ASSESSMENT OF THE NATURAL FOREST MANAGEMENT AND THE CHAIN OF CUSTODY FROM THE FOREST TO THE OUTPUT OF ROHDEN INDÚSTRIA LÍGNEA LTDA PRODUCTS – FAZENDA ROHSAMAR AT JURUENA, STATE OF MATO GROSSO, BRAZIL

CONDUCTED ACCORDING TO THE PRECEPTS OF FSC AND THE SCS FOREST CONSERVATION PROGRAM

Certification Program Accredited by FSC

Certificate registered under number: SCS-FM/COC-00063N

SUBMITTED TO ROHDEN INDÚSTRIA LÍGNEA LTDA

Rua Bernardo Rohden, 350 78340-000 – JURUENA – Estado do Mato Grosso BRASIL

Coordinated by Vanilda R. S. Shimoyama Field assessment dates: July 13th to 17th, 2008; and July 13th to 17th, 2009

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Organization of the report

This report is the result of the assessment by a team of auditors and is divided into two sections. The Public Summary and the basic information required by FSC (Forest Stewardship Council) are presented in section A. This section will be open to the general public and has the purpose to provide a general view of the evaluation process, the administrative and management programs, and the plan of action in regard to the forests, as well as the result of the assessment. Section A will be posted on SCS web page (www.scscertified.com) at most 30 days after re-certification. Section B contains more detailed information for the use of the company.

Certification process

Re-certification process of Rohden, Fazenda Rohsamar, in Juruena region, northwest of Mato Grosso State, Brazil. Rohden manages a forest management unit of 25,100.00 hectares where more than 40 native tree species are harvested. The most important species are: angelim-pedra, angelim-amargoso, caixeta, cupiuba, cerejeira, cedro-rosa, cedrorana, ipê, jatobá, garrote, garapeira, and tauari.

Maximum annual harvesting area = 1,200 ha.

Approximate volume harvested annually = $25,000 \text{ m}^3$ with a mean of 20.8 m^3 /ha.

FOREWORD

SCS – Scientific certification Systems, a certification body accredited by FSC – Forest Stewardship Council, was contracted by ROHDEN INDÚSTRIA LÍGNEA LTDA to carry out the re-certification process for the natural forest management at Fazenda Rohsamar, located in the Juruena region, State of Mato Grosso. According to FSC/SCS system, forest operations that comply with the international standards for forest management can be certified as "well managed" and, therefore, will be eligible to use the FSC logo for market purposes.

In July, 2008, an SCS interdisciplinary team of specialists in natural resources was contracted to perform the evaluation. The team collected and analyzed several documented material, performed public consultation through e-mail and regular mail, performed interviews, and field and office audits for four days at the property of the applicant for the re-certification assessment. In July, 2009, a new visit was paid to verify the treatment given to the CARs issued after the previous assessment. After completion of data collection, the team concluded that the company complies with all FSC criteria and recommended its certification. This report was drafted with the objective to support the recommendation for FSC certification of the natural forest management in the Juruena region, State of Mato Grosso, at Fazenda Rohsamar, of ROHDEN INDÚSTRIA LÍGNEA LTDA, in continuation of the already existing certificate (SCS-FM/COC-00063N). Some major corrective actions request were issued by the assessment team after the field audit. These were handed to Rohden which complied with all of them prior to the finalization of this report, as verified by SCS. If recertification is granted, SCS will post this public summary on its web page (www.scscertified.com).

INDEX

FOREWORD	2
SECTION A – PUBLIC SUMMARY AND BASIC INFORMATION	3
1.0- GENERAL INFORMATION	3
1.1- DATA REQUIRED BY FSC	3
1.2- FORES MANAGEMENT CONTEXT	
1.2.1- Environmental context	
1.2.2- Socio-economic context	
1.3- FOREST MANAGEMENT	
1.3.1- Background	
1.3.2- Areas outside the scope of certification	
1.4- MANAGEMENT PLAN	
1.4.1- Management Objectives	
1.4.2- Forest Composition	
1.4.3- Silvicultural Practices	
1.4.4- Estimate of the sustainability of forest productivity	
1.4.5- Estimate of the planned and the present production	
2.0 - STANDARDS USED IN THE ASSESSMENT PROCESS	
3.0 - ASSESSMENT PROCESS	13
3.1- ASSESSMENT DATES	13
3.2- ASSESSMENT TEAM	13
3.3- ASSESSMENT PROCESS	14
3.3.1- Itinerary	
3.3.2- Assessment of the Management System	
3.3.3- Stakeholder consultation	18
3.3.3.1- Model – Public Consultation on Rohden Indústria Lígnea Ltda. – Fazenda Rohsamar.	10
3.3.3.2- Model – Public Consultation Questionnaire of Rohden - Fazenda Rohsan	
5.5.5.2 Model Tubile Consultation Questionnaire of Ronden Tubile Ronsul	
3.3.3.3- Summary of public concerns and responses from the team	
3.3.4– Other Assessment Techniques	
3.4 – Time Spent in Assessment	
3.5 – Process to Determine Conformances	
4.0 – RESULTS OF THE EVALUATION	23
4.1 - Main Strong and Weak Points in the Performance of Rohden Indústrias Lígneas Ltda	a in
Relation to FSC P&C	24
4.2 - Pre-conditions or Major CAR's	27
5.0 – DECISION ON THE CERTIFICATION	28
5.1 – RECOMMEDATION ON CERTIFICATION	28
5.2 – Initial Corretive Actions Required (CAR's)	

5.3 – Recommendations	34
6.0 – FOLLOWUP ASSESSMENTS	35
7.0 - Summary of SCS procedures regarding the investigation on complain	nts
	35

SECTION A – PUBLIC SUMMARY AND BASIC INFORMATION

1.0 GENERAL INFORMATION

1.1 – DATA REQUIRED BY FSC

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Type of certification	Single area; single man	nagement plan.
Number of FMU		1
Number of FMU under assessment with less than 100 ha		
From 100 to 1,000 ha		
From 1,000 to 10,000 ha		
Over 10,000 ha	1	
Location of the forest to be certified	(CAMP)	(BORDER VERTEX)
Latitude	10°31′51,07" S	attached
Longitude	58°28'41,04" W	attached
Forest region	Tro	pical
Total forest area under evaluation included in the FMU	25,100 ha	
With less than 100 ha		
From 100 to 1,000 ha		
From 1,000 to 10,000 ha	25,1	00 ha
Over 10,000 ha		
Land tenure	Private property (100 %)	
Number of forest workers (including contractors') in action on the certified area	144 workers in the industry and 14 in the forest.	
Forest protection area, protected from harvesting activities and managed preferentially for conservation.	The forest protection area covers 5,457.7342 ha with 915.9204 ha as the control area (5%) and 4,541.8138 ha as APP	

Forest area defined as High Conservation Value Forest	A mountain area with 1,170.8740 ha was defined as HCVF.
List of high conservation values present	Wildlife; vegetation; scenic value areas which are sensitive due to physical characteristics such as presence of water springs, waterfalls, and cliffs.
Productive forest area	19,642.8129 ha
Productive forest area classified as "plantations" for the calculation of the Annual Accreditation Rate (AAF)	N/A
List of commercial timber included in the evaluation (scientific and common names)	Angelim-amargoso (Vatairea sp.), agelim-pedra (Hymenolobium sp.), caixeta (Simarouba amara), canela-fedida (Ocotea sp.), caucho (Castilla sp.), cedrorana (Cedrelinga sp.), marinheiro (Guarea sp.), cedro-rosa (Cedrela odorata), cerejeira (Torresea acreana), cumaru (Dipteryx odorata), cupiuba (Goupia glabra), garapeira (Apuleia sp.), garrote (Bagassa guianensis), ipê (Tabebuia sp.), jatobá (Hymenaea sp.), cachimbeiro (Couratari sp.).
Approximate annual volume authorized for harvesting	
List of jointly certified FM/CoC product categories and, therefore, eligible for trading as FSC products.	Toras de madeira tropical Tropical logs

1.2 FORES MANAGEMENT CONTEXT

The native forest management developed by Rohden at Fazenda Rohsamar must follow the norms, and national and state laws pertaining to the activity. The following main regulations must be complied with:

At federal level:

a. The Brazilian Forest Code (Law 4771/65) and pertaining Normative Instructions.

At State level:

- a. State Environmental Policy (Law 5887/95)
- b. Approval of the Management Plan by SEMA (State Environment Secretary)
- c. AUTEX (authorization for harvesting)
- d. GF (document on forest origin) and Bill of Sales for the transport of logs
- e. Bill of Sales issued when trading products.

At municipal level:

a. Payment of ISSQN (services tax), when using services provided by third parties.

Moreover, payment of all labor taxes at federal level is mandatory, which include:

a. Social security

- b. Severance fund (FGTS)
- c. Contribution to corporate bodies (Union fees)

1.2.1 Environmental context

The property of Rohden Indústria Lígnea is located in na área known as pre-Amazon, with a forest classified by RADAN (1974) as an "Open Semi-deciduous Tropical Rainforest with Palms and Lianas". A macro-zoning performed by the company in mid 2000 revealed the existence of a distinct type of vegetation stretching across 1,170.8740 hectares at the upper portion of a mountain range in the area. Traces of the last glaciation, when the climate in the Amazon was drier, are found in this area. Due to the soil characteristics in this area, species that are not found in lower forest sites were maintained in the cerrado environment. The junction of these biomes is rich in biodiversity, both in wildlife and vegetation. The phytoecologic environment as a whole is characterized by an evergreen vegetation with both permanent and deciduous foliage. It shows, also, a closed canopy, heavy biomass, and some emergent trees varying from 30 m to 50 m in height. Its upper stratum is dominated by heavy canopy trees reaching 50 m in height such as castanheira (Bertholletia excelsa), cedrorana (Cedrelinga sp.), and other evergreen trees, as well as other not so tall trees such as cerejeira (Torresea acreana), and ipê-amarelo (Tabebuia sp.); at intermediate strata there are species such as caucho (Castilla ulei) and garrote (Bagassa guianensis), most of them evergreen. The next lower stratum shows palms such as palmito (Euterpe sp.) and babaçu (Attalea speciosa); at the lowest stratum there are regenerations of various species, short trees such as amescla (Protium sp.), small palms such as buriti (Mauritia sp.) and tucunzeiro (Astrocaryum aculeatum). At high sites, on top of the mountain range, there are species that are characteristics of the cerrado, grasses, and short and crooked trees such as açoita-cavalo (Luehea sp.) and pau-santo (Brosimum guianensis), as well as some forest species such as cerejeira (Torresea acreana) and roxinho (Peltogyne sp.) growing in form and height like cerrado species.

According to IBGE (1990), the compensated mean annual temperatures vary from 25° C to 27° C. The mean of the maximum temperatures ranges from 31° C to 33° C, and the mean of the minimum temperatures ranges from 21° C to 24° C. The mean annual rainfall ranges from 1,800 mm to 2,800 mm with important variations through time. Although the rainfall is regular, its distribution during the year varies. The rainy season occurs from October to May, and the dry season from June to September. Distinct off-season dry spell can occur from November to December.

The hydrology is formed by Rio Juruena Basin. This river is a tributary to Rio Tapajós, along with a large number of both permanent and seasonal streams. There are several rivers such as Tucumã, Canamã, Piranha, and Vermelho which are tributary to Rio Juruena. The FMU managed by Rohden is located along Rio Juruena.

The soil in the region, according to Baldwin, Kellog and Thorp soil classification system, fits into the ZONAL Order, Sub-Order of lateritic soils from forested hot and temperate tropical environments. It belongs to the Podzol (Ultisol) great Group, specifically Red-yellow Podzol with textural horizon, non-hydromorphic, with presence of clay, low base saturation, low to medium drainage, variable depth, and sequential A, B, and C horizons. Its texture is sandy to sandy-clay. The soil fertility varies from low to medium. In some cases, there are rock outcrops.

The ecosystem at Fazenda Rohsamar is characteristic of a transition forest from Amazon forest to Cerrado and is rich in wildlife. Several species of mammals, birds, reptiles,

amphibians, and invertebrates take part in nutrient cycling, seed dispersal, and in energy flow. These processes not only maintain the forest but also help in its regeneration.

Pesticide use

There is no evidence of pesticide use in the FMU. This is because pesticides are totally unnecessary in natural forest management. The company has defined in its forest management proposal to preclude use of such products as much as possible by adopting proper silvicultural practices.

1.2.2 Socio-economic context

The Sustained Forest Management at Fazenda Rohsamar is established between Rio Juruena and MT-170 highway, in the southern section of Juruena Municipality, 36 km from the Rohden Indústria Lígnea industrial park in Juruena city. The FMU is at 140 km north of Juína city and 120 km to the west of Aripuanã city by MT-208 haighway. Its neighbors are: to the east, Rio Juruena and Japuíra Indian Area across the river; to the southwest, large landholdings with established grazing lands; and to the south, an INCRA settlement area known as Vale do Amanhecer and a property of Madeireira Faxinal where a sustained forest management unit and grazing lands are established. The main economic activities in the region are extraction of forest products and logging; these are complemented by extensive both milk and beef cattle grazing. There are some gathering of Brazil-nut and heart-of-palm harvesting.

Land squatting is frequent in the region by peasants from social movements, mainly from the neighboring State of Rondônia. They create illegal land trading for cattle grazing. There is also the Japuira indian area located to the east of the company's management area, across the 800 m wide Rio Juruena. In spite of the proximity, the width of the river limits the access and, as to date, no indigenous people has been seen on the management area, The infrastructure in the region is extremely poor. Because the roads are not paved, they become useless during the rainy season. At Rohden FMU and surrounding areas, the same lack of infrastructure holds, as well as lack of basic services for the local population. However, the activities developed by Rohden have generated some benefits to the population in the aspects of informal education, and generation of both direct and indirect jobs that stimulate the regional economy. Furthermore, Rohden has provided effective improvements in tax collection, job landing, and in general social conditions.

1.3 FOREST MANAGEMENT

1.3.1 Background

Rohden Indústria Lígnea Ltda plays in the world market since 1980 with manufacture of solid doors, frames, linings, finger-joint panels, flooring, and semi-finished lumber. It exports its products to Holland, Belgium, Germany, Italy, France, Spain, England, United States, the Caribbean, China, and Japan. This company is known by the quality and originality of its products of which 70 % are exported. In the domestic market, its businesses are focused in the States of Rio de Janeiro, Minas Gerais, São Paulo, and Espírito Santo.

In 1990, Rohden Indústria Lígnea established its forest base on the banks of Rio Juruena, in a 25,000 hectare native forest in the municipality of Juruena, within the Amazon Forest in the State of Mato Grosso. In 1992, the company started to operate under the

Sustained Forest Management Plan and became a pioneer in sustained log harvesting in the state. This is one of the first companies to operate under reduced impact management and forest enrichment with native tree species.

By watching the world market trends, the company applied for forest certification in 2003 in order to reinforce its characteristics of sustainability, adequate use of natural resources, and social responsibility toward its workers and the neighboring communities.

Rohden owns and area of 25,100.55 ha of which 20,106.07 ha are registered as Legal Reserve. This corresponds to 80.1 % of the total area, in compliance with Law 4771 (Brazilian Forest Code). The whole area is subject to certification. At present, the company holds an area of 6,471.53 ha to be harvested, since 14,819.7882 ha have been already harvested on the property. The permanent preservation areas add up to 4,541.8138 ha. These are distributed into 1,170.874 ha in the mountain range, 550.34 ha along Rio Juruena, and 2,230.5977 ha along other streams and temporarily flooded areas. There are, also 915.92 ha of untouched forest, represented by APU 02, in compliance with FSC norms. Therefore, the total preservation area is 5,457.7342 ha, which represent 21.74 % of the property. In summary, the distribution of areas by destination is shown in Table 1.

Table 1. Distribution of Rohden Indústria Lígnea Ltda property areas by type of use.

Categories	Areas (ha)
Total farm area	25,100.5471
Permanent preservation area	4,541.8138
FSC control area	915.9204
HCVF area	1,170.8740
Preserved area	5,457.7342
Area harvested under uncertified management	14,819.7882
Productive forest area (certified management)	6,471.5319
Forest Management Unit (FMU)	25,100.5471
Legal Reserve	20,106.0740

1.3.2. Areas outside the scope of certification

The company has no other area. Therefore, all areas managed by Rohden are within the scope of certification.

1.4 MANAGEMENT PLAN

1.4.1 Management Objectives

General Objective:

Wood production in a sustainable manner to supply Rohden Indústria Lígnea Ltda., in conformance to the law, in both federal and state levels, and the forest activity sustainability principles.

Specific Objectives:

1.- To create practical and theoretical mechanisms for a sustainable forest management so that protection of the existing biodiversity in the forest is ensured and the forest be kept in production indefinitely, with help from research institutions and environmental agencies.

- 2.- To use reduced impact harvesting techniques (RIH) in order to reduce negative impacts to the forest.
- 3.- To create, establish, and implement a monitoring plan on activities developed in forest management to reduce negative impacts and to improve cost reduction techniques.
- 4.- To adopt silvicultural and selective harvesting treatments to maintain a short cycle between harvestings.
- 5.- To establish a wildlife control system to identify its food and protection needs for the sustainability of the foreest.
- 6.- To establish harvesting systems that preserve water sources.
- 7.- To maintain FSC (Forest Stewardship Council) and SCS (Scientific Certification Systems) certified management principles.

1.4.2. Forest Composition

The forest in the region is characterized as a sub-montane open tropical rain forest with presence of palms in 40 % of the property; and a contact or transition forest between the sub-deciduous and the open tropical rainforest (according to the classification by FEMA – State Environment Foundation) in the remaining part. These are part of the region known as Pre-Amazon where species characteristics of Rio Paraguay Basin and Amazon Forest occur. Therefore, a great variability of plant species is present. In 3% of the area there are atypical forms of vegetation, found near the higher spots on the terrain. There are small and very crooked trees and many palms. There are areas subjected to human influence by forest exploration in some points. Where forest exploration is older, its signs are being obliterated by the natural regeneration. In more recent exploration areas, these signs are still visible.

The Rohden property (25,100 ha) for forest management shows different phytoecologic environments (Table 2).

Table 2. Characteristic phyto-ecologic environments in the region of Rohden Indústria Lígnea Ltda operations.

Ecosysistems	Areas (ha)
Semi-deciduous tropical rainforest with lianas and palms	23,379.3310
Mountain range/cerrado (savanna)	1,170.8740
Differentiated vegetation along Rio Juruena banks	550.3451
TOTAL	25,100.0000

1.4.3 Silvicultural Practices

The silvicultural system in use is the polycyclic. For conditions as in the Amazon upland forest, Embrapa named such system as Sistema Brasileiro de Manejo Seletivo – SBMF (Brazilian System of Selective Management). In this system, the rotation is divided into intervals or cutting cycles. In each cycle, mature trees are harvested along intermediate cuttings. In the present case, an initial 25-year cycle will be adopted, according to the current law. The justification for the application of this system is the result of research which indicated this to be the best system to manage tropical rainforests such as this. The sequence

of operations in this system to be applied by Rohden's project at Fazenda Rohsamar is presented on Table 3.

Table 3. Sequence of operations involved in Rohden Indústria Lígnea Ltda management

YEAR	OPERATIONS
N-1	Demarcation of the Forest Management Unit (FMU); Demarcation of the Annual Production Unit (APU); Demarcation of Work Units (WU) and direction trails; 100 % inventory of trees and micro-zoning of production units; Data processing and mapping of production units; Planning and construction of the main roads; Selection of trees for harvesting and harvesting operation planning; Secondary roads and logyard planning and construction; Drafting of Annual Operational Plan (AOP); Drafting of WU maps.
N	Cutting of selected trees with directed felling; Skidding with forest tractor (Skidder); Bucking, measurement, and tagging of logs; Transport to the main yard; Beginning of transport to the industry; Establishment and first measurement of permanent plots; Data collection for the evaluation of impacts; Enrichment plantings with native species.
N+4	Remeasurement of permanent plots; Assessment of the development.
N+8	Remeasurement of permanent plots; Assessment of the development.
N+12	Remeasurement of permanent plots; Assessment of the development.
N+16	Remeasurement of permanent plots; Assessment of the development.
N+20	Remeasurement of permanent plots; Assessment of the development.
N+24	Remeasurement of permanent plots; Assessment of the development.
N+25	Beginning of the second cycle.

Concepts and criteria for the application of silvicultural treatments

Studies developed on the Amazon upland by Silva *et al* (1997) and Piña-Rodrigues *et al* (1999) indicated mean annual increment (MAI) of up to 1.0 m3 in fast growing species such as sumaúma (*Ceiba pentandra*) and breu-sucuruba (*Trattinickia burseraefolia*). These results indicate the potential of forest tree species, as long as the correct silvicultural practices are applied. This was demonstrated with the management plan applied in the Tapajós and Jarí

regions where the 40 m³/ha harvesting intensity, together with silvicultural treatments at each 10 years produced an increment of 0.7 to 1.0 cm/year in diameter and 2 m³/ha.year, with a cutting cycle of 30 years (Silva, 1997). In the case of Martins FMU, with harvesting intensity from 10 to 20 m³/ha, it is likely that this intervention is not necessary because the quantity of vines is smaller and the gaps are relatively small.

The experience gained with management on the upland indicates that the moderate intensity harvesting is recommended, by avoiding the opening of wide gaps with removal of 30-40 m³/ha, combined with 25- to 30-year cutting cycles (Silva, 1997). According to this author, other harvesting intensities and silvicultural treatments must be tested to further reduce the cutting cycle.

Although experimental data indicate higher increments in wood production through the application of silvicultural practices, there is scant of no information about operational costs and the economic viability of this activity, mainly when applied on a large scale. However, the company is applying the silvicultural treatments on an experimental basis in order to determine the balance between the reduction in the harvesting cycle and its economic viability.

At the Annual Production Unit (APU) 04, two experimental plots were established to test opening of the canopy with 1.0 ha each where all trees greater than 30 cm in diameter were measured and mapped. After mapping, trees with low commercial value were chosen to be killed by girdling. Subsequent measurements will be done every other year after the establishment.

Utilization of Residues Generated at Harvesting

The industrial wood harvesting, mainly in tropical forests, leaves a substantial amount of residues in the form of branches and remnants of stems that are not adequate for industrialization. At Rohden areas, there will no be any utilization of such residues. They will be left in the forest for decomposition and release of the nutrients for the remaining trees.

1.4.4 Estimate of the sustainability of forest productivity

The concept of Allowed Harvesting was applied in order to regulate production. This term is defined (FAO, 1978) as the mean quantity (of wood or other product) that can be harvested, annually, in a management unit or, periodically, within a 5-10 year time frame. When the harvesting is specified in annual terms, it is known as Annual Allowed Harvesting (AAH). In tropical forests, AAF is determined on the basis of the mean annual increment (MAI) and the losses during the operations. The total reduction in volume is represented by the production (P) plus the impact or damages caused during the harvesting (D). MAI is estimated as the increase in volume (Vt) in a given period of time (T):

MAI = Vt/T

AAH = (1-D%).MAI

Where D% = D/(P+D)

For the Rohden management plan, a 25-year harvesting cycle on a 25,000 ha forest area subdivided into 20 APU (Annual Production Units) with 1,250 ha each on average was adopted, with harvesting intensities of up to 25 m³/ha.year. This is to complete the first harvesting cycle of the forest rotation to supply industrial logs on a medium term basis. On

the basis of information coming from the permanent plots in each production unit, the company will reassess whether to maintain or to discard the initially established harvesting cycle.

1.4.5 Estimate of the planned and the present production

The volume to be harvested at Rohden FMU must be around 25,000 m³ of logs, with an average of 20.8 m³/ha to be processed at Juruena. Trees of commercial species with dhb of 45 cm and over are inventoried for harvesting.

For APU 16, the species considered for harvesting are indicated on Table 4. In September, 2006, 30 % of the volume requested for harvesting were allowed. This corresponded to 305 ha; only two years later were the remaining 70 %, corresponding to 661 ha, allowed for harvesting. An average of 40 species were harvested.

Table 4. Species for harvesting and annual volumes (m³/year) planned for APU 16.

		Volume (m³	n³/ha.year)	
Popular names	Scientific names	2006 (30 %)	2008 (70 %)	
Abobrão	Schefflera morototoni (Aubl) Decne.&Planch	47.8524	0	
Alecrim	Sloanea lasiocoma K. Schum	389.2910	0	
Angelim-amargoso	Andira fraxinifolia Benth	338.0396	553.3260	
Angelim-pedra	Dinizia excelsa Ducke	572.2762	718.8502	
Angelim-saia	Parkia pendula (willd)Benth ex Walp	127.0349	0	
Angico-branco	Pithecellobium trapezifolium Benth	95.9955	0	
Breu	Protium heptaphyllum (Aubl) March	65.3408	0	
Cachimbeiro	Couratari guianenses Aubl.	287.8165	0	
Cajueiro	Anacardium giganteum Hanck ex Engl	65.4208	0	
Cambará	Erisma uncinatum Warm	464.5281	782.0345	
Canela	Ocotea indecora (Schott) Mez	54.5742	0	
Canela-bosta	Nectandra cuspidata Nees	133.3615	0	
Canelão	Ocotea puberula (Rich) Ness	162.7935	155.1095	
Caroba	Jacaranda copaia (Aubl) D. Don	135.5055	0	
Catuaba	Anemopaegma arvensis (vell.) Stellfeld ex de Souza	164.9880	83.6162	
Caucho	Castilla ulei Warb	564.6027	0	
Caxeta	Simarouba amara Aubl	301.5979	461.7759	
Cedrorana	Vochysia maxima Ducke	220.3761	276.2441	
Cedro-rosa	Cedrela odorata L.	137.4547	194.1392	
Cerejeira	Amburana acreana (Ducke) A. C. Sm	331.7482	604.6547	
Copaiba	Copaifera guianensis Desf	199.0420	292.7617	
Cumaru	Dipteryx alata Vogel	84.8851	185.2117	
Cupiúba	Goupia glabra Aubl.	1720.8542	1,560.9567	
Farinha-seca	Polygonanthus amazonicus Ducke	12.8258	0	
Garapeira	Apuleia leiocarpa (Vogel) J. F. Macbr	181.2442	324.8765	
Garrote	Bagassa guianensis Aubl	728.3298	1,028.0252	
Guaritá-rajado	Astronium lecointei Ducke	257.3521	0	
Ipê	Tabebuia serratifolia (Vahl) Nichols	81.4007	111.2861	
Itauba	Mezilaurus itauba (Maisn) Taub. Ex Mez	93.8145	203.4248	
Jatobá	Hymenaea Capanema Ducke	222.7807	388.2142	
Jequitibá	Cariniana rubra Gardner ex Miers	79.0171	0	
Marinheiro	Guarea guidonia (L.) Sleumer	28.0849	163.6695	
Mirindiba	Buchenavia tomentosa Eichler	182.3890	401.3421	
Paricá	Schizolobium amazonicum (Huber) Ducke	13.5830	53.3967	
Pau-ripa	Andira anthelmia (Vell) J. F. Macbr	31.1421	0	
Perobinha	Aspidosperma formosanum A.P. Duarte	43.9489	0	
Sucupira-amarela	Bowdichia nitida Spruce	167.3748	289.5553	

Sucupira-preta	Bowdichia virgilioides Kunth	107.5343	142.2774
Sumaúma	Ceiba pentandra (L.) Gaertn	73.3966	0
Timburi	Enterolobium maximum Ducke	51.5344	0

2.0 STANDARDS USED IN THE ASSESSMENT PROCESS

The standards used in the recertification assessment of Fazenda Rohsamar, of Rohden Indústria Lígnea Ltda., were the principles, criteria, and indicators defined by the Brasil-Work Group of FSC (Forest Stewardship Council) for the Brazilian Amazon upland forest management. This document was approved by Board of Directors of FSC International on March 24th, 2002. The standard can be found on FSC Brasil web page (www.fsc.org.br).

3.0 – ASSESSMENT PROCESS

3.1 ASSESSMENT DATES

• Public meeting: June 14th, 2008 – Juruena

• 1st Field audit: July 14th to 18th, 2008

• 2nd Field audit: July 13th to 17th, 2009

3.2 ASSESSMENT TEAM

Dr. Vanilda Rosângela de Souza is a forestry graduate from USP (University of São Paulo) with doctor degree from UFPR (Federal University of Paraná) in Wood Technology. She has over twenty year experience in the profession. She held the position of researcher, consultant, and service provider for private companies in Brazil. For the forest departments in companies, she has developed, established, and carried out forest quality control programs. She has also developed research to improve forest productivity and wood quality. She has worked in timber harvesting for more than seven years. In the environmental sector, she has carried out studies and developed programs to minimize environmental impacts caused by forest activities. She has developed management programs to deal with waste generated by forest operations. She has also developed requirements handle chemical products and introduced new products. She has coordinated natural forest fragment studies and projects on reclamation of degraded areas. In the social sector, she has developed human resources qualification programs (training and recycling), involving subjects such as productivity, quality, labor safety, and environment. She has developed projects, established, and carried out environmental education programs for the northern region in the State of Paraná. In the industrial sector, she has developed and carried out programs to integrate Forest x Industry aiming to improve the final product cost and to reduce the production costs; she has also carried out studies and programs for a better use of raw material. She coordinates the SCS certification program in Brazil through Sysflor and has acted as auditor in several processes of preliminary evaluations, certification and recertification of forest management units, including both planted and natural forests, as well as chains of custody of a variety of wood products.

Dr. Ana Cristina Mendes de Oliveira: biology graduate from Universidade Federal de Minas Gerais, M.Sc. in animal behavior and Doctor degree in sustainable development in the humid tropics from the Universidade Federal do Pará. She is adjunct professor III at the Department of Biology of the Universidade Federal do Pará, advisor professor of the graduate program in zoology of the Museu Paraense Emilio Goeldi, and collaborating researcher at Instituto de Pesquisa Ambiental da Amazônia. Dr. Ana Cristina has spent 13 years in the Amazon, working in ecology, mainly with wildlife. In forest certification, she has participated as auditor in 10 forest certification and re-certification processes in the Amazon. Her experience extends to auditing in planted forest management in the southern region in Brazil.

Rossynara Batista Cabral Marques: forestry graduate (1995) from Instituto de Tecnologia da Amazônia and specialized in environmental engineering from Universidade Federal do Amazonas (UFAM). Presently, she is pursuing a specialization in forest administration at Universidade Federal do Paraná (UFPR). She has experience in forest management in the Brazilian Amazon and in the management of projects in partnership with logging companies and communities. As the coordinator of the Promising Initiative Component of the ProManejo project of Ibama for five years, she articulated forest management assistance actions, as well as the implementation of training centers in the Amazon among different government environmental agencies. Her experience in community forest management includes work carried out in Latin America. Since 2000, she has participated in the MFC Work Group in which she has contributed with public policy proposals. Her experience in forest certification involves work with Imaflora (Brazil) and Centro de Investigación y Manejo de Recursos Naturales Renovables (CIMAR - Bolívia). In the social area, she established and is presently in charge of the development in the community forest management plan within conservation units in the State of Pará. The work includes support for training, adjustment of harvesting techniques for reduced impact on the communities, work safety, and community administration. She worked, also, as an aid to Instituto de Desenvolvimento de Florestas do Estado do Pará (IDEFLOR) at the board of the Public Forest Management with the assignment to draft and implement a system to monitor the Pará State forest concession process. Since 2007, she has worked for Sysflor (Certificações de Manejo e Produtos Florestais Ltda.) which represents SCS (Scientific Certification Systems) in Brazil as auditor in forest management and chain of custody. So far, she has completed more than 10 audits in chain of custody and 6 in forest management in northern Brazil.

Pedro Bernardo da Silva Neto: forestry graduate from Universidade Federal Rural da Amazônia/UFRA, in the State of Pará. Presently, he is taking a specialization course in geotechnology at IESAM. He has more than eight years of professional experience in sustainable forest management in the Amazon and has worked for several institutions and projects such as SIPAM (Amazon Protection System), CIFOR (Center for International Forestry Research), and SECTAM (the Executive Secretary of Science, Technology, and Environment) in the State of Pará. He has experience in following the development of forest management projects and has acted as coordinator of the Remote Sensing Nucleus of IDEFLOR (Forestry Development Institute of the State of Pará).

The assessment for Fazenda Rohsamar recertification process started with a public consultation in mid July, 2008. FSC and a number of environmental, social, and economic institutions with activities at local, regional and national levels were notified through both email and regular mail.

The multidisciplinary team of specialized auditors in forestry, environment, and social areas started its work by verifying documents and formal procedures in management. Field audits were performed in two occasions: in July, both 2008 and 2009. In the field work, all auditors verified the forest harvesting operational procedures, including planning, felling, transport, and labor safety, as well as the environmental aspects.

On the last day of assessment in both field audits, the auditors convened to analyze the information gathered during the field work and to confront them with the Principles, Criteria, and Indicators of FSC Standards for Certification. In closing, major and minor corrective actions required (CAR) were determined for the company to comply with. These were presented at the closing meeting with the company directors and technical staff.

3.3.1 Itinerary

The assessment work was performed according to the itinerary presented on Tables 5 and 6.

Table 5. Itinerary of field visits by the auditors (first field visit).

Dates	Activities/visits	Auditors
	Opening meeting: brief presentation of audit procedures; presentation of the activities developed by the company. Planning of the logistics of the field audit.	all
T. J. (1.4th/o.o.	FMU areas: post-harvesting areas; HCVF areas.	Ana Cristina
Jul./14 th /08	Analyzis of documents (programs, maps, projects etc.)	Vanilda
	Analyzis of documents (programs, maps, projects, management plan, AOP, AUTEX etc.)	Rossynara
	Public meeting in Juruena	all
Jul./15 th /08	Visit to the harvesting area, checking of working conditions of cleanliness and labor safety.	Vanilda
	Visit to the FMU: pré-harvesting areas and control area.	Ana Cristina

	Visit to the Municipal Secretary of Environment. Visit to Renascer Settlement. Verification of compliance with labor and labor safety laws.	Rossynara
	Verification of documents on monitoring and environmental surveys. Verification of strategic planning an the economic conditions of the company.	Vanilda
Jul./16 th /08	Visit to FMU borders and verification of documents.	Ana Cristina
	Verification of the company's social development, environmental education, and training programs.	Rossynara
Jul./17 th /08	Verification of the company's management chain of custody and operational procedures.	Vanilda
	Verification of documents and the tree selection system. Verification of the industry's chain of custody.	Ana Cristina
	Verification of the industry's chain of custody and its control system.	Rossynara
	Closing – meeting to assess the compliance with P&C and drafting of conditions.	all
Jul./18 th /08	Closing meeting and presentation of the assessment results to the company.	all

Table 6. Itinerary of field visits by the auditors (second field visit).

Dates	Activities/visits	Auditors
Jul./13 th /09	Analysis of documents and structuring of the data bank to characterize Rohden areas for the audit, in Cuiabá.	Pedro and Rossynara
Jul./14 th /09	Trip from Cuiabá to Juruena	Pedro and Rossynara

	Audit opening meeting: breef presentation of procedures used in auditing; Meeting to plan the logistics of the field audit.	Pedro and Rossynara
	Analysis of documents (programs, maps, projects etc.).	Pedro and Rossynara
Jul./15 th /09	Identification of stumps in different areas to trace the chain of custody. Verification of post-harvesting damages caused to the environment in areas harvested in 2008. Verification of the road system: opening skidding of trails, conservations and maintenance of roads.	Pedro and Rossynara
Jul./16 th /09	Verification of documents pertaining to monitoring and surveys of the environmental and social aspects. Verification of the company's management chain of custody control system. Meeting to assess the compliance with the	Pedro and Rossynara
	P&C and drafting of conditions	Pedro and Rossynara
Jul./17 th /09	Closing meeting and presentation of the results of the assessment to the company.	Pedro and Rossynara

3.3.2 Assessment of the Management System

Forest operations were assessed by visiting areas where these such as felling and skidding took place, in order to evaluate the impacts caused and the recovery of the forest. In terms of soil conservation, the conditions of conservations and maintenance of the road network were verified. These involved the main and the secondary roads, as well as the opening of skidding trails.

For the analysis of the forest aspects, a data base structured by auditor Pedro was used as a support tool. This was obtained through georeferenced information provided by the company and matched with a 2009 Landsat-5 image and a SRTM radar image covering the whole project area. This structure was assembled in a GIS environment (ArcGis version 9.2) and connected to a GPS to permit real time navigation in the management area. With this base, it was possible to match the planned Macrozoning of the Forest Management area with the effectively performed activities. Additionally, operations carried out at APU 2006 were characterized on the GIS so that it was possible to confirm whether the logistic operations in these areas were as proposed in the Annual Operational Plan.

In the environmental context, recently harvested areas and those harvested in different years according to the low impact harvesting system of Rohden were visited. Also, possible environmental impacts to parts of the water streams crossed roads and under the influence permanent FMU infrastructure evaluated. Wildlife monitoring work and pre- and post-harvesting silvicultural treatments developed in the FMU were checked and the criteria for the choice of trees for harvesting were verified in the company's computerized system.

In order to assess the socio-economic aspects, the audit was performed through analysis of primary and secondary data with several representative instances of the local and regional civil societies, as well as public agencies pertaining to the environment, the forest activity, and the protection of indigenous tribes. Company employees and representatives of the local society present in the public hearing held in Juruena were interviewed. Safety conditions as well as the aspects of labor, transport, meals, collective agreements, economic sustainability of the venture, operational training, cleanliness, and socio-environmental actions were also evaluated.

The team of auditors concluded that the analysis of documents and the field visits were sufficient and representative in both intensity and quality for the verification of forest operations. The representativeness is essential in the assessment of management so that adequate decision can be taken about its certification. The team used the time of field visits to check phytographic formations where Rohden is included and the relation of the company with the local society.

3.3.3. Stakeholder consultation

According to SCS procedures, the consultation to the most relevant local stakeholders is an important component in the process of assessment. Consultations were performed prior to the filed work through correspondence to a large number of entities (Annex 1). During the audit, the consultations were performed by interviews with local leaderships and representatives of several segments of Juruena civil society. Interviews involved union leaders, representatives from public agencies, private organizations, political leaderships, and residents in the neighborhood. The main purpose of the consultation was to gather information about the strong and weak points of Rohden forest management, as well as about the nature of interactions between the company and the populations in the neighborhood.

The main stakeholders in this assessment were identified on the basis of an SCS data bank, a list presented by the company, a survey of other sources, and the list from FSC-Brasil. The following groups were defined as the main stakeholders:

- Company employees, including management and field personnel;
- Contractor companies
- Neighboring landholders;
- FSC-Brasil members;
- Local and regional members of environmental NGOs;
- Local and regional members of social NGOs;
- Log buyers;
- Federal, State, and Municipal environmental agency representatives (licensing, control);

• Other relevant groups.

The assessment team contacted organizations and individuals from the main stakeholders. The Public Consultation Questionnaire and a letter of invitation were sent to 242 organizations and individuals by e-mail and regular mail, with a description of the certification process. At that moment, an opportunity was offered for comments (Annex 2). The organizations or individuals that agreed to have their names included in the report, as well as those that were contacted but did not respond are listed in Annex 2.

3.3.3.1. Model – Public Consultation on Rohden Indústria Lígnea Ltda. – Fazenda Rohsamar

PUBLIC MEETING

FSC Forest Certification of Forest Management in the Brazilian Amazon Upland Forest in the region of Juruena - MT

Rohden Indústria Lígnea Ltda.

SCS – Scientific Certification Systems (<u>www.scscertified.com</u>) –, an entity accredited by **FSC** (*Forest Stewardship Council*) for Forest Certification, invites you to a **Public Meeting** that sets the beginning of the field audit of the **FSC Certification** applied for to this institution by Rohden Indústria Lígnea Ltda. The farm to be assessed in the company's property is in the municipality of Juruena, in the State of Mato Grosso. In these localities, the management of native species covers 25,100 ha to be certified.

Rohden Indústria Lígnea Ltda holds, among its main activities, the commitment to supply of wood for the production of doors, panels, furniture, frames, and the establishment and management of native forests for its own use.

As the result of its operations, the company generates 206 direct jobs. Additionally, Rohden develops partnerships with research institutions and universities in the State of Mato Grosso and maintains an environmental education program as well as a large number of social programs geared toward the population in its forest units.

In environmental terms, the company develops several works on monitoring and conservation of biodiversity, soil, and water resources. Rohden Indústria Lígnea Ltda has sought to minimize, as much as possible, the impact of its activities on the environment through the implementation of appropriate management techniques.

The process of Forest Certification includes the **participation of the people** and of the **civil society**. To that effect, we invite you to the **Public Meeting** to be held on Julu 14th, 2008, at Centro de Apoio ao Turismo, from 19:00h to 21:30h.

It is emphasized that participation of the most diverse instances representing the civil society is fundamental, since Forest Certification assumes the practice of full citizenship by individuals and institutions, directly and indirectly interested on the subject. Likewise, the applicant must develop its forest management in conformity with FSC Principles and Criteria

that assume that the company must promote a management that is *socially fair*, environmentally adequate, and economically viable.

It is emphasized that the **Meeting** will be held without the presence of representatives from the company. Its objective is to gather suggestions and concerns that should gear field audits to assess how the forest management develops in the *social*, *legal*, *environmental*, and *economic* aspects. Therefore, your participation is important so that everybody can express his/her concerns, comments, suggestions, criticisms, or present new evidences that could be useful to the process. These will be recorded in full in the presence of all participants.

The meeting will be divided into two parts:

- a) A quick exposure of the Forest Certification process according to the FSC (Forest Stewardship Council) Standards. On this occasion, the participants can express their remaining concerns;
- b) Expression of concerns or aspects that the participants would like to have contemplated in the Rohden Indústria Lígnea Ltda Forest Certification Process;

If it is in your interest, you can find attached a **Public Consultation Questionnaire** to fill out. It must be sent to by e-mail to vanilda.shimoyama@sysflor.com.br or, if you prefer, through fax to (**0xx43**) **3535-4906**. In addition, if you have interest in obtaining more detail about FSC Standards for Certification of the Brazilian Amazon Upland native Forest, this cocument can be obtained from FSC web site (www.fsc.org.br), at the item "Certification Standards" that can be downloaded (in Word format) free of charge.

Therefore, **everybody is invited** to participate in the Public Meeting, **independently of having received the formal communication**. We appeal to you to publicize this event and the attached Questionnaire to institutions and persons that, in your knowledge, might have interest to participate in the process.

Sincerely,

Vanilda R. S. Shimoyama Rossynara Marques Aguiar

SCS/Sysflor auditors

3.3.3.2. Model – Public Consultation Questionnaire of Rohden - Fazenda Rohsamar

PUBLIC CONSULTATION QUESTIONNAIRE
Certification of native forests - Fazenda Rohsamar – Juruena (MT)

ROHDEN INDÚSTRIA LIGNEA LTDA

Name								
Institution								
Address for contact								
ZIP:				-				
							E-mail	
1. Do you know Roh	den, in Ju	ruena	r egio i Yes	n, State	of Ma	ato G		lo
2. Would you have a	ny comme	ent to	make a	about F	Rohde	n?		lo
3. What would be the	ese comm	ents?						
might have	special e	cologi	c impo	ortance	?			s, in Juruena region, in the State of Mato Grosso, that
6. Is there any aspec	ct in the en	nvironi	m enta Yes	l area t	hat yo	ou co		h of attention in the field assessment?
What would be thes	e environn	nental	aspec	cts?				
6.1								
6.2								
7. Is there any aspec			Yes	at you d	consid	der w		ntion in the field assessment?
7.1								
7.2								
institutions of the civ questionnaire to vani to publicize this quest	il society to the soc	o activ yama@ those	ely pa @sysfl who, i	articipat or.com n your u	e in tl . .br . If unders	ne FS you standi	SC Forest C prefer, it can ng, are perso	varied backgrounds and interests, or representatives from ertification Process. Therefore, we ask you to send this be sent by fax to (0xx43) 3535-4906 . We further ask you ons that can contribute to the process.
Process.						•		not imply co-responsibility in the Certification Process.

3.3.3.3 Summary of public concerns and responses from the team

Social and economic concerns

• A strong concern was detected from the part of the local society regarding the need to continue with the certification process of the company's FMU, given the socio-economic development at Juruena city.

Reply: Rohden has been operating in the wood market for 29 years and was one of the pionners in the adoption of reduced impact harvesting practices in the State of mato Grosso. Its FMU was certified (FSC) in 2004. The company owns na industrial park in the municipality of Rio do Sul, SC, and another in Juruena, MT. In Juruena, its industry covers na area of 120,000 m², of which 12,000 m² used by are buildings for production and administration sectors and offer wood manufactures to the market in the form of solid doors, frames, linings, finger-joint pannels, floorings, garden furnitures, French doors, and semi-processed wood. All certified wood are from the company's own forest management areas located 25 km from Juruena. Only in Juruena, the company generates 158 direct jobs and develops social projects such as promotion of reforestation in conjunction with the Secretary of Agriculture and the Environment and environmental education actions. In addition, it studies the possibility of a project to extract brazil-nut in company areas in partnership with local communities.

3.3.4 – Other Assessment Techniques

No other assessment technique was used other than the usual field visits, interviews, and checking of documents.

3.4 –Time Spent in Assessment

For the assessment of Fazenda Rohsamar, the team of auditors revised all documents that were sent for evaluation. The team travelled from their respective places of origin to the company site and performed the field assessment for 5 days each time. In addition, a certain amount of time was spent to identify the stakeholders and to send them the invitation and the questionnaire for consultation. The total time used by the team is shown on Table 7.

Table 7. Time in hours dedicated by the team to audit Rohden Indústria Lígnea Ltda forest management

Activity		Auditors				
	Vanilda	Cristina	Rossynara	Pedro		
Travel (round trip)	26	30	46	16		
Checking of documents	6	4	6	6		
Field	16	20	24	8		
Sytakeholders / invitation	-	-	6	-		
Closing (Jul.18 th , 2008)	4	4	4	4		
Closing session (Jul. 18 th , 2008)	3	3	3	3		
Sub-total	55	61	89	37		

3.5 – Process to Determine Conformances

The certification standards defined by FSC comprise three hierarquical levels: the principles, the criteria to look into each principle in detail, and the indicators for details in each criterion. According to the evaluation protocols of SCS Forest Conservation Program, the assessment team must collectively verify whether a given forest operation is in conformance with any applicable indicator within the relevancy of the certification standard. Each non-conformance with a criterion or sub-criterion must be evaluated in order to determine whether it constitutes a major or a minor non-conformance. Not all indicators have the same importance and there is no numerical form to determine whether an operation is in non-conformance. The team uses the collective judgement to evaluate each criterion and to determine its conformance. If an operation is evaluated as in non-conformance for a given criterion, then, at least one indicator must be evaluated as in a major non-conformance.

A Corrective Action Request (CAR) is defined for each non-conformance. Major non-conformances are denoted as Major CAR and minor non-conformances as Minor CAR or just CAR.

Interpretation of Major CARs (pre-conditions), CARs (Minor CARs), and Recommendations

Major CARs/Pre-conditions: correspond to major non-conformances, either alone or in combination with non-compliances of other requirements that results (or is likely to result) in a fundamental failure to achieve the objectives of the relevant FSC requirement. This non-conformance must be corrected or closed before the certification is issued. If a major CAR is determined after certification is awarded, the timeframe for correction is typically shorter than in the case of a minor CAR. The certification will become conditioned to the response from the forest operation to solve the pending issue in the given timeframe.

CARs or Minor CARs: these are corrective actions in response to minor non-conformances. They are typically limited in scale or can be characterized as unusual errors in the system. The minor corrective actions request must be complied with within a pre-determined timeframe after the certificate is awarded.

Recommendations: these are suggestions presented by the evaluation team, intending to help the company to achieve an ideal performance. Compliance with the recommendation is voluntary and does not affect the maintenance of the certificate. However, recommendations can become conditions if non-compliance with them affects some criterion.

4.0 – RESULTS OF THE EVALUATION

Conclusions reached by the assessment team in regard to strong and weak points of the forest operation in relation to FSC certification standards are presented in this section. Also, corrective actions request (major and minor) and recommendations for each principle are presented.

4.1 – Main Strong and Weak Points in the Performance of Rohden Indústrias Lígneas Ltda in Relation to FSC P&C

Principles	Strong Points	Weak Points	Measures
P 01:	Long term commitment with FSC	• Pending payment of taxes and fees	CAR
	 Long term commitment with FSC principles and criteria. Compliance with laws pertaining to forest management, with Management Plan duly registered at SEMA (State Secretary of Environment). Compliance with union laws. The APPs (Permanent Preservation Areas) are respected. All documents of the company operation are duly registered. Compliance with all agreements and treaties. The person in charge of the Management Plan is trained. The laws pertaining to the activity are complied with. Formal commitment of adherence to the maintenance of the forest on a long term. Respect to international agreements to which Brazil is signatory. No evidence that Rohden is involved in 		
P 02: Tenure and use rights and responsibilities P 03: Indigenous	 illegal timber harvesting. Well documented property titles. Peaceful land tenure. Forest management without use of traditional population knowledge. Respect for land tenure of neighboring communities. The forest management does not interfere with or jeopardize traditional rights of neighboring residents to land tenure or use. Not applicable – this is a company management that does not threaten any 	 Need to acquire new areas to continue with the management; Lack of maps showing adjacent neighbors. 	CAR 2008.16 2009.07
peoples' and traditional communities ' rights P 04:	indigenous or traditional populations rights.There is no discrimination regarding	• The evaluation of social impact is	CAR
Community relations and worker's rights	race, religion, sex, or political position of the workers. The workers are hired among residents in the region. The workers are qualified to undertake their activities The workers demonstrate understanding about environmental care pertaining to the activity. Good quality meals provided. Good quality water served and monitored.	 Meeds to structure work crews in the training program for workers involved in harvesting. Needs to adjust the Management Plan and steer the company's social actions according to the results of the social impact surveys. Needs to improve knowledge and procedures on operational practices, control of CoC, procedures on cleanliness and labor safaty and 	2008.06 2008.11 2009.02 REC 2009.01

	Well structured occupational health (PCMSO) and environmental risk prevention programs (PPRA). Existence of Collective Agreement and good image to the Workers Union. Good institutional image to the local society. The company efficiently monitors all procedures regarding workers health and safety. Easy communication among subordinates and superiors The management does not cause negative impact in any local or regional community	social actions. • Needs to improve communication in the field during operational activities and surveillance.	
P 05: Benefits from the forest	 The forest cycle and the harvesting rate are justified in the Forest Management Plan. There is a network of permanent plots in addition to those that are regularly measured; also, there is a planning to improve monitoring and knowledge about its forests. The company acquires goods and services from local providers whenever available. Chainsaws, skidders, and forklifts are in use because these are technically and economically viable. The company endeavors to achieve multiple use of the forest by utilizing more than 40 tree species. 	Needs to optimize the use of residues from the harvesting operations.	CAR 2008.12
P 06: Environmen tal Impact	 The ecosystems contained in the FMU are preserved and the permanent preservation areas are respected in forest operations. The borders of the FMU are well kept and reduce the risks of fire and border effects. The control area is well preserved and continuous. The wildlife in the area appears to be a good representative of the ecosystem in the FMU and indicates the good environmental quality in the FMU. The stringency in maintaining the remnant vegetation ensures maintenance of wildlife. There are guidances regarding minimization of impacts from infrastructure works. Directional tree felling technique is used in order to reduce damage to the trees for subsequent harvesting and, also, to make skidding easier and to reduce excessive canopy gaps. Planning and implementation of techniques to minimize soil compaction 	 The company has not analyzed damage monitoring results so that the same problems can be prevented. Although indicated, the company has not presented the attributes for conservation to characterize its HCVF. 	CAR 2008. 13 2009.05 REC 2008.01

	1 4 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1
P 07: Managemen t Plan	and other damages; these include lifting the end of the log for skidding and minimization of areas taken by log yard and roads. No chemical product is used in the FMU No area in the FMU was converted to any other use. A minimum of 10 % of each species is maintained as seed trees. Permanent preservation areas are identified (on maps and drafts) and incorporated in annual operational plans. Potential environmental impacts are considered in the choice of equipments and their use. A Management Plan with all required items was presented; Rohden uses the reduced impact harvesting technique and implements improvements on the basis of acquired knowledge; Removal of vines is done 12 months prior to harvesting, during the forest census; There are procedures for contruction and maintenance of the road network; Forest growth and dynamics are monitored; Rohden surveys the forest by identifying all commercial trees with dbh>45 cm; 100% pre-harvesting inventory of commercial species is done, including identification, numbering, and mapping of the trees to be either remove dor protected; The harvesting map shows all information regarding protected areas, transport infrastructure (roads, trails, and yards), position of the trees, and direction of fellings.	- Delay in the approval of AOP (Annual Operational Plan) by the environmental agency; - Needs to implement the strategy to structure the work crew and the training program for workers involved in harvesting; - The company has not analyzed the monitoring records on damages so that their recurrence could be avoided; - The company needs to be equiped to draw and handle maps; - Needs to consolidate all operational activities into a single document; - Lack of a mechanism to improve knowledge on operational practices, control on the chain of custody, cleanliness and labor safety procedures, and social actions.	CAR 2008.11 2009.01 2009.02
P 08: Monitoring and assessment	 Rohden records eventual damages caused during forst operations; The company conducts monitoring in permanent plots; Experiments on site reclamation are conducted. 	 The company has not analyzed the records from the monitoring of damages that could be used to improve the management; Although the company has monitored wildlife in the past, it needs to be continued 	CAR 2008.11
P 09: Maintenanc e of high conservatio n value forests		The company indicated and area on the mountain in the center of the FMU as a HCVF. However, no attribute was presented, that could characterize that area as a HCVF.	CAR 2008.15

4.2 Pre-conditions or Major CAR's

Pre-conditios are major corrective actions (Major CAR) that are issued in a forest operation after the initial assessment and prior to its certification. No certification can be awarded if there is a pending pré-condition.

The following pre-conditions were issued to ROHDEN during the initial assessment. All of those were closed and accepted by the assessment team:

Non-conformance: The company accumulated tax debts during the last years when			
there was no harv	esting operation.		
Major CAR	Establish a strategy to pay the pending taxes generated in the last		
2008.01	years.		
Reference	P1.c2; P1.c2.i1; P1.c8.i1; P1.c9.; P1.c9.i1		
Company action	s:		
The company presented a plan for the payment of pending taxes, including a payment			
timetable based on its average invoice. The proposal will be presented and registered at			
the proper agency. These payments will be checked during monitoring audits.			
Position at the end of this audit:			
CAR complied with			

Non-conformance: The delay in approval of Annual Operational Plans has caused interruption in operational activities and in supply of certified wood to the industry of the group and thus, compromising the forest business sustainability. In 2006, SEMA authorized only 30 % of the volume requested by the company and the remaining 70 % were authorized in September, 2008 (APU 16). At the present, AOP of APU 19 and 20 for the years 2009 and 2010 are being analyzed.

for the years 2009	and 2010 are being analyzed.		
Major CAR	Draft and present a strategic plan for the sustainability of the		
2008.02	business including:		
	- Long term operational investments of the forest operation;		
	- Investments to ensure maintenance of ecologic productivity of the		
	forest:		
	 Followup on the development of the already harvested 		
	forest;		
	 Wildlife and vegetation projects; 		
	 Maintenance and monitoring of roads and log yards; 		
	 Environmental education. 		
Reference	P5.c1; P7.c1.i7; P7.c1.i12; P7.c3.i4.		

Company actions

Rohden presented a strategic plan regarding the development of actions to pursue, given the delay in the approval of AOP and, consequently, in the supply of certified wood. In regard to long term operational investments, the company has been developing new products with different species and sizes of items (truck bed flooring, garden furniture) to obtain a higher reclamation of wood. Also, a new 5,160 ha area, in the municipality of Castanheira, was acquired to supply the wood demand for at least four years. In order to maintain the ecologic production of the forest, the company presented a timetable of observations on permanent plots and, also, resumed

partnerships to	continue with wildlife and vegetation projects.
Position at the	end of this audit:
CAR complied	with

Non-conformance: Rohden does not have na updated version of the Forest					
Management Plan	n. The general description is superficial.				
Major CAR	Update and detail the Forest Management Plan				
2008.03					
Reference	P7.c1; P8.c4				
Company actions					
The company presented an updated version of the Forest Management Plan					
containing the description of activities and results obtained.					
Position at the end of this audit:					
CAR complied with					

Non-conformance: The delay in the authorization of Annual Operational Plans			
brought operation	brought operational activities to a halt, as well as reduction in the number of		
employees and re	elocation to different activities.		
Major CAR	Draft a plan of action to resume operations, including:		
2008.04	- a strategy to structure the work crew and a training program for		
	workers involved in harvesting;		
	- update on the operational, environmental, and labor safety		
	timetables.		
Reference	P1.c1; P4.c1.i3; P4.c2.i6; P7.c7.		
Company action	Company actions		
Rohden presented a plan of action to resume its operational activities in 2008 and			
2009 containing the items requested in the Major CAR.			
Position at the end of this audit:			
CAR complied with			

5.0 – DECISION ON THE CERTIFICATION

5.1 – RECOMMEDATION ON CERTIFICATION

As determined by the SCS Forest Conservation Program protocol, the assessment team recommends that **ROHDEN INDÚSTRIA LÍGNEA LTDA** be awarded a 5-year FSC recertification with the respective certificate of "well managed forest", subject to compliance with the corrective actions required as described on item 5.2, for a period of five years (2010 to 2014). **ROHDEN INDÚSTRIA LÍGNEA LTDA** has demonstrated that its management system is capable of ensuring that all FSC (Forest Stewardship Council) requirements for the management of the Brazilian Amazon Upland Native Forest are complied with in the forest area, which is the object of this assessment. **ROHDEN** has demonstrated, also, that the described management system is being duly conducted in all areas covered in this assessment.

5.2 – Initial Corretive Actions Required (CAR's)

Non-conformance: The company has not implemented its strategy to pay the				
pending taxes (I	pending taxes (ICMS, Union fees, INSS, FGTS) generated in the last years.			
CAR 2008.05	Implement the strategy to pay the pending taxes (ICMS, Union fees,			
	INSS, FGTS) generated in the last two years.			
Deadline	2009 annual audit			
Reference	P1.c2.i1; P1.c8.i1; P1.c9.i1			
Company Actions				
During the 2009 audit, it was verified that the company is paying back the taxes as				
planned. However, since the law offered a possibility to renegociate the deadline for				
pending payments, the company is reviewing the issue with the proper agencies.				
Position at the end of this audit:				
CAR complied with.				

Non-conformance: There was no plan of action to resume management operations as		
soon as the AOP	soon as the AOP be approved.	
CAR 2008.06	Implement a plan of action to resume management operations as	
	soon as the AOP is approved, including:	
	- strategy to structure the work crew and the training program for	
	workers involved in harvesting;	
	- update the operational timetable on labor safety.	
Deadline	Until the resumption of harvesting operations	
Reference	P4.c1.i3; P4.c2.i6	
Company Actions		
Up until the time of 2009 audit, operational activities had not been resumed due to the		
delay in the approval of the Annual Operational Plan for 2008 and 2009. Therefore,		
this CAR will be verified in the next audit.		

Position at the end of this audit:

CAR postponed to the beginning of management operations and will be assessed in the 2010 annual audit.

Non-conformance: The occupational health programs, the PPRA and the LTCAT		
were not updated and, therefore, did not conform to the Brazilian Labor Safety Law.		
CAR 2008.07	Update its occupational health programs, the PPRA and the	
	LTCAT.	
Deadline	Up until the resumption of harvesting operations	
Reference	P4.c2.i1	
Company Actions		
The company presented the Occupational Health Programs and PPRA/LTCAT for		
2008 and 2009.		
Position at the end of this audit:		
CAR complied with.		

Non-conformance: The company does not have the necessary structure to ensure		
first aid services and immediate removal of workers in case of accident.		
CAR 2008.08	Elaborate a strategic plan to rescue and remove workers in case of	

	accidents and include first aid equipments and training, and
	maintain at least two trained people in the work front.
Deadline	2009 annual audit
Reference	P4.c2.i10
Company Actions	
The company presented a plan with clear procedures to rescue and remove workers in	
case of accidents. The work fronts were equipped with first aid material and the	
workers were trained.	

Position at the end of this audit:

CAR complied with.

Non-conformance: No evidence was presented on monitoring of worker turnover in			
harvesting operations.			
CAR 2008.09	Elaborate a spreadsheet with monthly information on worker		
	turnover (entry and exit) with information on the motives for		
	dismissal.		
Deadline	2009 annual audit		
Reference	P4.c1.i1; P4.c2.i12		
Company Actio	Company Actions		
The company presented a spreadsheet showing the details on admissions and			
dismissals of workers in the period of Jan/2008 to Sep/2009 including the motives.			
However, this spreadsheet does not reflect reality since harvesting had not been			
resumed. This CAR must be checked at 20120 audit.			
Position at the end of this audit:			
CAR postponed			

Non-conformance: No procedure to assess and monitor the frequency and severity of		
labor accidents was presented.		
CAR 2008.10	Analyze and monitor labor accidents occurred in the management	
	unit, showing the frequency and severity.	
Deadline	2009 annual audit	
Reference	P4.c2.i13	
Company Actions		
The company established a procedure of fortnightly assessing the frequency and		
severity of labor accidents during the operational activities.		
Position at the end of this audit:		
CAR complied with.		

Non-conformance: No assessment was presented of social and environmental impacts generated by management activities developed in the last 29 years in Juruena region.	
CAR 2008.11	Perform social and environmental impacts surveys of the company's activities in Juruena region with including mitigating measures in cases of negative impacts and include the results in the Management Plan.
Deadline	2010 annual audit
Reference	P4.c4.i1; P7.c1.i6; P8.c1.i1; P8.c2.i4; P8.c5.i1
Company Actions	

The company presented the initial survey work on socio-environmental impacts in Juruena region, with perspective to finalize it in the first half of 2010.

Position at the end of this audit:

CAR postponed until next audit.

Non-conformance: There is a considerable number of non-commercial species in the	
management unit, as well as unused residues from the harvesting operations.	
CAR 2008.12	Perform a market study to determine possible insertion of new
	species for commerce, as well as a study to reclaim residues from
	harvesting operations in order to optimize the use of forest
	products.
Deadline	2009 annual audit
Reference	P5.c2.i2, i3; P5.c3.i3; P5.c4.i1
Company Actions	
The company is developing new products and inserting new species in the industrial	
production. Samples of these products were sent to different clients for analysis	

production. Samples of these products were sent to different clients for analysis. However, it has not yet received feedback from the clients.

Position at the end of this audit:

CAR postponed until next audit.

Non-conformance: The company has procedures to monitor damages to the forests. However, these have not been fully implemented yet and complementary information is needed. Also, data need to be systematized and analyzed to be useful in improving management.

CAR 2008.13	Analyze records and monitor damages and environmental impacts
	caused by forest harvesting. Draft reports defining mitigation
	measures in cases of negative impacts
Deadline	2009 annual audit
Reference	P6.c1.i1; P6.c5.i2

Company Actions

The company does not have data to monitor since forest operations were not resumed yet due to delays in approval of the Annual Operational Plan for 2008 and 2009.

Position at the end of this audit:

CAR postponed until next audit

Non-conformance: The company has not publicized the summary of its Forest		
Management Plan.		
CAR 2008.14	Publicize the summary of the company's Forest Management Plan.	
Deadline	2009 annual audit	
Reference	P6.c5.i10; P7.c4.i1	
Company Actions		
The Public Summary of the Forest Management Plan was posted on the company's		

The Public Summary of the Forest Management Plan was posted on the company's web site (<u>www.rohdenlignea.com.br</u>)

Position at the end of this audit:

CAR complied with

Non-conformance: The company indicated a mountain area, in the center of the	
FMU, as a HCVF. However, it has not presented consistent attributes to characterize	
it as a HCVF.	
CAR 2008.15	Evaluate the indication of HCVF (mountain area) by considering
	the following steps:
	1. Define the most important attributes to characterize that area
	as a HCVF based, primarily, on public consultation;
	2. Develop and implement appropriate guidelines for the
	management of this área in order to conserve or increase the
	attributes.
Deadline	Itens 1: 2009 annual audit; item 2: 2010 annual audit
Reference	P9.c1.i1
Company Actions	

The company defined a mountain area with 1,170.8740 ha in the central portion of the management Unit. Due to presence of steep slopes, water springs, waterfalls, and natural cliffs, the area is already considered as Permanent Preservation Area since the approval of the company's management plan. Therefore, this area is protected according to the environmental law. In addition, the area shows phytoecological characteristics that are typical of the cerrado, with presence of a differentiated vegetation containing species found in no other place. All these attributes were considered to define the area as a HCVF to be protected. These areas will not be managed, which theoretically means that the attributes will be, at least, preserved.

Position at the end of this audit:

CAR complied with

Non-conforman	nce: There is no estrategic plan to ensure continuity of forest
management until the 25-year harvesting cycle is completed.	
CAR 2008.16	Elaborate and present a strategic plan ensuring the continuity of
	harvesting until the 25-year cycle is completed, considering the
	inclusion of new areas.
Deadline	2009 annual audit
Reference	P2.c1.i1
A	

Company Actions

The company established a lease contract over an area of 5,160.1678 ha known as Fazenda Santa Rita de Cássia, in the municipality of Castanheira, State of Mato Grosso. However, the contract covers a period of only five years. Therefore, the contract must be reviewed to ensure operations during the 25-year period.

Position at the end of this audit:

CAR to be assessed at 2010 audit

Non-conformance: Rohden does not have a procedure to systematize the information generated in forest management to be used in reports, drawing of maps, and in the control on the chain of custody. Part of the information on entry and output of wood is recorded on paper forms. From 2007 on, the information was recorded in an electronic spreadsheet. There is neither an adequate system of their own to work on georeferenced data (the information is handled and filed by a contract company). Post-harvesting reports do not show the results of harvesting in relation to elements such as mapping of removed trees, road infrastructure, opening of log yards, and others.

CAR 2009.01	Implement a computerized system to:
	- improve the system to monitor its production activities;
	- draw and handle maps (SOFTWARE);
	- draft post-harvesting reports.
Deadline	2010 annual audit
Reference	P7.c1.i8; P7.c6.i3

Non-conformance: There was no evidence of employee (manager and technical	
staff) retraining program on RIH (Reduced Impact Harvesting) technique, chain of	
custody, and monitoring, in order to improve its forest management.	
CAR 2009.02	Improve the employees' knowledge on procedures in operatios,
	control on chain of custody, cleanliness, labor safety, and social
	actions.
Deadline	2010 annual audit
Reference	P4.c1.i3; P4.c2.i11; P7.c3.i3

Non-conformance: There is no established procedure to deal with conflicting	
situations involving entry and illegal actions in the FMU by unauthorized persons.	
CAR 2009.03	Formalize procedures to deal with conflicting situations and
	implement the necessary training of personnel involved in
	surveillance of the management area.
Deadline	2010 annual audit
Reference	P1.c5.i1

Non-conformance: The camp structure (lodging, mess room, bathroom) are in bad	
condition (comfort, safety, and cleanliness) for field crews to stay.	
CAR 2009.04	Refit the camp structure (lodginf, mess room, bathroom) at Fazenda
	Rohsamar in the aspects of cleanliness and safety to comply with
	the current legal requirements.
Deadline	Up until harvesting operations are resumed
Reference	P4.c2.i1
Company Actions:	
The company restructured the camp at Fazenda Rohsamar so as to provide adequate	
living conditions for its field workers.	
Position at the end of this audit:	
CAR complied with	

Non-conformance: There was no evidence of a basic and adequate structure for		
handling and sto	handling and storing field equipments and products.	
CAR 2009.05	Refit the physical structure in the FMU for maintenance, storage,	
	and use of equipments and products (oil, fuel etc.)	
Deadline	Up until harvesting operations are resumed	
Reference	P4.c2.i3; P6.c7.i2	
Company Actions:		
The company established a camp structure that is adequate for handling, storing, and		
use of equipments and products (oil, fuel, etc.)		

Position at the end of this audit:	
CAR complied with	

Non-conformance: The sign boards indicating prohibition of illegal hunting, fishing,	
and gathering, placed along the roads to the FMU, are in bad shape.	
CAR 2009.06	Improve the sign boards indicating prohibition of illegal hunting,
	fishing, and gathering in the FMU.
Deadline	2010 annual audit
Reference	P1.c5.i1; P1.c5.i3; P1.c6.i2

Non-conformance: The company does not have a visual indication (map) of the	
neighbors surrounding the FMU.	
CAR 2009.07	Present a visual indication (map) showing the location of neighbors
	surrounding the FMU.
Deadline	2010 annual audit
Reference	P2.c2.i4

5.3 – Recommendations

Justification: 7	The sign boards along the roads indicating prohibition of illegal
hunting, fishing, and gathering in the company's FMU are in bad condition.	
REC 2008.01	Improve the warning signs along the roads indicating prohibition of
	illegal hunting, fishing, and gathering in the FMU.
Reference	P1.c5.i1; P1.c5.i3; P1.c6.i2
Company action	
During 2009 audit, it was verified that the company had done nothing to improve sign	
boards along the roads to discourage illegal hunting, fishing, and gathering in the	
FMU.	
Position at the end of this audit	
REC replaced by CAR 2009-06	

Justification: The company has not adopted an integrated CIPA (Internal Committee on Prevention of Accidents) procedures among field and industry employees. The participation and reports from field employees are highly important for their own safety.

REC 2008.02 Elaborate a timetable of meetings to discuss work safety matters (CIPA) in the forest area, according to the Brazilian law.

Deadline 2009 annual audit

Reference P4.c2.i5

Company Actions

The company presented a timetable of meetings as recommended.

Position at the end of this audit

REC complied with

Justification: The company discontinued the work on wildlife survey and monitoring	
in the FMU that could be used to ensure measures for their protection.	
REC 2008.03	Establish partnerships with universities and/or research institutions
	to perform surveys and wildlife monitoring, including possibilities
	for training of workers in wildlife monitoring.
Deadline	2009 annual audit
Reference	P6.c2.i5; P7.c1.i7; P8.c2.i3
Company Actions	
The company resumed negociations with a university to continue the wildlife survey	
and monitoring work in the FMU. However, no partnership has been finalized as yet.	
Position at the end of this audit	
REC open	

Justification:	The company has not recycled training on fire control for its	
employees and is not prepared to ensure protection of its areas against fire.		
REC 2008.04	Resume periodical training programs for fire crews.	
Deadline	2009 annual audit	
Reference	P6.c4.i4; P7.c3.i1	
Company Actions		
The company resumed its training program on fire control for its employees and the		
general public as recommended.		
Position at the end of this audit		
REC complied with		

Justification: There is no radio communication at any of the company's work front,	
nor at strategic locations such as property gates.	
REC 2009.01	Establish radio communication facilities at work fronts as well as at
	the company's property gates.
Reference	P4.c2.i1

Justification: The area that has been defined as HCVF will not be managed by the	
company, theoretically maintaining the conservation attributes. However, the works	
that will be developed in the HCVF vicinity may cause some influence over these	
attributes.	
REC 2009.02	Develop a program to monitor the attributes that have been defined
	as HCVF, including a chronogram for its implantation.
Reference	P9.c3.i1; P9c4

6.0 – FOLLOWUP ASSESSMENTS

If certification is awarded, followup assessments must be performed at least once a year in order to verify the compliance with each corrective action requested and to review the continuity in conformance of the company to the standards for certification of the Brazilian Amazon Upland Forest Management. The public summary of the followup assessments of Rohden will be posted on SCS web page (www.scscertified.com).

7.0 - Summary of SCS procedures regarding the investigation on complaints

The following is a summary of the SCS procedures regarding the solutions to complaints. The complete procedures are available at SCS upon request. These were planned and are available to any organization that perceives any problem regarding the SCS Forest Conservation Program and has reason to question SCS directly for its actions or SCS certificate holders.

The procedures constitute the first forum and a mechanism in attempt to solve problems in a friendly manner, thereby avoiding the need to involve FSC. The complaints can originate from our clients (e.g. forest owners, companies, or distributors) or from other interested parties (stakeholders). In order to have a pattern in these procedures, the complaints must be presented in writing with attachments containing support evidences and submitted within 30 days from the day when the actions causing the demand occurred.

The compaint description must contain:

- Identification and the name of a contact person in regard to the presented complaint.
- A clear description of the claimed action (date, location, nature of action) and which parts or individuals are associated with the action.
- Explanation on how the action is violating the FSC requirements that are applicable to the case.
- In the case of complaints against the actions of a certificate holder, rather than SCS itself, the complaint must contain also the description of efforts done directly with the certificate holder to solve the issue.
- Propose actions to take by considering the opinios of the complainant.

Formal complaints must be submitted to:

Dr. Robert J. Hrubes Senior Vice-President Scientific Certification Systems 2000 Powell Street, Suite 1350 Emeryville, California, USA94608 E-mail: rhrubes@scscertified.com

As detailed in the SCS-FSC Certification Manual, the investigations on the complaints will be carried out confidentially within a reasonable period of time. If appropriate, corrective or preventive actions, as well as the resolution of any deficiency found in products or services must be taken and documented.