		Objective Evidence:					
		Interview with workers and sub contractors.					
		Close-out evidence:					
002	1.6.3 & 1.6.4	Date Recorded>	4 March 2005	Due Date>	1 st surveillance	Date Closed>	dd MMM yy
		Non-Conformance:					
		Barama does not provide for a time frame/schedule associated with its policy statement for bringing in other areas under its management for certification.					
		Objective Evidence:					
		Policy statement covers the entire company concession and operations within Guyana but lacks reference to time frame for other areas to meet the company's policy					
		Close-out evidence:					
003	2.3.1 & 4.5.2	Date Recorded>	4 March 2004	Due Date>	dd MMM yy	Date Closed>	Dd MMM yy
		Non-Conformance:					
		The draft procedure for communication and dispute resolution has yet to be finalised					
		Objective Evidence:					
		The joint community relation is in place however, the current draft procedure for communication and conflict resolution is inadequate and does not reflect the actual system being developed. The procedure should include stakeholder consultation as through the Joint Community Relations Committee.					
		Close-out evidence:					
M04	3.1, 3.2, 4.4, 6.1, 6.2 & 7.1	Date Recorded>	4 March 2005	Due Date>	4 September 2005	Date Closed>	02 Sep 2005
		Non-Conformance:					
		Environmental and social elements are inadequately addressed in the 5 year forest management plan for compartment 5 (2004 -2008).					
		Objective Evidence:					
		Lack of specific baseline data, list of reference to ERT species, assessment of impacts, mitigation measures and monitoring system for safeguarding environmental and social impacts in the FMP document.					
		Close-out evidence:					

CAR #	Indicator	CAR Detail					
		<p>Barama Company Limited (BCL) hired three consultants (with environmental, economic and social expertise) to carryout an environmental and social impact analysis of the operation in Compartment 5. A report dated June 2005 detailing the socioeconomic and environmental profile of the area was produced. This report also tabulates potential impacts and measures/action recommended to be taken to mitigate the anticipated impact.</p> <p>The findings of this study have been incorporated into a revised 5-Year Forest Management Plan (FMP) for Compartment 5.</p> <p>During the course of the clearance of findings assessment, which took place 5 months after the main assessment, the SGS team visited the local communities (including two Amerindian Captains on the Pomeroon River) to discuss these issues and confirm that such consultation was indeed carried out. It was confirmed that a joint Community Relation Committee (CRC) was established and is now up and running. The people interviewed felt that this forum was a good and practical mechanism for them to provide input in order to benefit from the company's operation in the area.</p> <p>Major CAR 04 was closed on the basis of this study, the revised FMP which provided more focus on environmental and social elements as well as the verification achieved through community consultation. In future surveillance visits, the implementation of recommended mitigatory measures must be monitored.</p>					
005	4.2.1, 4.2.3, 4.2.5, & 4.2.7	Date Recorded>	4 March 2005	Due Date>	1 st surveillance	Date Closed>	dd MMM yy
Non-Conformance:							
Lack of communication equipment to ensure the objectives of the health and safety policy are met. All accidents and incidences are investigated, appropriate remedial actions are taken and recommendations are implemented.							
Objective Evidence:							
At the felling place, there was no means to communicate directly with base camp in an emergency situation. Evidence of inadequate investigation carried out to find the cause and mitigation measures to be implemented on the fatality involving a worker occurred last year.							
Close-out evidence:							
006	5.1.2	Date Recorded>	4 March 2004	Due Date>	1 st surveillance	Date Closed>	Dd MMM yy
Non-Conformance:							
Inadequate provision for accounting the cost for environmental and social programmes within the current FMU management planning.							
Objective Evidence:							
5 year FMP.							
Close-out evidence:							
M07	6.5.1; 6.5.2	Date Recorded>	4 March 2005	Due Date>	4 September 2005	Date Closed>	02 Sep 2005
Non-Conformance:							
Inadequate procedures (SOP Document 5, section 4.1) and lack of implementation of mitigation measures to prevent silt from entering the natural water courses during and after road construction.							
Objective Evidence:							
Direct discharge of surface runoffs into stream without silt trap observed within Compt. 5. Evidence of water ponding as well as complaints of muddy water downstream by stakeholders.							
Close-out evidence:							

CAR #	Indicator	CAR Detail					
		<p>Barama Company Limited has revised the Standard Operating Practice (SOP) Document 5, pertaining to the road survey, construction and maintenance to include the following elements:</p> <ul style="list-style-type: none"> The provision of roadside drains and turn-outs on gradients of more than 4 % at specific distance intervals, as well as the provision of cross culverts where it is not possible to construct turn-out on the uphill side of the road, to divert drain water to the other side of the road where a turn-out exists. Side drains and turn-outs near a creek, stream or river shall end at least 50 m away from the water course with a suitable silt trap of 1 m deep and 1 m wide not less than 2m length. <p>The procedure is also well illustrated with clear graphic road specifications including a diagram on a typical road approach to a stream/river crossing. It also includes a description of the monitoring and maintenance requirements of these silt traps.</p> <p>In addition, a new procedure, SOP/Doc.3A entitled "<i>Detailed Block Harvesting Plan</i>" was also formulated describing procedures for identifying and marking of buffer zones, log markets, skid trails etc and measures to be taken to minimize environmental impacts.</p> <p>During the field visit, it was observed that silt traps were constructed at many locations along the main (M1 and M2) and feeder roads outside as well as inside Compartment 5. It was confirmed with main assessment team members that roadside drainage had much improved, with numerous side drains and turn-outs to channel surface runoffs onto the forest floor and not directly into the stream. Roads were well cambered and compacted. Numerous silt traps were constructed along the road verges. Silt trap maintenance was evident, and bridges and culverts were also maintained to prevent clogging and damming of the area.</p> <p>Major CAR 07 was closed on the basis of the following:</p> <ul style="list-style-type: none"> d) The immense progress with road maintenance and drainage that was clearly evident through site inspection, and the number of silt traps that had been constructed, e) The improved procedures to assist with the setting of basic standards and minimum requirements, and f) The fact that the new roads will be constructed according to the new procedures, and will be vastly superior to the old roads. This has already apparently already been initiated, but was not verified in field. <p>Minor CARs 14, 15 and 16, were, however, raised about issues relating to road building and other activities linked to roads.</p>					
008	6.7.1, 6.7.2 & 6.7.3	Date Recorded>	4 March 2004	Due Date>	1 st surveillance	Date Closed>	Dd MMM yy
Non-Conformance:							
Lack of bunding for skid tanks to contain possible fuel spillage at various locations throughout the forest operation and inadequate handling of empty containers. Incorrect fuel containers for transporting fuel.							
Objective Evidence:							
Empty containers lying around and skid tanks were not properly bunded to contain spillage, Tree fellers using Coke bottles for transporting fuels.							
Close-out evidence:							
009	6.5.1	Date Recorded>	4 March 2004	Due Date>	1 st surveillance	Date Closed>	Dd MMM yy
Non-Conformance:							
Lack of procedure for identification of retention trees (especially those commercial trees above diameter cutting limit) on the pre-harvest map or the ground.							
Objective Evidence:							
Trees to be protected currently not identified on the pre-harvest map or the ground. The skidding team has the ability to make decision to cut commercial trees above cutting limit not tagged with green tag. The trees felled may be actually have been intended to be retained by the enumeration team							
Close-out evidence:							

CAR #	Indicator	CAR Detail					
010	6.5.1	Date Recorded>	4 March 2005	Due Date>	1 st surveillance	Date Closed>	dd MMM yy
Non-Conformance:							
Lack of identification and procedure for cutting non-commercial trees for internal use.							
Objective Evidence:							
Non commercial trees are cut for internal use such as for bridge construction and camp construction. No records of the trees felled.							
Close-out evidence:							
011	8.2.2	Date Recorded>	4 March 2004	Due Date>	1 st surveillance	Date Closed>	Dd MMM yy
Non-Conformance:							
Inadequate reference to, and implementation of, procedures for establishment and measurement of the PSPs.							
Objective Evidence:							
There are no clear procedures for the establishment and measurement of the PSPs. Currently, most of the dbh measurement of trees in PSP in block 18AE were found to be inaccurate.							
Close-out evidence:							
M012	8.1, 8.4 * 8.5	Date Recorded>	4 March 2004	Due Date>	4 September 2005	Date Closed>	02 Sep 2005
Non-Conformance:							
Inadequate description of procedures and implementation for monitoring the environmental and social elements.							
Objective Evidence:							
The management plan does not adequately address the monitoring requirements for social and environmental elements. There is inadequate evidence of monitoring and incorporation of results in future planning.							
Close-out evidence:							
Section 13.3 of the FMP has been revised and elaborated upon to identify and describe actions to be to be undertaken by Barama in order to monitor the effects of its operations at Buck Hall and Compartment 5. This includes: <ul style="list-style-type: none"> • Past and current research activities in the concession • The establishment of Permanent Sample Plots (PSPs) • Plans for monitoring the impacts of logging activities, including the monitoring of air quality, water quality as well as biological aspects and socio-economic issues. This is described in more detail under Principle 8 of the main assessment report, and numerous monitoring activities were verified through result presentation. This CAR is closed.							
M013	9.1	Date Recorded>	4 March 2005	Due Date>	4 September 2005	Date Closed>	02 Sep 2005
Non-Conformance:							
Lack of identification of high conservation value forest (HCVF) that includes consultative process of identifying HCVF attributes. Lack of system to maintain and monitor the HCVF attributes within the concession.							
Objective Evidence:							

CAR #	Indicator	CAR Detail					
		<p>No identification of HCVF through consultation with relevant stakeholders incorporated into management planning document.</p> <p>Close-out evidence:</p> <p>An expert consultant, James Tolisano, WWF Guianas, was engaged to assist in the assessment of high conservation value forests in the area. In May 2005, the consultant carried out extensive consultation with local communities in the Pomeroon and Essequibo River communities, international and local NGOs, Amerindian groups as well as government agencies to discuss the concept of HCVFs and their possible relation to the BCL operation in Compartment 5 of the concession.</p> <p>The study concluded that the whole Compartment 5 is considered to be HCVF, but that, in general, the existing BCL forest management activities do not have significant impact on the HCV of the forest. Nevertheless, the study provides several recommendations on management and monitoring measures to be taken to safeguard the HCV of the forest.</p> <p>The elements described in the consultant's report have been incorporated into the revised FMP. Table 21, 22 and 23 under Section 12.3.5.1 of the revised FMP tabulates the recommended activities and guidance for the management and monitoring measures to be taken to ensure the maintenance of HCV of the area.</p> <p>New procedure doc SOP/Doc.13 for monitoring describes the monitoring requirements for HCVF.</p> <p>Major CAR-013 is closed on the basis of the study; however, the need for maps to indicate the location of categories of HCVs in and around the FMU was raised as Minor CAR 17. Principle 9 of the Main assessment report provides further detail of the above.</p>					
014	6.1.2	Date Recorded>	2 Sept 2004	Due Date>	1 st surveillance	Date Closed>	Dd MMM yy
		Non-Conformance:					
		Site specific assessments of potential environmental impacts are not carried out prior to the commencement of certain site-disturbing operation.					
		Objective Evidence:					
		No site specific assessments carried out prior to the construction of burrow pits and log markets. Some such burrow pits and logs market constructed along M2 and feeder roads in Compt. 5 were poorly sited on slopes and there was evidence of erosion on some such sites.					
		Close-out evidence:					
015	6.3.3	Date Recorded>	2 Sept 2004	Due Date>	1 st surveillance	Date Closed>	Dd MMM yy
		Non-Conformance:					
		Lack of programme for restoration of degraded sites.					
		Objective Evidence:					
		No restoration programme for the rehabilitation of burrow pits and log markets (including management and monitoring). No evidence of rehabilitation of a skid trail at Block 7AO on a steep slope (> 20 % slope).					
		Close-out evidence:					
016	6.5.3	Date Recorded>	2 Sept 2004	Due Date>	1 st surveillance	Date Closed>	Dd MMM yy
		Non-Conformance:					
		Buffer zone encroachment at water crossings.					
		Objective Evidence:					
		At water crossings km 108 and km 110 of M2 road, there was evidence of machinery operation on the stream bank resulting in riparian zone disturbance and sedimentation of the water courses.					

CAR #	Indicator	CAR Detail					
		Close-out evidence:					
017	7.1	Date Recorded>	2 Sept 2004	Due Date>	1 st surveillance	Date Closed>	Dd MMM yy
		Non-Conformance:					
		Absence of maps to indicate the location of categories of HCVs (high conservation values) in and around the FMU.					
		Objective Evidence:					
		HCVF has been identified for Compt 5 but there is no map indicating the above.					
		Close-out evidence:					

12. RECORD OF OBSERVATIONS

OBS #	Indicator	CAR Detail			
		Date Recorded>	Sept 2005	Date Closed>	dd MMM yy
1	5.6	Observation:			
		It was observed that trees were also being removed for road construction and bridge construction with no clear procedure for recording the removal of these products. It was stated in the field that these species were non-commercial, but were not recorded anywhere			
		Follow-up evidence:			
2	8.3	Observation:			
		At present the log list does not have reference to the GFC transshipment permit number even though the documents (transshipment permit and log list) were clipped together. Other details such as TSA # and the block # was not indicated on the log list			
		Follow-up evidence:			
3	5.6	Observation:			
		The intensity of harvest for individual species must be monitored closely and compared with new information on growth estimates (if available) to ensure compliance to GFC requirement on sustainability.			
		Follow-up evidence:			
4	4.2	Observation:			
		Vehicle conditions to be evaluated and maintenance records need to be adequately maintained.			
		Follow-up evidence:			
5	4.1, 4.2 & 7.3	Observation:			
		Monitor workers for adequate training on RIL, health and safety, chain of custody, etc.			
		Follow-up evidence:			

13. RECORD OF STAKEHOLDER COMMENTS AND INTERVIEWS

Stakeholder consultation was carried out prior to the Main Assessment (March 2005), but some issues also emerged after the main assessment, and were followed up on at the clearance of findings assessment on 30 August – 2 September 2005. The table below summarises the issues from both assessments.

The points mentioned and the resulting actions taken by the company should be followed up on at the next surveillance visit:

Issue Raised by Communities and Neighbours	Response
<p>A: A Mazharally & Sons (AMS) raised dissatisfaction with Barama Company Limited (BCL) with regards to use of road from Buckhall through their concession. AMS claimed that BCL did not construct the road, they only merely upgrade the road, therefore they have no right to dictate the terms and condition for using the road.</p>	<p>About 80 % of the 88 km road passes through the AMS concession. Legal access rights were granted by the Authority that gave BCL the mandate to use and upgrade the road. All stakeholders along the alignment are allowed to use the road including AMS. BCL issued a letter to the stakeholders requesting them to be careful and more responsible while using the road due to high cost of maintenance. The letter displeased some parties and the matter was brought to higher authority for resolution. BCL will abide by the decision and all regulations made by the authority, and will continue to maintain the main road.</p>
<p>B: The St Monica Amerindian Captain mentioned that the Concession area was far from their community, and that they had never lived in the concession area. He mentioned the benefits of Barama in terms of employment created the provision of Medics who visit the community, and the assistance in meeting certain needs of the community. He also verified the open communication with the company in terms of the meetings between themselves and Barama. He expressed concern about the Pomeroun River changing colour after rain (siltation), even when there was no rain in St Monica.</p>	<p>BCL are well aware of the siltation problem caused by the roads (Major CAR 07 was raised in this respect). They have also undertaken to carry out water quality monitoring on a quarterly basis, which includes the measurement of turbidity and total suspended solids (TSS). The first monitoring took place in August 2005 at two sites situated within Compartment 5 where they are working, one site downstream from the Barakat concession on the Arunamai river, one site on a stream passing through the Sukul and Mazharally concession, and a site near camp Buckhall.</p> <p>Result interpretation has not yet been carried out, but generally, results show that the stream passing through the Sukul and Mazharally concession is very turbid (high TSS) and contains heavy metals such as iron and mercury - two elements mainly associated with mining activities. It is a public knowledge active mining is ongoing upstream of that sampling station. Results of the other sampling points do not show any significant heavy metal and siltation. These results will be publicly available and related to the Pomeroun catchment and activities, but this has just been initiated.</p>
<p>C: The Kabakaburi Amerindian Captain also expressed concern about the sedimentation of the river during rainfall events from tributaries of the Pomeroun River. He also mentioned that the meetings with Barama need to be more regular, with pre-set dates and a rotating chairman, and the minutes distributed. He further re-iterated the benefits of Barama in terms of employment, provision of water tanks. He also stated that they enjoy the same benefits from the forest as they always have; Barama has not interfered with that. The Captain also confirmed being consulted with in terms of HCVFs.</p>	<p>See above with regard to water quality monitoring.</p> <p>Barama acknowledged the request about the meetings.</p>
<p>D: Truli Island community: A family on the island in close proximity to the Buck Hall camp were interviewed and they were happy with the presence</p>	

Issue Raised by Communities and Neighbours	Response
<p>of Barama Company Ltd in terms of the following:</p> <ul style="list-style-type: none"> • Employment at Camp Buck Hall and potential employment from the sawmill • Barama buy fresh produce (vegetables and chickens) from them for Camp Buck Hall, and the potential for this market will increase with the establishment of the sawmill • The use of Camp Buck Hall medical facilities <p>This family also confirmed being consulted with in terms of HCVFs.</p>	

Issue Raised by NGO's	Response
<p>E: Barama is 80% controlled by Samling Strategic Corporation Sdn Bhd of Malaysia. There is information on them in a report called "<i>High Stakes - the need to control transnational logging companies: a Malaysian case study</i>".</p> <p>Greenpeace also did a report on their PNG subsidiary Concord Pacific called "Partners in Crime" and, Concord Pacific has been clearly identified as operating illegally in PNG.</p>	<p>The need to control "trans national" logging is the decision of the Government of Guyana, and besides ensuring compliance to the FSC P&C in terms of economically viable, environmentally sound and socially responsible, SGS cannot interfere with the government's decision about the above.</p> <p>Samling has other forest areas in New Zealand, Cambodia, Malaysia and China. At least another forest area (plantation in New Zealand) is in the process of FSC certification and one FMU in Sarawak has been certified under the National MTCC certification scheme. BCL however does not have authority or control on these other forest areas owned by Samling.</p> <p>BCL has a few other areas in Guyana (through joint ventures or own) where it has control over its management.</p> <p>Minor CAR 02 was raised due to the fact that Barama had not provided for a time frame/schedule associated with its policy statement for bringing in other areas under its management for certification.</p>
<p>F: This stakeholder said that some of the things that SGS need to look at were as follows:</p> <ol style="list-style-type: none"> 1. <u>The legality of Barama's contract</u> with the government of Guyana because it was "... a deal with an official who probably didn't have the legal right to grant the concession at all because it was during the hiatus between the dictatorship and the democratic government taking charge." 2. <u>Payment for timber:</u> Barama were not paying a "decent" price for timber. The contract said that the price they had to pay in stumpage for timber was fixed for 20 years in local currency - equivalent of US\$0.02 per cubic metre in 1993 - so if the currency devalued at any time - which was virtually inevitable, their payments would go down even further. 3. <u>Indigenous land rights</u> – The Amerindians whose houses were in the way were given new houses but lost their land except for a small patch around the house. 	<ol style="list-style-type: none"> 1. Barama Company Ltd has a legal contract of tenure ship over the concession area, and a legal Investment contract with the Government of Guyana. This was confirmed with both the Prime Minister H.E. Samuel A. Hinds as well as the Commissioner of Forests, James Singh, personally in a meeting with the SGS team on 2 September 2005. 2. This investment contract documents an ascending scale for royalty payments over 20 years. SGS interviewed the Commissioner of Forests (GFC), James Singh on 1 September 2005, and he stated that Barama was paying a royalty that was higher than other companies were and that Barama was in year 14 of a sliding scale for 20 years - stumpage for timber was not fixed. Barama has paid G\$29.4 million (US\$147,000) as royalties for logs harvested in year 2004. In 2005, estimated on royalty payment is estimated at G\$ 66 million (c. US\$330,000) 3. The Amerindian group present during the meeting has raised positive comments on Barama operation where it has brought development to Port Kaituma providing social amenities and employment. Barama

Issue Raised by NGO's	Response
	<p>started operating in Region 1 in 1993, bringing basic infrastructures and providing economic rejuvenation into the area. The company purchased products from locals and appointed a local liaison officer for communication. The company made decision to leave Region 1 even though the forest has yet to be fully harvested due to complication with the mining industry.</p> <p>There was an issue of relocation and compensation for the people involved however, it was done through the Regional Democratic Council (RDC), comprising mainly of local leaders. According to the Amerindian representative during the discussion, the relocation and compensation made to the people involved was felt to be fair and done in a transparent manner.</p> <p>SGS also met with the Amerindian NGO Chairperson in Georgetown on 2 September 2005, who confirmed that the relocation was fair and transparent, and that there was no evidence to suggest corruption or coercion on the part of Barama.</p>
<p>G: This stakeholder questioned why Barama withdrew from Port Kaituma (camp) in 2002 after was "logged out", because in 1993/4 Barama said that their logging rate was sustainable within that concession. In light of the above it was questioned if SGS would only audit their new logging area and not the one they already logged out.</p>	<p>At the clearance of Findings Audit of 30 August – 2 September 2005, SGS did query about visiting Region 1, but this would require a scheduled flight, and the notice was too short. The SGS team, however, interviewed the Commissioner of Forests, James Singh, in person, and questioned him about Region 1. He stated that the Forestry Commission had recently carried out a survey of Compartments 1, 2 and 3 in Region 1 and that the results showed conclusively that the logging intensity was low. The logging was on average 8m³/ha, which was well below the maximum allowable cut of 20 m³/ha. Such post-harvest surveys are routinely carried out after logging and the report entitled "Post-harvest Silviculture Survey of Port Kaituma Operations" is publicly available. The reason for Barama withdrawing from Port Kaituma was that it was apparently too costly to harvest, and due to the mining operations.</p>
<p>H: Confirm that less than 15% of BCL's workforce of 1100 is expatriates (condition of the TSA contract).</p>	<p>This was confirmed during the main assessment and at the clearance of Findings Audit of 30 August – 2 September 2005, where SGS interviewed the Commissioner of Forests, James Singh, in person. He stated that the Forestry Commission has checked this and the numbers never reached 15%, and that Guyanese employees were in very senior positions (confirmed during audit). He further stated that there was a GFC resident forest officer at Camp Buckall and a mobile monitoring unit that checks on all environmental and social aspects of operations from concession to concession.</p>
<p>I: The tax concessions that were being enjoyed by Barama were questioned.</p>	<p>There are clear protocols on "tax holidays" from the Guyana Revenue Authority (GRA). These tax holidays apply to anyone that invests a specific amount in the country. On 2 September 2005, SGS met with His Excellency the Guyana Prime Minister Samuel Hinds, and questioned him about these tax concessions. He stated emphatically that this was the responsibility of the GRA. The stakeholder needs to address this issue directly with the GRA. SGS cannot intervene further in this issue, for it is a decision taken by the Guyanese government, and is not in any conflict with the FSC P&C. The same applies to the export tax.</p>

Issue Raised by NGO's	Response
J: Barama are using their tax concessions in other concession areas where they are contracted to carry out harvesting for other concessionaires.	The Commissioner of Forests, James Singh, stated that there have been meetings between the Guyana Forestry Commission (GFC) and Barama to deal with harvesting from other concessions, and the GFC recognises this point and are in the process of resolving the issue.

Issue Raised by Government	Response
No issues.	

Issue Raised by Others	Response
General issues highlighted during discussions were as follows:	
1. Dispute resolution process	1. A Joint Relation Committee has been set-up comprising member of the community and the BCL officer and representatives from the Amerindian Ministry. Any conflicts will be resolved through the committee who will meet every three month. A minor CAR-003 is raised due to the fact that the draft procedure for communication and dispute resolution has yet to be finalised.
2. Chain of custody	2. There was a misunderstanding on the issue of chain of custody where the stakeholders questioned the purchase and handling of materials, but it was established that these did not originate from the Barama concession.
3. Opportunities for locals in employment and sub contract work	3. Currently, Barama provides employment to 1,200 Guyanese (300 in forest operation and 900 at the plywood factory). It is Company Policy to provide job opportunities and technological development to local industry.
4. Down stream value adding activities	4. BCL now operates a sawmill and a plywood mill that consumes 70 % of the raw materials harvested from the concession. The company now is installing another sawmilling facility at Buckhall that will employ some 200 workers.
5. Implementation of RIL: A stakeholder questioned BCL for not using a type of chainsaw which is more useful in terms of implementing RIL compared to the one currently used by the company.	5. BCL continues to monitor such situations and consider the change in technology and equipment if it is cost-effective and suitable to the environment and work condition.
6. Compensation for ex worker: There was a specific incident where one worker claimed that there was injustice to another worker who met with an accident while working with BCL.	6. As far as the company is concerned, all legislative and regulatory requirements have been met. The dues have been paid through the sub-contractor involved who then should extend the payment to the worker involved. There may be delays in handling some parts of the process due to involvement of many parties.
7. Harvest of NTFPs	7. BCL is only licensed to harvest timber from the area. Local communities are not prevented from harvesting NTFPs and BCL is actively assisting GFC and other authorities in the research and evaluation on the potential of the NTFPs.

14. RECORD OF COMPLAINTS

Nr	Detail		
	Complaint:	Date Recorded >	dd MMM yy
	Objective evidence obtained:		
	Close-out information:	Date Closed >	dd MMM yy
	Complaint:	Date Recorded >	dd MMM yy
	Objective evidence obtained:		
	Close-out information:	Date Closed >	dd MMM yy

End of Public Summary