RSPO

RSPO NOTIFICATION OF PROPOSED NEW PLANTING

This notification shall be on the RSPO website for 30 days as required by the RSPO procedures for new plantings (http://www.rspo.org/?q=page/53). It has also been posted on local on-site notice boards.

Date of notification: June 21, 2013

Tick whichever is appropriate

	This is a completely new development and stakeholders may submit comments.
٧	This is part of an ongoing planting and is meant for notification only.

COMPANY : Golden Veroleum (Liberia) Inc.

SUBSIDIARY (If any) : None

RSPO Membership No. : 1-0102-11-000-00

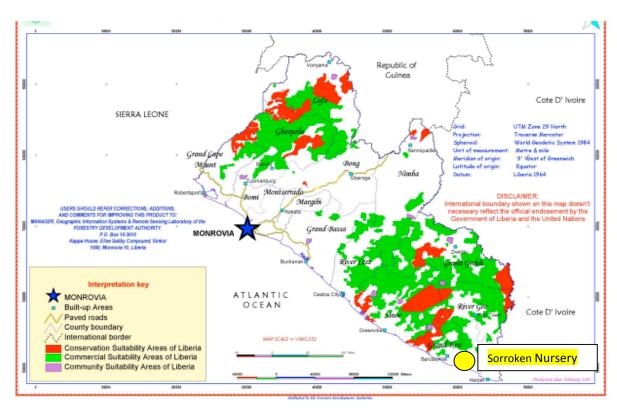
Ordinary member Approved 29/08/2011,

Location of proposed new planting: 100 hectare nursery site in Sorrokken in the north of

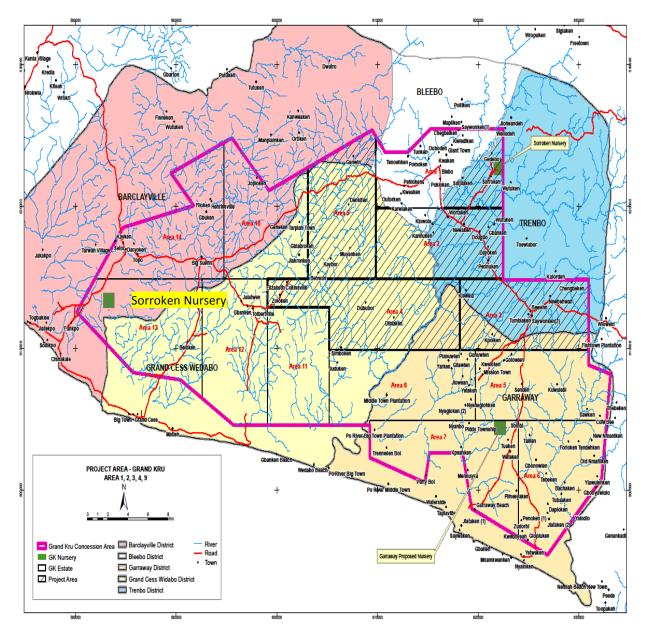
Trenbo District, Grand Kru County, Republic of

Liberia (Location map on next page)

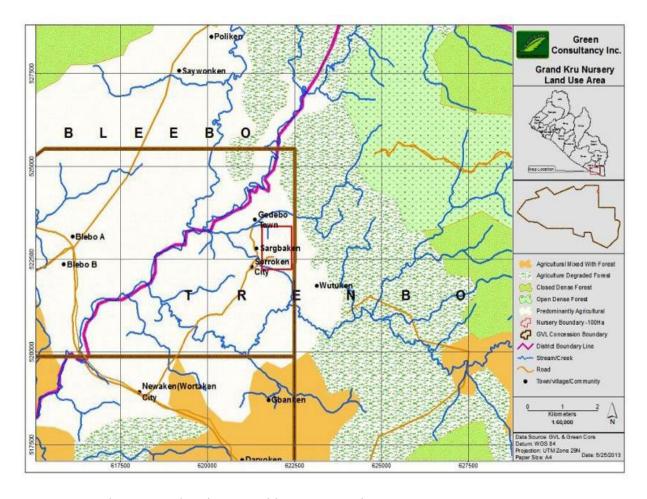




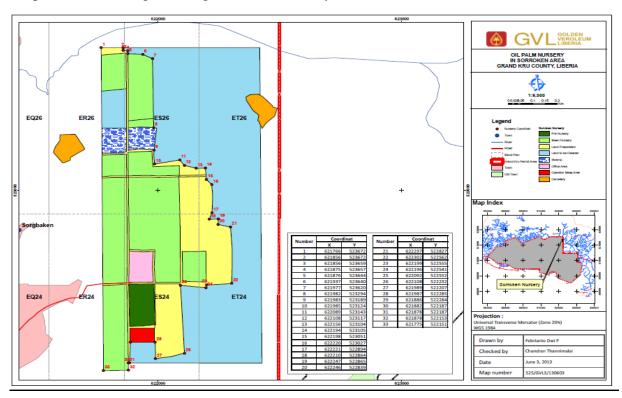
Map 1a&b. Location of Sorroken Nursery in the Republic of Liberia.



Map 2. Location of Sorrokken Nursery in Trenbo District Grand Kru County, Republic of Liberia



Map 3. Land use map showing Sorrokken nursery site



Map 4. Sorrokken nursery site map

BACKGROUND

Golden Veroleum (Liberia), Inc. (GVL), a subsidiary of the Verdant Fund LP, entered into a concession agreement with the Government of Liberia in 2010 for the development of oil palm plantations in five (5) counties in Liberia: Grand Kru, Sinoe, Maryland Rivercess and Grand Kru. The signed and ratified concession agreement covers a total of approximately 500,000 acres (220,000 hectares). The concession agreement provides for the Government and GVL to implement a social and community development program, which include employee housing, education and medical care. Additionally, a Liberian smallholder program is to develop 100,000 acres (40,000 hectares) of oil palm in support of local Liberia oil palm farming initiatives. In addition, the project provides that in 15 years' time, the project will generate 35,-40,000 jobs in 5 counties; with approximately 15,000 of those jobs being created in Grand Kru County, including within a Gross concession area which covers an area of 97,000ha. The concession also provides for GVL to construct about 16 mills and 2 seaports within 15 years. The concession agreement from which this project derives has a period of 65 years with an option for an extension.

In support of biodiversity conservation in the country, the concession agreement obliges GVL to carefully preserve original forest and areas of high biodiversity, sacred community lands located within its proposed project area.

In order to adhere to Section 11 of the Environmental protection and Management Law of the Republic of Liberia (2003) and Annex 1(Section 6), which requires all new projects that fall under the Environmental Laws of Liberia EIA mandatory listing, including plantation to undergo an environmental and social impact assessment, GVL applied for an Environmental Permit from the Environmental protection Agency of Liberia in June 2011. This was followed by the hiring of Green Consultancy Inc, a Liberian own environmental consultancy and management firm; for the purpose of conducting an environmental and social impact assessment for the Grand Kru oil palm plantation project.

Following the conduct of the environmental and social impact assessment, stakeholder's consultation and reviews; the Environmental Protection Agency issued a two-year environmental permit (EPA/EC/ESIA/002-0411) for the Grand Kru project on November 23, 2011.

The Liberian ESIA process is essentially aligned to the Roundtable on Sustainable Palm oil (RSPO) High Conservation Value (HCV) assessment process with broad based participation, however the RSPO in 2011 did not have approved assessors who would be licensed to work in Liberia.

On September 15, 2011, GVL received notification from the Roundtable of Sustainable Palm Oil of the approval of its membership application. Subsequently, GVL took up participation in Liberian RSPO NI development activities and working groups as well as in development of oil palm sustainability skills in Liberia in conjunction of the EPAL. In August 2012, RSPO confirmed Solomon P. Wright and E. Abraham T. Tumbey Jr of Green Consultancy Inc as Approved HCV Assessors, being the first approved assessors also licensed to practice in Liberia by the EPAL.

GVL has stated that its operation follows Liberian legislation and was established prior to its RSPO membership and prior to the RSPO's approval of assessors also licensed to practice in Liberia, and therefore the applicable RSPO procedures are the Ongoing New Plantings

Procedures. Under both pre-existing and ongoing development by GVL, the company is committed to the RSPO and therefore the company initiated a validation assessment to specifically enable the certification of its existing operations under the RSPO. As noted these operations have followed Liberian regulations (which follow RSPO principles, including regarding FPIC and HCV processes), and these Liberian assessments have been carried out by certified RSPO HCV Assessors.

In support of the above, a updating review of the ESIA prepared by Green Consultancy Inc was conducted commencing September 18, 2012 to April 17, 2013 by RSPO approved HCV Assessors Solomon P. Wright and E. Abraham T. Tumbey Jr of Green Consultancy Inc. The assessment was part of a process by GVL to bring GVL into alignment with the RSPO NPP process with the objective of certifying its operations. The documents submitted in connection of this current notification include GVL's such submission of management and monitoring plans.

1.0 SUMMARY FROM SEI ASSESSMENTS

An ESIA assessment was done in 2011 for the Grand Kru concession area. This was revised in 2013 to focus on the proposed Sorrokken Nursery areas and initial planting blocks. The revised ESIA report includes the following: reviewing and validating the report in consideration of project activities; updating information regarding local people's concerns and opinions about the project including reconfirmation of their free prior and informed consent and re-evaluation of socio-economic impacts associated with the project as well as people's driven mitigation measures that promotes sustainable development. The review was conducted alongside the High Conservation Value assessment. The HCV assessment is a combination of satellite imagery and GIS analysis, field surveys to identify, demarcate and participatorily map sacred sites, old towns, community cemetery, farming reserves and environmental sensitive areas in reference to high conservation values ranging from 1 to 6, holding community and national level stakeholders meetings. All of these were achieved through working along with representatives from GVL and the local communities.

1.1 Project Area and Location

The project investigation area (gross concession area) covers 97,000 hectares of EPA permitted land within Trenbo Statutory District, Garraway District, Gblebo District, Picnicess-Barclayville District and Grandcess-Wedabo District. The investigation land also straddles several villages, cities and towns including but not limited to Jlukronken, Gbuken, Topoe, Neweken, Ciloken, Andrewville, Gunnuwin, Johwin, Beloken, Nengbein, Sunti, Gblebo, Behwan City, Soroken, Wetiken, Big Suehn, Topoe, Gbarken, Sorroken, Wutuken, Zoloken among others.

At this stage of the project one nursery site of 100ha located in Sorroken and Wutuken has been identified which is to also serve as a training ground for the project local staff. 69ha of the area has already been prepared by GVL. This nursery development when completed will serve as the source of materials for the initial plantation development in the first plantation blocks that will be cleared following the RSPO New Planting Procedure process. There are no overlapping claims for land in this area which we are aware of.

The area of the nursery site is generally a customary old farming land owned by the two neighboring towns of Sorroken and Wutuken. The communities have willfully offered the tract of land to GVL for the purpose of establishing the nursery, based on their free, prior and informed consent. As per the ratified concession agreement, 40,000 hectares, in addition to the 220,000 hectares has been allocated to out growers scheme. In regards to this, 18% of the total planting area will be allocated as plasma area.

1.2 Need

The Poverty Reduction Strategy Paper (PRSP) prepared for Liberia, which provides information on the country poverty index, shows a poverty head count of more than 67.2-76.7% for the southeastern region, which includes Grand Kru County. This county is noted to be so far one of the poorest in the region, despite its large land size and resource potential.

The low population and high poverty rate in the area is largely due to the lack of infrastructure and investment, which is compelling the youthful population that are not attracted to farming and mining to migrate to other areas of the country. Moreover, until lately the county has been largely isolated from the rest of the country, due to the lack of roads and with many of the major bridges damaged. The inaccessibility of the county remains one of the major challenges to the country's agriculture productivity. This has left many of the population in the area without food. The County Development Agenda notes that more than 70% of households are said to be food insecure or vulnerable to food insecurity. This project fits within the framework of the Poverty of Liberia Poverty Reduction Strategy (PRS) prepared in 2007. The PRS is a home –grown strategy for overcoming poverty in the country through a sustainable development program of socio-economic growth. In support of the PRS, the project has potential to create jobs, provide basic social services, add value to Liberia's oil palm sector and generate sufficient revenues from taxes to support GOL post war development agenda. The Poverty Reduction Strategy Paper (PRSP) prepared for by the Liberian Government in 2007 points out that the South-Eastern region, which includes Grand Kru County is one of the highly ranked regions on the nations poverty index; recording a poverty head count of between 67.2-76.7% poverty ranking. This region is noted to be one of the poorest in the country, despite its large land size, low population and huge resource potential.

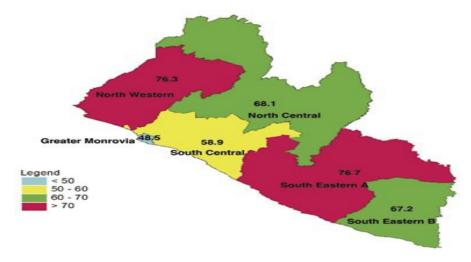


Figure 1: Poverty Head Count

GVL has indicated its determination to ensuring that its oil palm development activities are environmentally friendly, and in accordance with the principles and criteria of the Roundtable for Sustainable Palm Oil ("RSPO"). This commitment is based on the following reasons:

- The proposed project area is dominated by degraded areas and savanna land, with commitment to isolate or avoid diversity areas, traditional forests etc.
- A perennial tree crop like oil palm provides permanent crop cover to reduce soil erosion especially where terracing and natural ground cover are used.
- It is not affected by serious pests or diseases, thus minimizing the use of pesticides.
- Existing and future technology utilizes many plant parts and products, which results in minimal waste generation, which is then managed to mitigate potential environmental impacts.
- The crop cycle of 25 years makes it an effective crop in 'greening' of the environment.
- Sensitive natural forests that are in the area, along with community sacred and reserved forest will not be considered fordevelopment

1.3 Project Activities

The key activity at this stage is the Nursery Establishment- This phase of the project will include activities such as construction of access roads; clearing of the site including under brushing, felling, management and disposal of biomass; earthworks, including drainage and irrigation; polybag-planting and maintenance of seedlings.

At this stage of the project one nursery site of 100ha located in Sorroken and Wutuken vicinity has been identified which is to also serve as a training ground for the project local staff. This area is part of the 97,000ha area permitted by the Environmental Protection Agency for the oil palm project. Approximately 69ha of the area has already been prepared by GVL. This nursery development when completed will serve as the source of materials for the initial plantation development in the first plantation blocks that will be cleared following the RSPO New Planting Procedure process.

The road-building element of the project is also vital from a socio-economic perspective considering the need for road in the project area.

Roads will be constructed to serve nursery access as well as access to the Sorroken township from the main highway. The eroads will be graveled for all weather use. This can be progressively done as planting is being completed. The width is 6 to 12 meters, with a gravel depth of 20 cm.

The chiefs, elders and citizens of Sorroken and Wutuken, the two most immediate surrounding towns to the nursery site, identified the 100 hectares area to the management of GVL in 2011 and further ratified this in writing in April of 2013 on request of the assessment team.

1.4 Project Alternative

The No-Project alternative was assessed in the process of field investigation. In the absence of GVL oil palm plantation the three districts of Grand Kru will remain in the state of no development. There will be no employment of thousands of people, there will be no

improvement in the livelihood of the people as it relates to income earning, infrastructural development to include roads and bridges, and the social lives of the people will continue as it is, gradation of boys and girls from traditional society, the drinking water of the town and villages within the forest will remain as it is, the degraded agriculture forest will remain in abundance for the villages and as a result of the farming system (traditional slash and burn) forests which should be set aside will be destroyed as a result of deforestation. These situations of the towns and villages will continue to live in extreme poverty, poor social services, and eventually high teenaged pregnancy, high death rates, and movement to urban slums.

1.5 Environmental baselining

Environmental baseline studies of the Project Area was undertaken by a seven (7) man multidisciplinary team of Evaluators and Field Assistants from GREENCONS in 2011, also relying to further extent on traditional knowledge within the area. The purpose of this initiative is to gather information in respect to the status quo even before the project commences. In March 2013 an eleven (11) personnel GreenCons team conducted an additional field investigation to comprehensively assess the social-economic condition of the towns and villages and to identify all HCV areas within the project areas. The study involved every town and villages which fall into the new planting areas.

1.5.1 Atmospheric Environment

All indications based on desk based research and information gather from elders in the project area reveals that most of the areas under study in Grand Kru County were previously covered with an evergreen rain forest Rainfall data in the project area recorded in the 60's puts the rainfall at between 120-140 inches annually. The rainy season extends from April through October, with ±90% of the rainfall occurring between mid-April and mid-October. However, due to recent climate variations, the seasonal patterns seem to be diverting from the status quo. The study was conducted in the month of June, which traditionally should be a rainy period, but very little rain events were observed during the period. The maximum amount of rain recorded during the period of the survey was around 33mm. There are indications that the area receives a large amount of rain. The humidity is low during the day and increasing slightly as the temperature cools at night. A relative humidity of 70% to 98% was recorded during the study. March and February are reported to be the driest period of the year, relative air humidity decreases to as low as 65%. Total wind speed is greatest in the rainy season and lowest in the dry season. The climate of the area can be described as tropical, experiencing warm dry seasons and cool wet seasons.

1.5.2 Aquatic Environment

The Po River, Norr River, Gen, Doeh, Kulor, Jloh, Nippy, Deyea Creek, Hene Creek and Wettiken Rivers drain the Project Area. Surface water flow in the area is either Southeast to Northwest or Northeast to Southwest toward the Atlantic Ocean. Communities in the area rely on the existing surface water network for domestic activities including washing, cooking, and bathing.

Most of the water bodies of the project area are generally satisfactory based on the WHO water quality standards. There are however, high amount of turbidity and variance in the pH levels in some of the water sample. This is most likely due to increase sediment load associated with local gold mining.

A survey of fresh water fishes in the area identify more than a dozen of fresh water fish species including tilapia and catfish, which are local source of protein form communities in the area.

1.5.3 Geology

In terms of geology, the area is located within the Eburnean Age province. A major tectonic feature within rocks of the Eburnean Age province is the Dube shear zone. It is 2 to 3km wide and has been delineated on the basis of outcrops, topography and magnetic data

1.5.4 Floral Environment

The proposed project area has been associated with prolonged anthropogenic activities coupled with shifting cultivation (slash and burn farming). These activities have affected the kind of vegetation in the area. The prevailing forest vegetation is dominated by agricultural degraded forest. The remaining patches of intermediate forest are with couple of commercial timber species and secondary vegetation that includes: Entandrophragma angolense, Erythrophleum ivorense, Piptadeniastrum africanum, , Terminalia superba, Lophiraalata(ekki), Zanthoxylum gillettii, Terminalia ivorensis, Petersianthus macrocarpus, nuclei dederachi Rhizophora harrisonnii, Rhizophora mangle, Pteris vittata, Mohria caffrorum, Lenzites elegans, Alchonia spp, odorata spp, scleria spp etc. Non timber forest species include raphia, Elaiese guinensis, Harungara spp, Xylopia spp. Medicinal plants includes Parkia bicolor, Maniphiton spp, and Afromomium

1.5.5 Fauna Environment

Fauna survey results in the area shows poor fauna integrity with significant level of disturbance due to farming, mining and hunting pressure, which has caused many of the large and charismatic mammal species, such as elephant (Loxodonta Africana cyclotis, pigmy hippopotamus (Cheoropsis liberiensis, bush cow, leopard, and chimpanzees (Pantroglodytes verus), to migrate to high forest areas. The predominant species in the area comprise of Ground Squirrel, African Brush-tailed Porcupine, *Atherurus africanus*,, Rusty-bellied Brushfurred Rat *Lophuromys sikapusi*, Guinea Gerbil *Tatera guineae*, Green Bush Squirrel *Paraxerus poensis*, Tree Pangolin *Manis tricuspis*.

Although none were observed during the course of the survey, there are reports by local hunters on the presence of some FDA protected species in the area (Water Chevrotain-Hyemoschus aquaticus, Giant Forest hog, crocodiles, Olive Colobus monkey and several birds of prey), possibly in the scattered denser areas. Local villagers and bush meat traders confirmed this information. The species are hunted upon encounter. A wide variety of birds were observed in the different vegetations of the area.

1.5.6 Soil Environment

More than 90% of the soil type is characterized by latosols (ferralsols or oxisols). These are heavily leached, and silica, nutrients and humus are mostly washed out due to high rainfalls. Iron and aluminum minerals have accumulated as permanent residue materials forming hardpans and cemented layers within the subsoil or B-horizon, while on the surface hard and rounded iron oxides known as ironstone or buckshots-can be observed.

These are mineral soils (the thickness of the organic horizons does not exceed 40 cm) that have an oxic horizon. The upper boundary of the oxic horizon occurs at less than 125 cm depth. They may not show between 25 and 100 cm of the surface intersecting slickensides 1

or wedgeshaped structural aggregates, and cracks which is at least 1 cm wide at a depth of 50 cm.

Followed by ferralsols are regosols. Regosols are characterized by shallow, medium- to fine-textured, unconsolidated parent material that may be of alluvial origin and by the lack of a significant soil horizon (layer) formation because of dry climatic conditions. Coastal sands occur within the narrow coastal belt and also in several small patches further inland.

Along the coast they are mainly marine sediments consisting of more than 70% of fine to coarse sand and silt. These sands are heavily leached and bleached to an almost white color, and the percentage of clay and organic matter is very small.

1.5.7 Land Use

Land use in the proposed area can be classified as mainly subsistence agriculture (farming) and commercial suitability areas (based on FDA classification). Land in the study areas are regulated based on customary rules that are administered by tribal authorities. While the land is owned on a collective basis (Wedabo, Threnbo, Garraway), individual members and families have usufruct rights, dependent upon occupancy or use. The usufruct rights may be short-term (shifting cultivation-farming) or long-term, even passed down several generations (e.g., houses, tree farms), but never mature into ownership

1.5.8 Socio-Economic Environment

The forest and its resources represent the foundation of local people's subsistence and economic activities. Agriculture and the collection of non-timber forest products (NTFPs) represent the most widely practiced activities, each engaging over 95% of the households in the study area. Hunting and fishing are the third and fourth most widely practiced activities, reported by more than three-quarter of the sample populations. The Krus along the coast are more involved in fishing. Household involvements in other activities such as artisanal work, commerce, traditional medicine and civil service jobs and off farm activities further enhance their dependence on natural resources.

1.6 Environmental & Social Assessment, Mitigation and Monitoring

The procedures that have been used to identify potential impacts included standard identification tools as well as discussions with stakeholders, community leaders and residents as well as other experts. Potential impacts were assessed according to a set of assessment criteria and a significance value was assigned. One alternative (No Action) was considered. Potential impacts were identified and their level of significance was assessed. Mitigation measures were proposed for all the identified potential impacts. People, organizations/institutions and other stakeholders of the project, including interested parties have been identified at local and national level

2.0 SUMMARY FROM HCV ASSESSMENT (S):

Upon the assessment of the nursery site, it was established that the planned 100 hectares site is relevant in relation to 3.1 ha of HCV 4 (4.1 water catchment and 4.2 erosion control) and 1.3 ha of HCV 5 and HCV 6 (forest areas that provide basic needs, cultural identity, specifically cemeteries).

The findings were as a result of a rigorous HCV assessment investigation, which was carried out through all towns and villages within the project areas. The assessment was successful as a result of the involvement of representatives of each town's involvement in the HCV identification, investigation, and mapping exercises. The findings identified the following:

- 1. HCV 1: There are no protected areas located within or in proximity thereof neither were there any found within the surrounding area. The team investigation concluded after numerous interviews and bird watching that the concentrated area does not have habitats that support significant concentration of migratory birds of global significance. The team however found out that the conservation of riparian areas along the major creeks and rivers surrounding the nursery site are of significant to promoting the conservation needs of the project area.
- 2. *HCV 2:* There is no forest area found within the area of the nursery that contains a globally, nationally or regionally significant forest landscape that includes populations of most native species and sufficient habitat such that there is a high likelihood of long-term species persistence.
- 3. *HCV 3:* The team investigation concludes that these HCV characteristics were not found in any area of the nursery site. In fact, during the conduct of the ESIA, consultations from various institutions like the Forestry Development Authority, the Fauna and Flora International and other relevant sources were all consulted and concluded that the entire area does not possess any unique forest ecosystem.
- 4. HCV 4: Forest found around the nursery site was concentrated along the rivers of Killay, Kullor, Kopion and Bayella rivers/creeks. It is evident that the forest provide source of drinking water and significant ecological characteristics in controlling flooding, controlling stream flow and most especially water quality. The towns of Sarbarken and Gedebo rely on the Kullor and Killay representatively for drinking and other domestic usages including bathing, washing and cooking. Although hand pumps have been installed for both towns, some residents of the towns still depend on the water for these purposes. It was also found out that during working hours, workers of the nursery site use the Killay most especially for drinking as it lines some 108m away from the closest nursery area.

There are stretches of overlapping vegetation extending their canopies over the edges of the rivers. Tree species along these rivers/creeks encompassing Sorroken and Sorgbaken include Upapac guinensis, Bombax buonopo, Erythrophleum ivorense, Gilbertiodendron preussii, Cola butingii, Berlinea confus, Lophira alata, Canarium sahweinfurthii, Daniella ogra, Anophxis klaineana, Cynometra anonta. These tree species are mostly found within the old towns and sacred areas of the community. In Wutuken sacred sites, tree species such as Futumia elastic, Xylopia spp. Ceiba pentandra, Hallea ciliate, Parkia bicolor among other species were identified. These conditions keep the water cool and shade it from intense sunlight thereby maintaining its constant flow and tide level. The presence of the forest along these rivers is also critical in controlling erosion and downstream sedimentation.

- 5. *HCV* 5: The assessment identified most of the forested areas of the old towns to be considered under this aspect of HCV.
 - The reliance of the surrounding communities on the land for basic survival such as building materials, food, traditional herbs, roofing materials and nutritional ingredients to include meat, fish, wild yam and fruits was identified to be high priority. Medicinal plants found within the sacred areas and old town spots of Sorroken and Sargbaken include Manniphiton fulfifurm, Garania afzeia and Entandrophgma utiles. These plants are used cure talash on baby (sore within the baby stomach) urinary infection and stomach pains respectively. Most of the areas identified during the assessment used by the communities for farming purposes are young bushes and fellow areas. There were clear indication that the communities are avoiding high forest areas due to the intensity of the work involved in clearing these high-forested areas and the less manpower to do such tedious work. Considering that the towns and villages have willingly decided to offer portion of their land areas to the GVL management for oil palm operation, it is unlikely that the issue of intruding into towns and villages remaining farmlands will be of issue. Nevertheless, these old town areas are considered as HCV since these areas are still being used for farming purposes, and possess some fruit and food trees. Additionally, the presences of a number of ancestral gravesites within the areas are contributing factors to consider the area HCV. It is evident that communities' farmlands will not be intruded; however, all other HCV areas to include sacred forest or site, old towns, cemetery and riparian buffers will be demarcated and mapped out.
- 6. HCV 6: Surrounding reas to the nursery that could be impacted as a result of the nursery activities were identified to have these HCV characteristics. Two noticeable sacred areas were identified around the site. The sacred site belonging to the town of Wutuken overlooking the nursery site forming almost one end of the boundary of the nursery and the sacred site called the Soap tree belonging to the town of Sorroken and used by the community high priests for prayer ritual. Other sacred sites like the Sorroken Sacred site, the Wutuken Sacred Site also called Korllo and a number of cemeteries and grave sites to include Wutuken main cemetery and old graves in more than two locations and that of the Sorroken main cemetery and old graves in three locations in and surrounding the town.

SUMMARY TABLE OF HCVS

HCV	DESCRIPTION	PRESENT	ABSENT
HCV 1.1	Protected Areas		X
HCV 1.2	Critically Endangered Species		X
HCV 1.3	Concentrations of threatened or endangered or		X
	endemic species		
HCV 1.4	Critical Temporal Concentrations		X
HCV 2	Large landscape level forests		X
HCV 3	Rare, Threatened or Endangered Ecosystems		X
HCV4.1	Forests critical to water catchments	X	
HCV4.2	Forests critical to erosion control	X	
HCV4.3	Forests providing barriers to destructive fire		X
HCV 5	Meeting Basic Needs of Local communities	X	
HCV 6	Forest Areas of Critical Value to Traditional	X	
	Culture		

3.0 SUMMARY OF MANAGEMENT PLAN

3.1 Plan for ESIA/HCV monitoring and regular review of data

GVL will fully implement the recommendations provided in the Environmental and Social Impact Assessment reports and HCV assessments (of 2010, 2011, 2012 and 2013) made by Green Consultants, Inc., and those resulting from the internal work of the company's research, Environmental and Community Affairs departments to ensure that there is minimum negative social and environmental impact in the surrounding landscape. Furthermore, given the poverty and vulnerability, and desire for development, of the communities in the proposed GVL development regions, GVL will also seek to ensure and monitor the positive social and human impact being sought.

3.2 Monitoring, Evaluation and Responses

Operational monitoring: As described for each element (in tables)

Monthly internal monitoring reports: Internal reports will be provided monthly (Environmental and social activities reports, Grievances report, HR report). Review in monthly management meeting.

Quarterly monitoring reports: Summary of the monthly reports and a management conclusions section will be produced, including for stakeholder dissemination. Review in quarterly stakeholder meetings (timing may be subsequently adjusted).

Annual monitoring report: Per Liberian regulations, there will be an annual review of the Company's adherence to the environmental permit issued by the Environmental Protection Agency of Liberia and the Environmental permit will be subject to review.Review by EPAL and in annual seminar.

Our Sr Vice President of Operations will oversee the Environmental Manager and Community Affairs Managers responsible for managing the Environmental and Community teams who will be responsible for the survey, planning and community liaison and for placing the appropriate signage and delimiters to demarcate conservation areas and monitor the areas on a regular basis. Managers, team leaders, workers and contractors will be advised on our regulations regarding prohibition on respecting riparian buffer zones. Guard stations will also be established at all entries to monitor the entry and exit of individuals to ensure there is no trafficking of timber or animals. The joint teams team is also working with local partners to develop a community awareness programs covering the critical concerns.

3.3 Management and mitigation plan for threats to HCV areas & Management plans to enhance or maintain conservation values of identified HCV areas.

HCV4.1 Forests critical to water catchments and HCV4.2 Erosion Control:

Forests play an important role in preventing flooding, controlling stream flow regulation and water quality. Where a forest area constitutes a large proportion of a catchment may be able to play a critical role in maintaining these functions. The greater the risk of flooding or drought or the greater the importance of water usage, the more likely it is that the forest is critical to maintaining these services and more likely that the forest is a High Conservation Value Forest (HCVF).

Management objective

To ensure perpetual flow of clean water through the forest and for the host communities by setting aside and maintaining appropriate buffer zones for all major rivers and streams in the operational areas and to ensure that the oil palm plantation operation does not threaten communities' access to water resources; and to ensure that the forest continue to maintain its function of controlling erosion and catchment areas.

Threats to the above plan will include the following:

- Mistaken or inadequate planning to retain important HCV areas
- Operational encroachment into HCV areas
- Wrong work timing such as in heavy rain
- Erosion and silt/mud flows
- Clearing and removal of vegetation off HCV zones by local communities
- Lack of monitoring

Management regulations

Key regulations – specific standards and rules are shown in the rules table

- Water catchment areas should be protected to ensure that communities have unhindered access to quality water for their livelihood purposes and riparian forests are reserved to ensure that they maintain their function in controlling erosion
- All the specified HCVs are to be mapped out.
- Regular meeting with local communities to include discussion of the HCV establishment and their participation in the management of the HCV encouraged based on information sharing and awareness.
- Riparian reserves to identified, established, mapped, documented and respected (specific standards are established in the details section).
- Protection and maintenance of buffer zones, erosion control practices for all areas with slopes especially near any surface water.
- Visible signs are to be posted around the HCV and maps provided to land preparation team prior to clearing of any block. The team is to adhere to the map provided and avoid any impact to no go area. Land clearing activities need to be monitored and accounted for periodically. Penalties to be established for violators abusing the sanity of designated "no go" areas.
- Heavy equipment crossing through major river tributaries to be avoided by placing coverts to all points of crossing.
- Monitoring of the HCVs to be periodically done with the involvement of representatives of host communities, other stakeholders and the environmental team of the company.
- Surface water testing of the major rivers within the concession to be done and records of all testing kept to detect any change in water quality.

- Monitoring to include measuring fluctuation activity of water level during rainy season and dry season as baseline in rivers which has the important function as the catchment areas
- Refer to the Specific HCV Maps Based Guide for additional plans to maintain and enhance conservation values

High Conservation Value 5 (meeting basic needs of local communities)

Forest areas and are fundamental to meeting basic needs of local communities members for food farming and for those members retaining traditional lifestyles, also for hunting and gathering of livelihood needs, e.g. rattan and thatch).

Management objective

The objective of management under this HCV is to ensure mutual co-existence between the company and the host communities by ensuring that the basic dependence needs of the communities are supported and guaranteed.

Threat types

Threats to the above objective will include but are not limited to the following:

- Wrong or mistaken land planning, information and consent process resulting in not recognizing of host communities farmland or other community or private lands, or lands used for other livelihood/household needs
- Encroachment on planned restricted land by clearing operators

Management regulations

- Key regulations specific standards and rules are shown in the rules table
- Community members who wish to retain traditional life and sustenance styles to have the means to maintain a sustainable livelihood and agricultural practices with adequate farmlands and forest reserves
- Map out all host communities farmland and land used for other critical needs
- Schedule meetings along with the local communities for the purpose of explaining the mapping process and the essence of the HCV identification;
- Survey and demarcate along with host communities and other stakeholders all designated and mapped farmland ensuring their full participation in the process, thereby avoiding confusion and misunderstanding in the future;
- Recognize community's desired balance between land to use for development vs land to retain in traditional use, and the shift in aspirations (e.g. thatch being the necessary roofing material under poverty, while communities desire to roof with metal sheeting as soon as they have any income to do so).
- Record all meetings, attendance, minutes and approval documentation commencing and ending the process;
- Annually monitor the usage of the farmland
- Refer to the Specific HCV Maps Based Guide for additional plans to maintain and enhance conservation values

High Conservation Value 6

Forests can be critical to societies and communities for their cultural identity. This value is designed to protect the traditional culture of local communities where the forest is critical to their identity, thereby helping to maintain the cultural integrity of the community. Additionally, abandoned or temporary living places in the forest (such as hidden huts from the war years) may contain gravesites that are not now maintained or cared, but nevertheless important heritage.

Management objective

To give full consideration of the way of life of the host communities by ensuring that their beliefs and practices are encouraged and respected without any interference, disturbance, or disruption as a result of plantation development.

Threats

Threats to the above objective will include but are not limited to the following:

- Lack of inventory of area prior to clearing activities;
- Unmaintained sites such as graves forgotten or semi-forgotten, and difficulty to detect in advance of development
- Communities and traditional leaders not being unanimous over sacred areas and their use
- Land clearing activities encroaching by accident on sites to be preserved

Management regulations

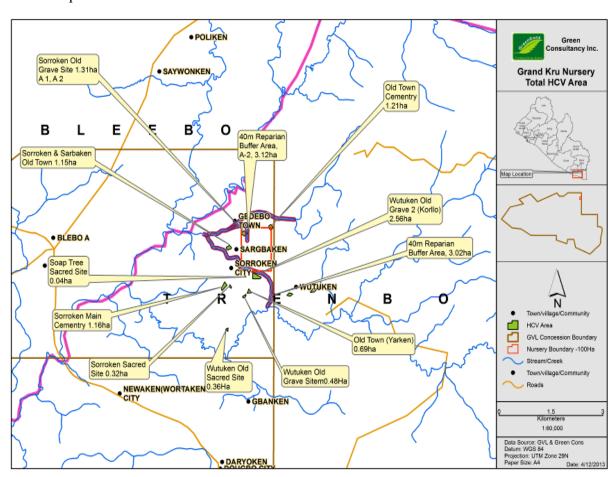
Key regulations – specific standards and rules are shown in the rules table

- The culture and rights of the local communities as well as their assets are respected and maintained
- Participatory mapping of the considered area with communities having interests and access
- The immediate host communities need to be fully aware of the proposed development area in order to identify any sacred area or unmarked graves that might be in the area to be cleared;
- The company needs to ensure that clear explanations concerning HCV is made to the host communities in order to guarantee their full participation and involvement in the demarcation process;
- Identification of any area related to this HCV to be demarcated and signs posted naming the owning community;
- Photo and other records relating to the lack of any identified area or the presence of identified areas needs to be taken and recorded;
- Any proposals to relocate traditional significant areas should be approached very cautiously and preferably avoided. Any negotiations entered into between the host communities and the company over the removal and subsequent relocation of any area

- relating to this HCV to be documented and recorded with photos and attendance of all present including other stakeholders;
- Advisory to the operational surveyors and operators to recognize and avoid potential sites not identified by community members in advance
- Monitoring of all sites demarcated to be periodically carried out by the company and the host communities' representative in order to ensure appreciation of the site.
- Refer to the Specific HCV Maps Based Guide for additional plans to maintain and enhance conservation values

3.4 Specific Maps

HCV Map



3.5 Specific Plans and Regulations Table

Impacts	Mitigation Measures	Monitoring Program
Soil Erosion	<u> </u>	
Soil damage & nutrient loss Soil instability Deterioration of water quality Disturbance to aquatic life Increase in sediment loads	Recommended preservation of riparian reserve for plantation Stream Width Min. Width <40 m 50 m 20 - 40 m 40 m 10 - 20 m 20 m 5 - 10 m 10 m 3m - 5m 5 m < 3m -	Exclusion to be mapped. Marking on the ground or on the tree at 1.5-m height on the demarcation of riparian reserves. Photo (with date), GPS locations and map to be included in the Compliance monitoring Report. Monitoring of water quality upstream and downstream of the Project site. The parameters include TSS, turbidity, oil and grease. Other information such as GPS location, stream width, surrounding land use must be
	Dominant drainage paths on cleared areas shall be rehabilitated for areas no longer used with fast growing creeper plants to prevent formation of soil erosion channels. Equipment must be of reasonable size and can be equipped with blade as is standard practice in the industry globally. Equipment will be used and operated to minimize soil disturbance and compaction. The blade should be mostly moved above the ground surface without touching the ground to prevent soil disturbance and forming of rill erosion.	Photo (with date) and GPS location of the drainage system. Photo (with date) of machinery used for land clearing and preparation.
	forming of rill erosion. Erosion control structures: table drains, culverts and other drainage structures to channel run-off water to road-side filter strips or silt pits prior to entry into streams should be installed concurrently with road construction.	Marking of proposed roads on the map and ground checking for the width of roads, drainage system and gradient. Photo (with date) and GPS location of the filter strips especially in the high- risk area.
	Table drains should be seeded with grass to prevent erosion of drainage banks and to prevent formation of erosion channels.	Site inspection – during rehabilitation works. Any failures should be noted.

Road grade should not exceed 15% (degrees).	Photo (with date), GPS location and mark on map for such structures.
Roads should not cross main streams unless appropriate crossing structures (e.g. culverts or bridges) are built.	Map showing the road with approximate area for each of them and photo (with date) for structures built across the river.
Avoid pushing excess spoil into gullies and the edges of road embankments during road maintenance. Spoil should be compacted 'in-situ', or transported to disposal sites away from the road, thus minimizing erosion of roads and sedimentation of waterways.	Site inspection – during rehabilitation works. Any failures should be noted.
Provide filter strips or silt pits (traps) along the roadsides to help to reduce siltation of river systems and to prevent an increase in the intensity and frequency of peak flows into the river system downstream of the land clearing activities.	Photo (with date) and GPS location of the filter strips and silt traps, especially in the high-risk area.
Where filter strip is not possible, silt trap is encouraged at all drainage outlets, prior to discharge into streams to reduce suspended sediment loading. Silt traps should be maintained regularly. Disposal from silt trap should not be done adjacent to rivers, streams, creeks or any drainage.	
All culverts should have cut-off wall to prevent erosion under the pipe. The head and outlet walls of culverts should be stabilized with log or stone pitched walls. Culvert gradients should ideally be 1-3%. Contractors should ensure that proper drainage is installed in order to reduce soil erosion and runoff.	Photo with date and GPS locations of all drainage system including any failures.
Removal of biomass should be carried out during suitable time period, proper methods and procedures and selection of machineries to reduce unnecessary surface erosion.	Photo (with date) and GPS location of the stacking of biomass and the location of burning at the field.
Soil Protection – Terracing Slope between 120 and 200 should be	Marking of slope between 120 and 200 on the map and in the

	terraced for better result in the field, improved access and water retention.	field.
	improved access and water retention.	Photo (with date) of terracing in
		the field.
	Protection of Steep Area	Development Plan in scale maps.
	The steep areas should be conserved	Photo with date and GPS
	for flora conservation and ecological	locations showing the marking or
	protection.	painting on the trees.
Hydrological I	l mnact	
, a rigin	Water Yield Management:	Marking on map the boundary of
	• Extensive land clearing should	each Project phases. GPS
	preferably be carried out during	location and photo (with date)
	the suitable weather.	showing the land clearing
	Commence planting cover crops	activities carried out in phases.
	soon (e.g. 1 month) after site	Records of rainfall
	clearing.	
	Refrain from clearing of areas	
	where slopes are more than 250	
	and soils are shallow.	
	 The areas should be limited by 	
	heavy machines during land	
	clearing and preparation.	
	Suspending tractor traffic during	
	wet periods to avoid excessive	
	compaction.	
	• Establish long term rainfall and	
	flow gauging stations to monitor	
	the impact on the river base flow.	
	Reduction on the flood levels:	Map showing details of phased
	Exercise proper management	development. Photo (with date)
	practices; develop Project area in	showing natural ground cover establishment and maintenance
	phases, encouraging natural ground cover immediately after clearing and	of riparian reserves and buffer
	maintaining adequate streamside	belts.
	buffer strips.	
	Protection of water quality from	Photo (with date) of measures
	sediment yield:	taken to protect water quality
	 Develop plantation in phases and 	from sediment yield. Provide
	ideally scheduled over drier	map and GPS coordinates to
	period or months.	show
	• Lay roads carefully, preferably	
	following the contour and must be	
	far enough from stream.Clearing should be done parallel	
	to contour lines, starting from	
	high to low ground.	
	ingii to 1071 ground.	1

•	Install cross drains for minimizing
	overland flow.

- Timing of road construction or road upgrading to conform to periods of less rainfall and allowing sufficient time for earthworks to stabilize.
- Using the appropriate machineries in the land clearing to minimize disturbance to the soil.
- All clearing, grading and stabilization operations would be done before starting the next phase.
- Where possible, the stages of development should be from the high to low grounds, so as to take advantage of the present vegetation to act as silt and runoff barriers.
- Reduce the duration (max. 3 months) of land exposure to natural elements.
- No person shall carry out any tree felling, building or structures erecting and other works within the riparian area.
- Conduct water resource assessment with the aim of identifying all water resources in the area of operation and identify sampling locations for monitoring

Wildlife and aquatic ecology

Human	
impact	on
wildlife	
population	IS
Fragmenta	ition
of habitat	and
wildlife	
ranges Los	ss of
biodiversit	ty

Steep slopes	more than 25°	must be
protected		

Retain patches of primary forests stand found in degraded forests areas, in order to serve as wildlife corridors.

Establish a wildlife buffer of at least 1km away from wildlife conservation areas surrounding the project Conserve riparian areas.

Discourage hunting or trapping of wildlife within and surrounding the Project area.

Directional clearing or felling of trees towards forested area.

GPS location, photo (with date) showing the marking on the trees at 1.5-m height at the base limits and map (1:33,0000) showing the surveyed area.

Regular check for any sign of hunting activities at all the base camps.

Development Plan with direction of clearing shown. Regular

		ground surveillance especially in the planting areas.		
Biomass management				
	Stacking of vegetative waste along the contour	GPS location and photo (with date) showing the stacking of biomass in the cleared area.		
	Explore alternative method of biomass disposal such as <i>in-situ</i> mulching or chipping.	The Project Proponent to look into these possibilities with consultation with the relevant authority.		
Fertilizer Appl	lication and Pests and Diseases Manag	ement		
Incorrect application of Fertilizers Judicious use of pesticides	Avoid application of fertilizers, pesticides and weedicides during the rainy weather and windy conditions. Fertilizers should also be applied in split doses.	The Project Proponent to closely monitor this by keeping proper records of each application.		
	The frequency, dosage and timing of chemical application should be monitored closely. Practice biological control and other environmental friendly methods to control weeds and mammalian pests whenever possible.	The Project Proponent to take into consideration in the development plan, with documentation of consultation with the relevant authority.		
Forest Fires	possioie.			
Totestilles	Establish a Emergency Response Procedure and an Emergency Response Team	The Project Proponent to take action.		
Socio-Economi	ics			
Displacement of people and communities	Resettlement as an option is not being considered under the project currently. However in the event where a community willfully request to be resettled. GVL will develop a	consultations and negotiation		
Loss of land and crops	program in accordance with the terms defined in the Concession Agreement	Monitor the socio-economic conditions of communities within and alongside concession areas		
Change in lifestyle and living conditions	Follow the Free Prior Informed Consent (FPIC) in all engagement and negotiation with communities. This includes Land acquisition from community. The process of identification and allocation of farming land as well as identification and mapping of high conservation values should be conducted with duly authorized community representatives	Record all communications and agreements with community people and ensure that those negotiating on behalf of the communities are duly authorized. Keep record of all payments made to affected persons		

Maintain a grievance redress mechanism and keep records of all complaints and actions taken to address them.

Work along with communities and support them with the capacity to adapt to sedentary farming practices that seeks to maximize land use environmental conservation. This exercise needs to be piloted in selected project communities and positive results shared with all communities within the project This will ensure that communities have enough land for their farming purpose as oppose to slash and burn agriculture or shifting cultivation, which has proven not to be sustainable over all long term.

Establish mechanism for working with authorized community representatives in project related activities.

Develop a community relations program that ensures adequate awareness and participation of community representatives in project related activities.

Encourage local farming initiative by purchasing vegetables and other crops from the farmers at competitive rates so that those who are not employed by the company can be encouraged to continue their farming.

Promote trade in livelihhod goods and services in communities within the concession areas.

Provision of Employment Opportunities

As much as possible, work priority should be given to the suitable qualified local villagers.

Keep a record of workers and their particulars.

for locals		
Risks to		
human health	If non-Liberians were employed,	Relevant authorities to monitor.
at the camps within the	proper procedures must be followed.	
project	Where practical, workers to go	Provide the audit team with non-
area	through health check within first year	confidential summary of the
	of employment and emphasis on communicable or infectious diseases	worker's health records.
	especially Malaria, TB or others	
	every 6 months	
	Provision of basic facilities and	Photo (with date) and GPS
	utilities in accordance with terms of	location of the camp,
	Concession agreement (potable or	
	clean water, housing and sanitary facilities)	
Pollution by	Refuse to be disposed off in pits	Photo (with date), GPS location
improper	approx. 30m from waterways and	of the dumping ground and
waste	above water table. Cover refuse with	general layout of the camp, name
disposal in the	soil once a week.	of contractor and plantation
project area	Ctamas taula if and already has	areas.
	Storage tank, if any, should be constructed on stable ground with	GPS location and photo (with date) showing the location of the
	bunding and at least 50 m away from	storage facilities.
	waterways.	
Water	Ensure good site development	Photos (with date) to show good
resource	practices e.g. conservation of riparian	practices on ground.
degradation and siltation	reserves, soil erosion minimization, etc.	
and situation	cic.	
	Cooperate with communities and	
	local authorities on solving water	
	supply issue on the directly affected	
	communities. Regular monitoring of water quality.	Compliance report to EDAL and
		Compliance report to EPAL once in every quarter.
Dust and	Proper maintenance of vehicles.	Records of maintenance carried
noise nollution	Gravalling of roads around the	out for vehicles Photo (with data) and man
pollution	Gravelling of roads around the plantation office, village and living	Photo (with date) and map showing roads, speed humps and
	quarters. Introduce tree-covered	tree-covered buffer zone around
	buffer zone around plantation area.	plantation area, installation of
	Install appropriate signboards and	signboards, speed humps
Dood C-C t	establish speed humps reduce speed.	Dhata (with 1-t-) 1 CDC
Road Safety	Proper traffic signboard at appropriate spots especially near T-	Photo (with date) and GPS location of the signboard.
	junctions or settlement area.	iocation of the signovard.
	Damage section of road should be	Photo (with date) and GPS
	repaired as quickly as is practical and	location of any damaged road.
	in accordance with company road	Totalion of any damaged four.

	maintenance procedures.	
Project Aband	onment	
Disturbance land area	Re-establish all open area with fast growing indigenous species or fruit trees	"
Visual impact on abandoned camps	To be in accordance with the terms of the Concession Agreement. Maybe to include, removal of all building structure to discourage any illegal squatter activities, removal of all solid and liquid waste, rehabilitation of all main roads.	Photo (with dates), GPS location of roads and map for the plantations.
	Remove all machinery and equipment to recover cost.	Project Proponent to take action.
Security of the Project area	Retain the security gates into the plantation areas.	Project Proponent to take action.

4.0 VERIFICATION STATEMENT:

The Golden Veroleum Liberian (GVL) was proposed a document review of the RSPO New Planting Procedures Verification for proposed 100 ha Nursery in Sorroken area. Two (2) BSI's auditors were conducted desktop study and review relevant documents from 15-17 Mei 2013. Subsequently, The GVL prepared and submitted the correction of documents by email for the verification purposes until completed by BSI on 19 June 2013.

It is also noted that GVL operation follows Liberian legislation and all relevant documents was established prior to its RSPO membership on 2010-2011. The SEIA assessment (including HCV assessment) conducted by the assessor prior the RSPO's approval where in practice at the time no other assessors have been approved for Liberia. The land clearance of Sorroken Nursery was started on 2012 with consideration from the result of SEIA and HCV assessments. GVL is committed to the RSPO and therefore the company initiated a validation assessment to specifically enable the verification of its existing operations under the RSPO NPP.

GVL states that "Following clarification discussions between RSPO and GVL between October 2012 and March 2013, on matters of ongoing development and future development, GVL affirmed in writing to the RSPO on 6 March 2013, and confirmed by RSPO, inter alia:

(Para 2, pg 2) GVL confirms to comply with RSPO NPP on areas initiated for clearance from the date of RSPO's letter, whereas areas initiated prior fall under the RSPO guidance of the May 12, 2010 as Ongoing New Plantings. GVL will submit appropriate documentation as confirmed above.

GVL believes that these are within Principle 7 and previously disclosed to RSPO. GVL confirms to submit management and monitoring plans within 3 months Therefore the

applicable RSPO procedures are the Ongoing New Plantings Procedures. Under both pre-existing and ongoing development by GVL,

In support of the above, an updating review of the ESIA (or SEIA assessment) was prepared by Green Consultancy Inc. It was conducted commencing September 18, 2012 to April 17, 2013 by RSPO approved HCV Assessors Solomon P. Wright and E. Abraham T. Tumbey Jr of Green Consultancy Inc. The assessment was part of a process by GVL to bring GVL into alignment with the RSPO NPP process with the objective of verifying its operations. The documents submitted in connection of this current notification include GVL's such submission of management and monitoring plans.

It is the opinion of the BSI that the social and environmental assessments (SEIA) and HCV assessment were detail, comprehensive and professionally carried out by RSPO approved assessor and has complied with the RSPO New Planting Procedures.

Signed on behalf of BSI,

Sohrome

Signed on behalf of Golden Veroleum (Liberia) Inc

-160° m

Aryo Gustomo

Lead Auditor

Matt Karinen

Director