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/535***). It has also been posted on local on-site notice boards.***

Date of notification: 12th June 2014

Tick whichever is appropriate

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

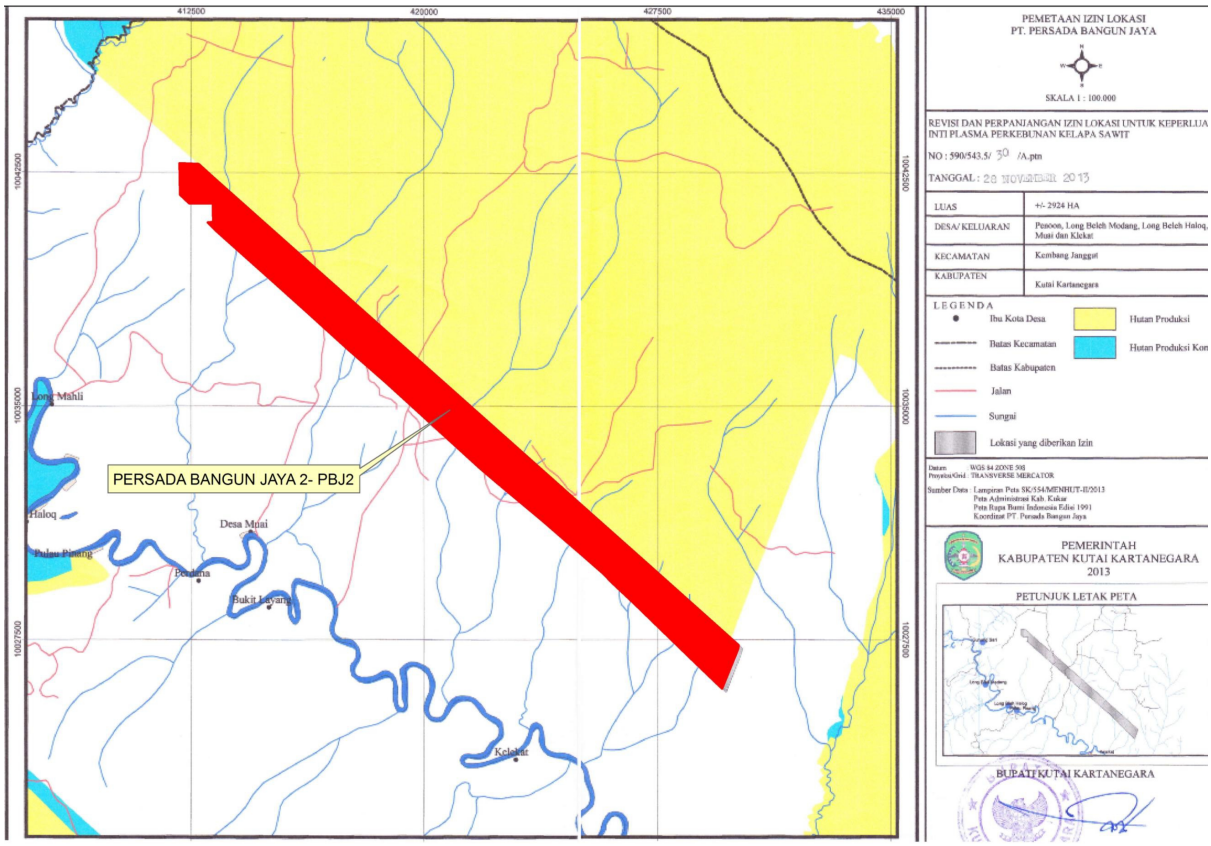
COMPANY: PT PERSADA BANGUN JAYA (REA Holdings Plc Group)

RSPO Membership No.: 1-0045-07-000-00 (**REA Holdings Plc Group)**

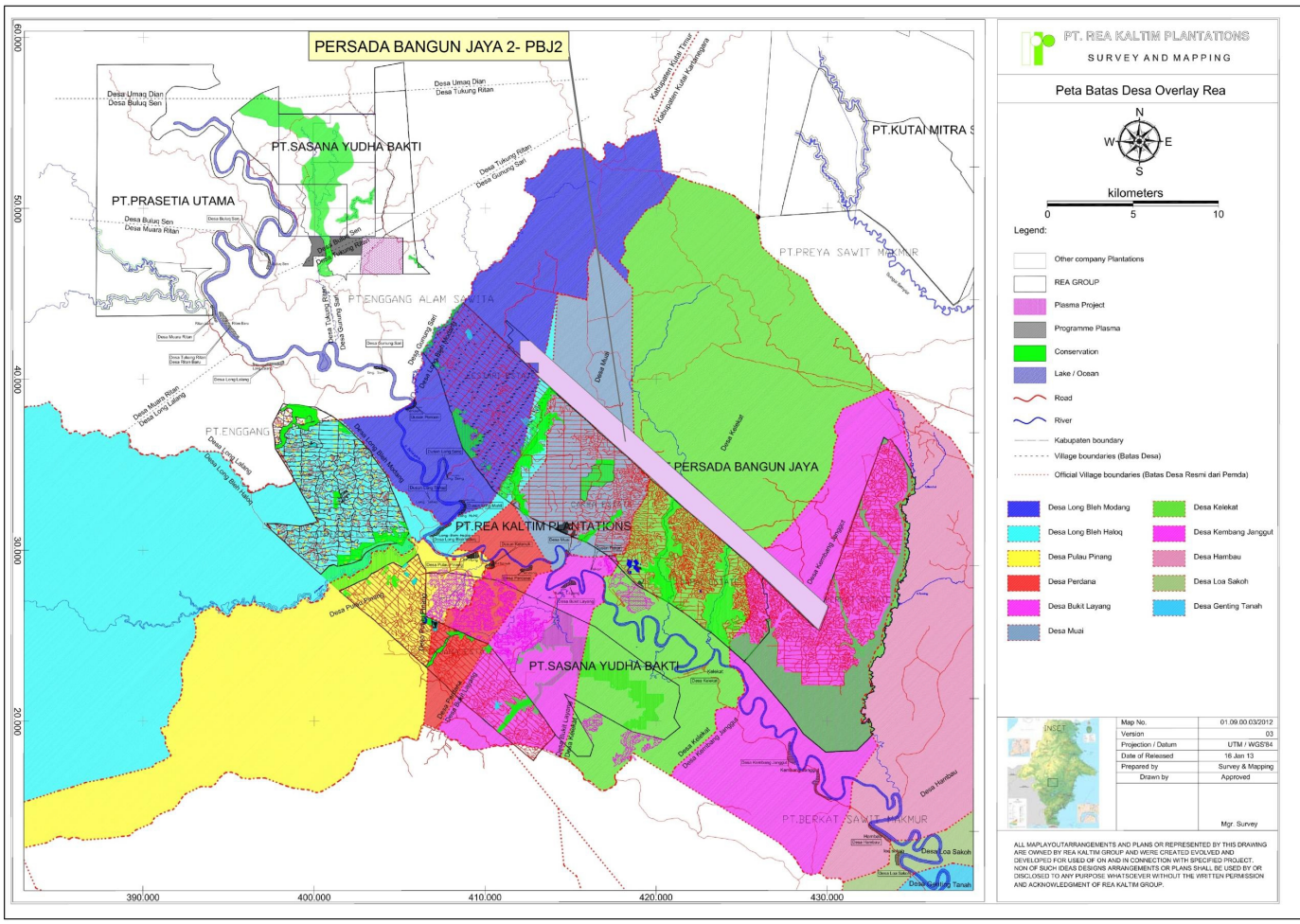
Location of proposed new planting**:** description or maps and GPS coordinates.

Company Name	:	PT Persada Bangun Jaya
Company Address	:	Jalan Hasan Basri , No 21 A Samarinda 75117 Kalimantan Timur Indonesia
Type of business	:	Oil Palm Plantation & Processing
Status of concession land	:	Permitted Area (Izin Lokasi) No 525/K537a/2012 dated on 4th June 2012- Total area 2142. Permitted Area (Izin Lokasi) No 590/525.29/002/Aptn. Dated on 28th Febuary 2012- Total area 3050 Ha. Permitted Area (Izin Lokasi) No 590/525.29/036/Aptn. Dated on 28th December 2012- Total area 2345 Ha. Plantation Permit (Izin Usaha Perkebunan) 000.525.26/739/DISBUNHUT. Environmental Management document(Upaya Kelola Lingkungan) and Environmental monitoring document (Upaya pemantauan lingkungan) Recommendation by Bupati Kutai Kartanegara Nomor:24/REKOM/UKL-UPL/V/2013.Date on 08.May 2013.

Contact Person		:	Mr Murali Tharan(Head of Inmature) Sophie Persey(Group sustainablity Manager)
Location		:	Desa Long Beleh Modang,Muai Kelekat dan Kembang Janggut Kecamatan Kembang Janggut Kabupaten Kutai Kartanegara Kalimantan Timur Indonesia
GPS References		:	419400 E, 35500 N(Central point)
Surrounding Entities	North	:	Production Forest
	South	:	PT Rea Kaltim
	West	:	PT Sasana Yudaya Bakti
	East	:	PT Rea Kaltim



Picture 1:Location map pf PT Persada Bangun Jaya



Picture 2:PT Persada Bangun Jaya with Soorounding entity

SUMMARY FROM SEI ASSESSMENTS:

Assessors and their credentials:

The Social Impact Assessment of PT Persada Bangun Jaya was carried out by Malaysian Environmental Consultants on the 23-24 January 2013 which is located at 82 Jalan Ampang Hilir 55000 Kuala Lumpur Malaysia.: 603-2052 6412/14FAX: 603-4252 4413 Email: info@mec-consult.org the key consultants conducting these assessments have been accredited and approved by RSPO. The team members are

1	1. Kishokumar	• 1992 MSc. Forestry and Its Relation to Land Use Queen's College, University of Oxford, UK • 1987 BSc. FORESTRY 4 yr Professional degree (Forest Management and Forest Industries Universiti Pertanian Malaysia (Agricultural University) Selangor, Malaysia • 1978 Higher School Certificate (Cambridge University) • Registered as HCV assessor with RSPO
	2. Dr Lim Meng Tsai,	• 1980 Ph.D. (University of Edinburgh; Forest Ecology) • 1975 M.Sc (University of Malaya; Forest Ecology) • 1972 B.Sc. (Hons) (University of Malaya; Ecology). • Registered as HCV assessor with RSPO
	3. Oi Soo Chin.	• (2000-2003)University Putra Malaysia (Bachelor of Forestry Science) • 2009 University Putra Malaysia (Master of Science) – on-going. • Registered as HCV assessor with RSPO
	4. Herculana Ersinta.	• 1994-Complete Economic studies from university of Tanjung Pura Indonesia • Registered as HCV assessor with RSPO

Assessment Methods (data sources, collection, dates, program, and visited places).

The assessment of HCV involves a multistage procedure. It starts off with a preliminary desktop analysis using GIS analysis which requires the input of maps and information from various sources to be integrated. This is followed by field survey(s) to cross-check and to verify the information from the GIS analysis. The field data is further analysed and the identification of conservation status of ecosystems and species of plants and animals recorded based on the IUCN Red List and other stakeholders such NGOs like Birdlife International and WWF and also the protected species list of respective countries and also the protected species list of Indonesia. The information is then incorporated into the GIS to generate new maps and information on HCV found in the area of interest. This will assist in identifying areas which need to be set aside before any/ further clearing begins.

1) **Preliminary desk-top assessment**

The preliminary desktop assessment involved the compilation of available information of the area of interest and its surrounding areas – up to 50 or 100 km surrounding the area. Available maps, satellite images and aerial photos are integrated into a GIS for further analysis while other information can include published documents, papers or grey literature available from the internet and other sources such as NGOs, government departments and universities. From the topography, soil types and land use of the area, thematic vegetation maps are prepared and compared with the condition assessed from the latest Google maps. The GIS would also enable the determination of any overlap with protected areas or areas with known distributions of protected or endangered species. Extents of vegetation types and soil types are also estimated from the GIS analysis. Locations of villages are also mapped and the boundaries of the villages are also mapped.

Using the maps generated, sample transects and tentative sampling points are then selected for the field survey to enable ground verification of the vegetation types. Transects are

selected to ensure that different sections of each estate/unit of the company are sampled and that as much of the natural vegetation and their variations (phases of succession/ regeneration) are recorded. The starting points are tentatively selected based on available maps. The maps are also used for the social impact assessment survey.

2) **Field survey**

The survey primarily focused on obtaining general ecological data, including the botanical and wildlife data in the area. The field survey involved both establishment of transects and plots and observations of the environs along treks through the forest or vegetation. The actual starting point selected in the field as starting points of sampling lines or transects in the field may vary slightly from those selected initially but are always located in the field using a GPS. At sample points, with a canopy height of over 8 m, plots measuring 20 m by 20 m were established and all the trees in the plot with the diameters equal to and greater than 5 cm were identified and the diameters were measured. In other areas with tree heights less than 8 m, quadrats measuring 2m by 5 m were established and all plants within were identified and counted. Sample points are taken at intervals of 100 to 300 m depending on the variability of the vegetation. The actual sample points can be modified according to existing field conditions – such as flooded areas or inaccessible areas.

The wildlife assessment teams use the same transects used by the vegetation survey team for their assessment. A rectangular or circular trek of between 800 and 1,000 m around the sample point is undertaken for the zoological component. All wildlife species observed during the treks are recorded. The appropriate census methods for the different taxonomic groups are left to the team members' expertise. They are reminded that the survey is a rapid / quick assessment and they are not required to set out traps. Indirect assessment methods using sounds, calls, droppings, and other markings are used and noted for each record. (e.g. bird sp a sighted, or bird sp b from calls, animal sp c from foot prints in mud, et c.,). Species

are identified using recognized local names and as far as possible to the scientific family, genus and species level and the basis of identification/ observation (whether actual sighting or other indirect evidence) noted. Photographs are taken wherever and whenever possible and relevant information recorded for reference. Survey distances for the different areas identified will vary. All treks are recorded on the GPS and locations of records noted.

The socio-economic and cultural assessment was made through interviews of local communities and stakeholders within and adjacent to Area of interest (proposed company site); including their dependence on the forest and rivers for their livelihood. The table below summarises the methods used, the target groups and the type of data obtained.

Table 6: A Summary of the Data Collection Methodology Adopted in the SIA Study

Method	Target group	Data	Data type
In-depth interviews	Key informants such as village heads, village secretary, customary heads, village elders, fishermen, farmers, etc.	Village history, social impacts, social issues land use, fulfillment of basic needs, harvesting trends, availability of alternatives	Descriptive/ Qualitative and quantitative
Field observation	Local informants, e.g. shaman, healer, village elders, farmers	-Village description, dependency on resources, -Attitudes and perceptions of the local peoples with respect to their land and natural resources	Qualitative
Participatory mapping and modeling	Focus groups	Landuse and resource distribution	Qualitative
Guided Field Walks	Village heads, other local informants	Site – location and use; GPS position;	Qualitative and quantitative
Focus group discussions	Village elders, village committee, customary heads, women	Validation of data collected in the study.	Qualitative and quantitative
Documentary analysis	Sub-district office, village heads, village secretaries/	Village profile, demography	Quantitative

Socio-economic and cultural survey of local communities is used to obtain information on the ethnic, cultural, religious background; basic economic information such as sources of income and livelihood and dependence on forests and areas of interest for livelihood and also cultural and traditional needs. Other data collected include Village administration, Land ownership,

Identifying sub-groups in each village based on their livelihood pattern. The survey team will also identifying how the community meets their basic needs, how and if the community uses resources sustainably

 Data Analysis

Vegetation and Flora

Compilation of vegetation types and species list for different vegetation types; Dominant tree families and species and common herb and shrub species indicate the vegetation types of the area surveyed. Stand characteristics from detailed enumeration – density of trees, basal area, etc. indicate the state on condition of the stand; whether in an early stage of succession or late – an indication of state of disturbance of the area.

Wildlife

Compile list of wildlife according to main taxa – fishes, amphibians and reptiles, birds and mammals. The known food and habitat preferences of species found in the survey can be related to the general environmental condition of the habitats (and successional states) of the locations.

Conservation Status of ecosystems and species

Identification of conservation status of ecosystems and species of plants and animals recorded based on the IUCN Red List and NGOs such as Birdlife International and WWF and also the protected species list of Indonesia which highlight the species that are endangered and threatened and also those that are endemic.

SUMMARY FROM HCV ASSESSMENT(S):

Assessors and their credentials

The High Conservation value Assessment of PT Persada Bangun Jaya was carried out by Malaysian Environmental Consultants on the 10-13 November 2012 which is located at 82 Jalan Ampang Hilir 55000 Kuala Lumpur Malaysia.: 603-2052 6412/14FAX: 603-4252 4413 Email: info@mec-consult.org the key consultants conducting these assessments have been accredited and approved by RSPO. The team members are

1	5. Kishokumar	• 1992 MSc. Forestry and Its Relation to Land Use Queen's College, University of Oxford, UK • 1987 BSc. FORESTRY 4 yr Professional degree (Forest Management and Forest Industries Universiti Pertanian Malaysia (Agricultural University) Selangor, Malaysia • 1978 Higher School Certificate (Cambridge University) • Registered as HCV assessor with RSPO
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Assessment Methods (Data sources, data collection, dates, program, and visited places)

HCV Identifying Methods

For HCV 1-4: Presence of Protected areas, Protected and Endangered rare a threatened species and their habitats; sites of temporal use; areas for protection of water resources and water quality and prevention of soil erosion and fires.

The counts of the HCV which are found would give an indication of the importance of the area for conservation.

Identifying sub-groups in each village based on their livelihood pattern

The villages selected for the full assessment should comprise several sub-groups with different ethnic origins and livelihood pattern. There are varying degrees of dependency on forest resources according to ethnicity and origin. Migrant communities may also become dependent on the very resources which have sustained indigenous communities. The survey will identify the different sub-groups according to their livelihood patterns. This assessment provides socio-economic data based on each sub-group and the overall aggregated data.

Identifying how the community meets their basic needs

The basic needs in terms of income (cash needs) will be assessed according to ethnic-based socio-economic differences. The determination of basic needs with respect to carbohydrate, protein, vegetables, fruits, medicines, timber for house building and fuel wood will be based on the 16

Community (percentage of households) rather than individual. This was done to obtain a holistic view of the dependency on resources, the harvesting or production trend and the availability of alternatives through a basic needs table

Identifying fundamental forest functions

The full assessment will also take into consideration changes in dependency on resources which meet the basic needs of the communities. Since local community livelihood patterns are dynamic in nature, it is important to gauge the importance of these resources to the community in the long-term by analysing the current trends of utilisation. If current trends point to a resource being used less and less, either due to resource depletion or the availability of an affordable alternative, the resource may be disqualified as being fundamental to meeting the basic needs of the community.

Identifying sustainable uses of resources compatible with other HCVs

The basic premise of HCV 5 is that local community utilisation of resources which meets their basic needs should be within sustainable levels. If a potential HCV area is utilised in an unsustainable manner by the local communities themselves, then it is not a HCV, unless the communities have existing mechanisms or aspirations which can help reverse the trend. If the threat comes from external sources, then the HCV needs to be protected from external threats as well. Therefore, the assessment will also explore community practices which support sustainable use of resources, identified possible threat from the local communities and external parties as well as the attitudes of the local communities towards the resources which they claim to meet their basic needs. If a resource has been severely degraded and has no long-term continuity, then it is not an HCV 5.

Assessment of HCV status of findings:

The original natural vegetation of the area would have consisted of Lowland Dipterocarp Forest and the Riverine forests.

The Lowland Dipterocarp Forest is dominated by Dipterocarps such as *Dipterocarpus crinitus, D. pachyphyllus, D. verrucosus, Shorea laevis, S smithiana* and *Vatica umbonata*, as well as other large sized canopy trees such as *Durio, Santiria, Litsea, Irvingia and Scaphium.* The understorey comprises Myristicaceae, Myrtaceae, Leguminosae, Annonaceae, Lauraceae, Moraceae and Rutaceae. The lower understorey layers are formed by Rubiaceae, Melastomataceae, Ebenaceae, Myrsinaceae and palms and rattans. Ground flora (herbs and shrubs) can be common in some areas consists of ferns, grasses, gingers, pipers.

The riverine forest is found on the riparian sections of the rivers and is usually the first zone to be flooded when the river rises. Trees and plant found are generally tolerant of waterlogging and occasional flooding. In less disturbed areas, large sized Dipterocarps (*Dipterocarpus oblongifolia, Anisoptera grossivenia*), *Actinodaphne* and *Artocarpus* can be found while in other disturbed areas, *Macaranga, Mallotus, Ficus* and *Callicarpa* are common. Common understorey species include Lauraceae, Myrtaceae, Rubiaceae and Melastomataceae and shrubs and herbs include Maranta, Phrynium, Melastoma, ferns, gingers, grasses and sedges in more open areas.

Currently, most of the project area has been disturbed, with the peak clearing activity in 2009. As indicated in Table 1, the clearing was not done by PT. PBJ. Some of these cleared areas appear to have been left to fallow or abandoned, allowing the succession process to begin to restore vegetation cover. The most active regrowth has been in the riverine areas where ample water and water transported seeds make recovery fast. In the drier areas, especially the hill slopes where soil moisture and transport of materials for restocking are constrained, the successional process is expected to be slower. Most of the area is dominated by pioneer species and pole sized trees such as *Macaranga gigantea* and *Melicope glabra*. The vegetated riverine buffers seem fairly intact although there are evidence of recent disturbance and encroachment. The vegetation in areas further from the river has recently been subjected too

much disturbance and some areas have even been cleared to the rivers' edge. Some of the remnant patches, however, still harbour some interesting plants and animals including orangutan (a number of stage 3 or 4 OU nests were observed). There was evidence of logging in progress – especially the harvesting of ulin (*Eusideroxylon zwageri*). The natural vegetation of the area consists of Lowland Dipterocarp Forest and the Riverine forests. The other vegetation types found include farmed areas and secondary forests.

The survey revealed that densities of trees can range from about 250 to 900 trees per ha – indicating a wide degree of openness of the forested stands. The basal areas or the different stands also vary quite considerably, indicating that these stands are recovering towards a late succession phase at different rates and stages. Closed canopy late succession phase would generally have basal areas over about 30 m2/ha, while early succession would have basal areas below 10-15 m2/ha.

290 species of plants from over 70 families were recorded during the survey. The species are from those from primary forest to those that are pioneers commonly found in open disturbed vegetation as well as those that are cultivated. These forests have been used by the local communities for the 22. exploitation of timber as well as the land for cultivation of food crops. A number of the primary forest species especially the Dipterocarps are listed as critically endangered (CR) in the Redlist as well as protected by the Indonesian Government (Table 4.2) are still found in the site. These would constitute HCVs and require specific management response.

73 species of birds, 13 mammals and 2 reptiles were recorded during the ecological survey of PT. PBJ 2-Kaltim Plasma strip. No critically endangered (CR) species were recorded, but 2 endangered mammals (the Orang utan and the Bornean Gibbon) were found as were several species of birds (12) and mammals (7) that are protected under Indonesia laws. Several vulnerable (VU) species of birds and mammals were also recorded indicating that the forested areas are still important habitats for birds and the large fauna.

The vegetated riverine buffers seem fairly intact although there are evidence of recent disturbance and encroachment. The vegetation in areas further from the river has recently been subjected too much disturbance and some areas have even been cleared to the rivers' edge. Some of the remnant patches, however, still harbour some interesting plants and animals including orangutan (a number of stage 3 or 4 OU nests were observed). There was evidence of logging in progress – especially the harvesting of ulin (*Eusideroxylon zwageri*).

The natural vegetation of the area consists of Lowland Dierocarp Forest and the Riverine forests. The other vegetation types found include farmed areas and secondary forests.

Evaluating High Conservation Values found in the AOI and management actions required.

In line with current RSPO guidelines for HCV 1.3 species, it is assumed that the individuals currently present on site are a part of a local viable population, capable of being self-sustaining. This will require:

1) Securing minimal habitat size for current populations,

2) Maintaining habitat quality for shelter, food and breeding space.

Table 7: Survey findings of HCV and proposed actions required

HCV	Survey findings	Action Required
HCV 1.1	There is no Protected Area in or adjacent to the area of interest	Not applicable (NA)
HCV 1.2	At least four CR species of trees *Dipterocarpus cornutus, D. hasseltii, D. tempehes* and *Shorea smithiana*	Initiate studies to assess presence, location and population of selected ERT species and start conservation efforts
HCV 1.3	Several species of plants and animals that are protected under Indonesian laws are also found in the site and these include a number of Dipterocarps and ulin as well as the orangutan, Bearded Pig and Sun bear and probably the Marble cat and the Borneo Bay Cat	Establish pockets of appropriate habitats and corridors to link them up; especially river buffers which may need to be widened
HCV 1.4	While not directly surveyed, it is likely that the natural areas with forests and water bodies will be used for nesting and breeding by fishes, amphibians, reptiles and birds. This conservation value can be incorporated into 1.3 above	See 1.3 above
HCV 2.1	There is a Production Forest to the north of the plasma site but highly degraded and identified for coal mining.	NA
HCV 2.2	Much of the area of interest is disturbed; the riverine forests can technically be an interphase of the river ecosystem and the relatively dry lowland alluvial dipterocarp forest.	The riverine areas should be protected by establishment of the river buffer which function as a corridor and should not be planted but be conserved and restored/ rehabilitated.
HCV 2.3	Although much of the area is disturbed there may be representative populations still existing in adjacent production and less disturbed areas of forests; this may require further studies	Initiate studies/ census on selected species
HCV 3	There is Production Forests to the north of the plasma site but it is highly degraded and presumed to have lost its conservation value. The riverine buffers which are intact are thus considered to be a rare and endangered ecosystem. Conservation value can be incorporated with 2.2 above	as 2.2 above
HCV 4.1	Not directly assessed as source of water for consumption; but rivers and vegetated riverine areas probably may attenuate water flow during floods and reduce erosion, *can be incorporated into 4.2 below*	Ensure river buffers are established and maintained and restored where necessary
HCV 4.2	Vegetated riverine buffers to reduce soil erosion into streams and rivers.	as 4.1 above
HCV 4.3	Although not assessed in the survey, vegetated riverine buffers may function as natural barriers to fire	as 4.1 above
HCV 5	No sites identified within proposed plasma area. Some HCV 5 areas are known outside the site.	Not applicable
HCV 6	No sites identified within proposed plasma area. Some HCV 5 areas are known outside the site.	Not applicable

These are both items for land use planning. They can only be secured if they are incorporated into the HGU and managed by the project proponents. If they are excluded from the HGU, then an endorsement and agreement for conservation management would have to come from government agencies responsible for the land resources where the habitats are located as well

as the local communities who are cultivating and extracting forest resources from the habitats of the threatened species.

At present the stresses put on the local population include: possible targeted hunting, habitat decline in area and quality, fragmentation of habitat through resource take and development for coal mines and permanent agricultural. Even parts of the 'green areas' along riverine buffers – and HCV 4 area that were aside for conservation between the existing REA Kaltim estates have been developed by the local community for permanent agriculture.

SUMMARY OF PLANs:

Development of HCV and SIA Management Plans

PT. PBJ 2-Kaltim is plans to develop approximately 2,924 ha (originally ±3,057 ha) of oil palm plantings for REA's PLASMA scheme. The original extent was 3,057 ha but was revised on the 28 November 2013 according to Keputusan Bupati Kutai Kartanegara, *Nomor 590/525.29/30/A.Ptn*.In line with the requirements of RSPO's New Planting Procedures (NPP) an independent High Conservation Value assessment is required among other things. The project site is referred to as an estate called Persada Bangun Jaya (PBJ 2) Kaltim which will be used by REA to develop plasma oil palm plantings. The project site was also named as PT.Persada Bangun Jaya (Kembang Jangut) in the Izin Lokasi document dated 28 November 2013. This site is in the Kabupaten of Kutai Kartanegara, Kecamatan of Kembang Janggut, and officially[1]overlaps with the 5 desas namely Penoon, Long BelehModang, Long BelehHaloq, Muai and Kelekat. In the HCV and SIA assessment, This site is intended to be developed as 'Plasma' on behalf of 4 different local communities and be managed as a single

[1] This is based on the KeputusanBupatiKutaiKartanegara, Nomor: 590/525.29/30/A.Ptntentang*Revisi&PerpanjanganIjinLokasiUntukKeperluanInti Plasma Perkebunan KelapaSawitPtPersadaBangun Jaya*, 28 November 2013.

entity by a single management body. The four local communities are from Kembang Janggut, Long Beleh Haloq, Muai and Kelekat. The community from Long Beleh Modang will be allocated their plasma holdings in a different area in the near future. The allocation of Plasma to the different communities is yet to be finalized and legally approved by the government. The finalization of this exercise is expected to be completed over the next few months.

The estate is located on the northern boundaries of the REA Kaltim estates of Lestari, Cakra, Damai and Berkat. The land is generally undulating, and slightly hilly towards the south. The area is drained by three main rivers – the Loa Wen in the north, the Lurah in the middle and the Hapai in the south. The area has three soil types, two of which are considered suitable for agriculture and much of the area has generally been disturbed by logging, clearing for farming and burning as well as mining in the north. The vegetation is thus mainly secondary in nature except for small patches nearer the rivers which have recovered or has been left less disturbed.

The objective of the assessment is to determine the ecological condition, vegetation types and also identity of important species of plants and animals found in the area in order to identify High Conservation Values (HCV) within the proposed estate. This will assist in identifying areas which need to be set aside before any/ further clearing begins. Despite of that social impact assessment (SIA) was done to collect basic information related to various social issues related to the livelihoods of local community around the area of the plantation, and also to gather information on the social impact caused by the presence and activities of the company's operations , in particular the plasma towards community development plans. With all these information obtained from SIA the management recommended for the company can be establish to manage the social impacts that have occurred and to anticipate the social impacts that are likely to arise (advancing benefits and mitigating adverse effects).

As the area of the development has been reduced from ±3,050 ha to ±2,924 ha according to the 28 November 2013 document (Keputusan Bupati Kutai Kartanegara, *Nomor 590/525.29/30/A.Ptn),* there is no requirement for an Environmental Impact Analysis (AMDAL) under Indonesia law. There is however a requirement for an Environment Management Plan (*Upaya Penggelolaan Lingkungan Hidup* (UKL)) and an Environment Monitoring Plan (*Upaya Pemantauan Lingkungan Hidup* (UPL)).

The assessment of HCV involves a multistage procedure. It starts off with a preliminary desktop analysis using a Geographical Information System (GIS) analysis which requires the input of maps and information from various sources to be integrated. This is followed by field survey(s) to obtain ecological and biological data – vegetation types, flora and fauna as well as forest stand data (species and diameter measurements). The field data is analysed and the identification of conservation status of ecosystems and species of plants and animals recorded based on the IUCN Red List and other stakeholders such NGOs like Birdlife International and WWF and also the protected species list of respective countries. The information is then incorporated into the GIS to generate maps and information on HCV found in the area of interest.

The Social Impact Assessment (SIA) for PT. PBJ 2-Kaltim was conducted on a number of occasions between November 2013 and January and March 2014. The assessment was conducted in a number of villages within the HGU and the Izin Lokasi of PBJ 2-Kaltim specifically for the establishment of PLASMA for the local communities. The villages with overlapping land in this area are Kelekat, Kembang Janggut, Long Beleh Halog, Long Beleh Modang, and Desa Muai.

Socio-economic and cultural assessment was made through interviews of local communities and stakeholders within and adjacent to area of interest (proposed company site); including

their dependence on the forest and rivers for their livelihood. Basic socio-economic and cultural survey of local communities; ethnicity, cultural, religious background; economic info: sources of income and livelihood and dependence on forests and area of interest for livelihood and also cultural and traditional needs. Data collection to include village administration; land ownership; identifying sub-groups in each village based on their livelihood pattern; identifying how the community meets their basic needs; identifying sustainable uses of resources compatible with other HCVs and developing a Basic Needs matrix. From a review of the findings of the principal issues with attention to the social context surrounding communities, it can be concluded that the presence and operational management of oil palm plantation by PT. PBJ2-Kaltim has an impact on the environmental aspects of community life, namely., the social life and economic / financial .

For new planting areas, the RSPO requires the extent of areas cleared between the 1st January, 2006 and 31st December 2009 and after the 1st January 2010. From the desktop study and GIS analysis, successional models based on satellite images allow comparisonsto be made in the change of successional stages in the time intervals between 2004 and 2009, and from 2010 to 2013. No late succession or virgin areas were present in the project areas, and all areas cleared had previously been disturbed. Late succession areas were only cleared in the earlier time period. After 2009, the only available late successional areas would have been flood prone riverine areas. Most of the areas cleared were in an early successional stage. These would have been areas where most of the original woody vegetation would have been removed for timber.

The HCV sites identified in the PT. PBJ 2-Kaltim plasma area would require appropriate management to ensure that the value is either maintained or enhanced. Historical clearing in the area is rampant and the local community has seen the area as an opportunity to expand their holdings. Areas have been cleared and developed for oil palm smallholdings. There is

also the pressure from coal mining activity. Any initiative made by the project proponents to invest in HCV management for these species in their current locations will need the endorsement and constructive support by these communities. Without such support, current available the habitat quality for these species will continue to decline below a level that could support a viable population. Some of the actions will involve active socializing with the local communities.

Area of new plantings and time-plan for new plantings

Table 1.1: Area of plantable and extent of HCV

Desa/ Villages overlaps with the planting area	No HCV 1-4, plantable		HCV 1 - 4, conserve		Total PT. PBJ2 - Kaltim
	ha	% of desa	ha.	% of desa	
Kelekat	918.73	*77.0%*	274.87	*23.0%*	1,193.60
Kembang Jangut	525.62	*75.9%*	166.84	*24.1%*	692.46
Long Bleh Haloq	68.13	*72.6%*	25.66	*27.4%*	93.80
Long Bleh Modang	142.49	*92.0%*	12.38	*8.0%*	154.88
Muai	719.71	*89.3%*	86.66	*10.7%*	806.36
Grand Total	2,374.68	*80.7%*	566.41	*19.3%*	2,941.10

Table 1.2 : Land Clearing and Planting Schedule

Description	Year		Total (Ha)
	2014	2015	
1. Land Clearing Schedule			
PLASMA	1,200 Ha	905 Ha	2,105

Total			**2,105**
2. Planting Schedule			
PLASMA	1, 200 Ha	905 Ha	2,105
Total			**2,105**

Stakeholders to be involved

No	In Cass	Name of Institution	Desa	Department	Name	Occupation
1.	Said Rum Hakiki	Koperasi Perkebunan Etam Bersatu	Kelekat	Ketua Koperasi	Seradin	Perangkat Desa
				Wak. Ketua Koperasi	Haryanto	Swasta
				Sekretaris	Anton Siausin	Petani
				Wakil Sekretaris	Relidin	Petani
				Bendahara	Witim	Petani
				Kepala Desa Kelekat	Rudi	Swasta
				Kepala Adat Desa Kelekat	Liseh	Petani
				Ketua BPD Desa Kelekat	Alexander	Petani
				Ketua LPM Desa Kelekat	Usman A.	Petani
2.	Said Rum Hakiki	KSU Benua Etam Jaya	Kembang Janggut	Ketua Koperasi	Doliansyah	Perangkat Desa
				Wak. Ketua Koperasi I	Ismid	Guru
				Wak. Ketua Koperasi II	Jamran	Petani
				Sekretaris	Agus	Honorer
				Wakil Sekretaris	Arhanuddin	Guru
				Bendahara	Ahmad Sumber Rianto	Swasta
				Wak. Bendahara	Jailani	Swasta
				Kepala Desa Kb. Janggut	Aslan	Perangkat Desa
				Kepala Adat Desa Kb. Janggut	Asan S.	Petani

No	In Cass	Name of Institution	Desa	Department	Name	Occupation
				Ketua BPD Desa Kb. Janggut	Safransyah	Perangkat Desa
				Ketua LPM Desa Kb. Janggut	Arwadi	Petani
3.	Said Rum Hakiki	-	Muai	Ketua Koperasi	-	
				Wak. Ketua Koperasi I	-	
				Sekretaris	-	
				Wakil Sekretaris	-	
				Bendahara	-	
				Wak. Bendahara	-	
				Kepala Desa Muai	Bakhtiar	Perangkat Desa
				Kepala Adat Desa Muai	Yusni	Petani
				Ketua BPD Desa Muai	Simon	Petani
				Ketua LPM Desa Muai	-	
4.	Said Rum Hakiki	-	Penoon / Long Beleh Modang	Ketua Koperasi	-	
				Wak. Ketua Koperasi I	-	
				Wak. Ketua Koperasi II	-	
				Sekretaris	-	
				Wakil Sekretaris	-	
				Bendahara	-	
				Wak. Bendahara	-	
				Kepala Desa Penoon	Amsar	Perangkat Desa
				Kepala Adat Desa Penoon	Jai Asnudi	Petani
				Ketua BPD Desa Penoon	Ahmad Dani	Petani
				Ketua LPM Desa Penoon	-	
5.	Said Rum Hakiki	-	Long Beleh Haloq	Ketua Koperasi	-	
				Wak. Ketua Koperasi I	-	
				Sekretaris	-	
				Wakil Sekretaris	-	
				Bendahara	-	
				Wak. Bendahara	-	
				Kepala Desa LB. Haloq	Saiful Anwar (PJS)	Perangkat Desa

No	In Cass	Name of Institution	Desa	Department	Name	Occupation
				Kepala Adat Desa LB. Haloq	-	
				Sek. Adat Desa LB. Haloq	Asmuransyah	Petani
				Ketua BPD Desa LB. Haloq	Suhaimi	Petani
				Ketua LPM Desa LB. Haloq	Hasni	Petani

RSPO

1. SUMMARY OF FINDINGS

1.1 Summary of Management and Mitigation Plans-Environmental Assessment (4a)

Based on the following documents:

- Environmental Management Plan (Upaya Pengelolaan Lingkungan Hidup- UKL)
- Environmental Monitoring Plan (Upaya Pemantauan Lingkungan Hidup- UPL)

Mitigation & management plans for the impacts

Impacts	Source of Impacts	Level of Impacts	Environment Management Plan (UPAYA PENGELOLAAN LINGKUNGAN HIDUP)			
			Location	Objective	Methods	Time
A. Pre Development Phase						
1. Land Acquisition						
- Social Conflicts						
Arise of social conflicts among the local community and also potentially create a conflict between local community and the company	Land Acquisition process	Conflict occur between community and company	At the location of the land acquisition activities will be conducted	to avoid the conflict between the local community or between the community and the company	1. Socialization process regarding to the boundaries of land to be released in the plantations plan.	Prior to land acquisition process
					2. Make a deal on compensation value between company and the land owner (local community)	
					3. Avoid the land acquisition process in the conflicts area	

Impacts	Source of Impacts	Level of Impacts	Environment Management Plan (UPAYA PENGELOLAAN LINGKUNGAN HIDUP)			
			Location	Objective	Methods	Time
					4. Involves the district and land department in the implementation and process of land acquisition.	
2. Labour Reception/ Intake of Labour						
- Field work						
Employment opportunities for local community created	increasing income of local communities with recruitment activities	the number and proportion of local labour employed	Desa Long BelehModang, Muai, Kelekat, KembangJanggut , KecamatanKembangJanggutand management office PT. PBJ	To provide opportunity and to empower the potential of the local community workforce	1. Prioritize the recruitment from local residents	During the recruitment activities
					2. Made the announcement and put a notice in the office of the village and district office about the recruitment for PT. PBJ	
					3. Providing education and training to the local workforce to increase skills and expertise accordance with the level of education	
					4. inform the amount, type, classification and labour skills required and report to the DISNAKERTRANS, District of Kutai	
					5. Initiator in cooperation with the Village Administration, District and Department of Labour on local	

Impacts	Source of Impacts	Level of Impacts	Environment Management Plan (UPAYA PENGELOLAAN LINGKUNGAN HIDUP)			
			Location	Objective	Methods	Time
					recruitment	
					6. Announced the results of the recruitment in the village and sub-district offices	
					7. Do not employ workers under the age of 18	
- Local Community Perception						
An increase in the income of people employed in the oil palm plantation activities	is due to the continued impact of the creation of jobs for local people	income levels before and after the operation of the project	Plantation area of PT. PBJ	to maximize the positive impact on the improvement of local community income	1. set a minimum wage according to the UMK (Minimum Wage District) KutaiKartanegara	during the operation of PT. PBJ
					2. Provide education and training to the local workforce to improve the skills and expertise that is expected to increase the income of local employment	
					3. Implement all employment rules, set by the Government	
					4. Spurring the development of the surrounding community effort associated with the operation of the garden, so that can be expected of non-formal job creation	
- General Traffic (Land & water)						

Impacts	Source of Impacts	Level of Impacts	Environment Management Plan (UPAYA PENGELOLAAN LINGKUNGAN HIDUP)			
			Location	Objective	Methods	Time
Traffic disturbances on roads that are used in equipment mobilization activities	crossings of the repetitive units of heavy equipment hauler (trailer)	the level of traffic congestion in the surrounding area of the project site	along the roads involves in the mobilization of equipment	to avoid interference with traffic-control equipment during the mobilization activities	1. Socialise the community about equipment mobilization plan	During to mobilisation activities
					2. Timing in the implementation of mobilization, especially at the time of frequency of vehicle on traffic decreased / low	
					3. Provide road signs around the access in and out of the vehicle to the location of the garden project that looks easy placement	
					4. The maximum vehicle speed is setting at 20km/hour especially when crossing settlements area	
					5. Priority to advance the use of public roads	
					6. Cooperate with related parties (Department of Transportation) to provide escort to the mobilisation process	
- Local community safety						
The emergence of the risk of traffic accidents; terrestrial and aquatic	Result of thegeneral disruption of traffic around the project	traffic accidents that occurred	settlements area along the roads and the local water bodies	To avoid the occurrence of traffic accidents related to equipment	1. Did not perform simultaneous mobilization on path/way for the mobilization activities	During to mobilisation activities

Impacts	Source of Impacts	Level of Impacts	Environment Management Plan (UPAYA PENGELOLAAN LINGKUNGAN HIDUP)			
			Location	Objective	Methods	Time
	area			mobilization activities		
					2. Coordination and escort by the Department of Transportation for the management of the trailer units during the mobilization activities	
					3. Slows the vehicle when passing through residential areas and obey traffic signs are there	
					4. Prepare units to move quickly in case of traffic accidents	
B. Development Phase						
1. Development of Plantation Roads						
- Vegetation						
The degradation of natural vegetation due to land opening (clearing) occurs	due to clearing of the plantation road site	Formation of barren land on the opening of plantation road	Along the road	To minimize the degradation of vegetation cover or restrict the opening land area	1. The construction of the road network should be done and planned systematically and to be adapted to the progress of the garden	During the operation of PT. PBJ
					2. Did not make its way in the conservation zone	
					3. Undertake riparian planting of a cover crop on the road	
- Erosion						

Impacts	Source of Impacts	Level of Impacts	Environment Management Plan (UPAYA PENGELOLAAN LINGKUNGAN HIDUP)			
			Location	Objective	Methods	Time
The rate of soil erosion increase on the land that are cleared and opened for the development of the plantation roads	The land clearing. Weathering solidity of soil particle surface due to the cut and fill	the increase in the rate of soil erosion that exceeds the erosion threshold predicted	around the plantation area		1. Implement land openings/ land clearing process for road construction in a planned and efficient ways	During the operation of PT. PBJ
					2. Makes peeling porch bench on the field of border road	
					3. Immediately planted land border road openings with cover crops	
					4. Coating maintenance of roads with coral and sand mixture (quarry)	
- Sedimentation						
The increase of sediment loads in the water bodies located around the project area	Is a derivative effect of increasing the rate of erosion on the opening of the roads activities	Sedimentation in water bodies in the project that led to silting	Along the plantation roads	To reduce the sedimentation loads on local water bodies	1. The implementation of development activities in a planned network of garden paths and stages in accordance with the requirement that the land openings that lead to erosion can be minimized	During the operation of PT. PBJ
					2. Making a trench in the left and right of the road	
					3. Making pond sediment traps at each end of the trench that leads to surface water bodies	

Impacts	Source of Impacts	Level of Impacts	Environment Management Plan (UPAYA PENGELOLAAN LINGKUNGAN HIDUP)			
			Location	Objective	Methods	Time
					4. Perform maintenance ditches and sediment traps intensive	
					5. Implement land openings/ land clearing process for road construction in a planned and efficient ways	
					6. Makes peeling porch bench on the field of border road	
					7. Immediate openings planting land border road with a cover crop (cover crop)	
					8. Coating treatment with a mixture of coral roads and sand (quarry)	
- Surface Water Quality						
A decline in the quality of surface water in the water bodies around the project site	Is due to the continued impact of the increase in the rate of degradation of vegetation and soil erosion on land openings for the road development	Regulation of East Kalimantan No 2 on 2011, The Managemen t of Water Quality & Water Pollution Control (Class 2)	Around the local's water bodies	to minimize the deterioration of water quality in water bodies around the project site	1. The implementation of development activities in a planned network of plantation road and stages in accordance with the requirement that the land openings that lead to erosion can be minimized	During the operation of PT. PBJ
					2. Making a trench in the left and right side of the road	

Impacts	Source of Impacts	Level of Impacts	Environment Management Plan (UPAYA PENGELOLAAN LINGKUNGAN HIDUP)			
			Location	Objective	Methods	Time
					3. Makea pond sediment traps at the end ofevery trench that leads to surface water bodies	
					4. Perform maintenance ditches and sediment traps intensive	
					5. Implement land openings/ land clearing process for road construction in a planned and efficient ways	
					6. Makes peeling porch bench on the field of border road	
					7. Immediate plants the land border road with a cover crop (cover crop)	
					8. Coating treatment with a mixture of coral roads and sand (quarry)	
2. Preparation of the Plantation Area						
- Vegetation						
The degradation of natural vegetation due to land opening (clearing) occurs	direct impact of the cleaning	formation of non-vegetated unfertile land	Around the planting site location	Accelerate the planting of crop plant	1. Conduct land clearing activities systematically and gradually done and the direction of opening the land from the nearest settlement leading to a wooded area	
					2. Planting in areas that have been open as soon as possible in planting staple crops (palm oil) and cover crop planting	
					3. Do not allowthe land clearing activities accompanied by the burning of land (zero burning / PLTB)	

Impacts	Source of Impacts	Level of Impacts	Environment Management Plan (UPAYA PENGELOLAAN LINGKUNGAN HIDUP)			
			Location	Objective	Methods	Time
					4. Do not perform land clearing to the area that is designated as a conservation zone area	
					5. Maintain conservation area by declare or announce the area as well as disallow encroachment and hunting in the protected area ,enriching the types and locations that have economic value to the surrounding community	
- Erosion						
The rate of soil erosion increase on the land that are cleared and opened for the development of the plantation roads	a derivative effect of the loss of ground cover vegetation (due to land clearing) on the prepared planting area	the increase in the rate of soil erosion that exceeds the erosion threshold predicted	around the plantation area	to control the rate of soil erosion on the plantation path openings	1. prepare the land for gradual and planned planting area preparation activities	during the preparation of the plantation area
					2. Making residual herbaceous land clearing which is cut lengthwise direction of the slope	
					3. Accelerate the process of planting the staple crops (palm oil) and cover crops in the area of planting plans	

Impacts	Source of Impacts	Level of Impacts	Environment Management Plan (UPAYA PENGELOLAAN LINGKUNGAN HIDUP)			
			Location	Objective	Methods	Time
					4. Do not perform the clearing activities of the land with open burning	
- Surface Water Quality						
A decline in the quality of surface water in the water bodies around the project site	Due to the continues impact of the increase in the rate of soil erosion	Regulation of East Kalimantan No 2 on 2011, The Management of Water Quality and Water Pollution Control(Class 2)	In the project location	To minimize the rapid decline of the water quality in water bodies around the project site	1. Preparation gradual and planned land	During the preparation and activities of the planting and the operation of oil palm plantations PT. PBJ
					2. Making residual herbaceous land clearing which is cut lengthwise direction of the slope	
					3. Accelerate the planting of staple crops (palm oil) and cover crops in the area of planting plans	
					4. Do not perform the clearing activities of the land with open burning	
					5. Did not perform clearing on riparian zones and water source as well as maintain existing natural vegetation in the conservation zone	
3. Planting Process/Activities						
- Air Quality						

Impacts	Source of Impacts	Level of Impacts	Environment Management Plan (UPAYA PENGELOLAAN LINGKUNGAN HIDUP)			
			Location	Objective	Methods	Time
Decline in the quality of the air around the road/transportation of oil palm seedlings	During the transportation process of the seedlings from the nursery to the plantation area	Standard Quality content of dust in the air of 0.23 mg/m3(ambient air quality standards) based on PP. 41 of 1999 on Air Pollution Control	conducted along the roads of the seeds transportation process	to reduce dust scattered in the air caused by vehicles transporting oil palm seedlings to prevent from exceed the environmental quality standards limit	1. Adjust the speed of the vehicle transportation to the maximum of 20 km/h, especially when passing through the settlement or community area	During the planting activities
					2. Perform a hard compaction and special road haul on the freight crossing paths seeds	
					3. Watering the road every 3 hours on transit lines that pass near the settlement especially in hot weather	
					4. Construct a fire watchtower at the site of the garden with a height of about 25-30m	
4. Conservation of Water and Soil						
- Erosion						
A decline in the rate of the erosion	Planting of the *Leguminosae* Cover Crop	Government Regulation No.150 of 2000 on	In the location of soil and water conservation	To minimize and control the rate of erosion	1. Conduct land clearing activities in the hot weather condition (summer)	During the operation of PT PBJ

Impacts	Source of Impacts	Level of Impacts	Environment Management Plan (UPAYA PENGELOLAAN LINGKUNGAN HIDUP)			
			Location	Objective	Methods	Time
	(LCC) on oil palm plantation area which causes a strong bond of soil particles, thus decreasing the rate of soil erosion	Land Degradation Control for Biomass Production (critical erosion threshold of 9 tonnes / ha / year)				
					2. Immediately planting the cover crop on soil and water conservation	
					3. Fertilize trees and clearing the rest of the chopped herbs on erosion-prone areas	
					4. Making erosion control facilities prior to conducting land clearing	
					5. on slope area/ slope> 8%, made terracing and planting fast-growing vegetation types (fast growing species), fibrous and tight/assembly roots	
					6. Provide treatment fertilization and liming to increase the availability of plant nutrients for plant re-vegetation and to increase the carrying capacity of soil fertility and plant growth re-vegetation	

Impacts	Source of Impacts	Level of Impacts	Environment Management Plan (UPAYA PENGELOLAAN LINGKUNGAN HIDUP)			
			Location	Objective	Methods	Time
- Sedimentation						
The decrease in sediment load in the water bodies near to the project site	Is the continuousim pact of the decline in the rate of erosion	The volume of sediment loads in waterways and local water bodies	On the location of soil and water conservation	prevent / minimize the loads of the increased sedimentation in water bodies	1. Conduct land clearing activities in the summer	During the operation of PT PBJ
					2. Immediately planting the cover crop on soil and water conservation	
					3. Fertilize trees and clearing the rest of the chopped herbs on erosion-prone areas	
					4. Making erosion control facilities prior to conducting land clearing	
					5. Perform road maintenance and erosion control facilities regularly and continuously, especially during the rainy season	
					6. On sloping land / slope> 8%, made terracing and planting fast-growing vegetation types (fast growing species), fibrous and tight/assembly roots	
					7. Provide treatment fertilization and liming to increase the availability of plant nutrients for plant re-vegetation and to increase the carrying capacity of soil fertility and plant growth re-vegetation	

Impacts	Source of Impacts	Level of Impacts	Environment Management Plan (UPAYA PENGELOLAAN LINGKUNGAN HIDUP)			
			Location	Objective	Methods	Time
C. OPERATIONAL PHASE						
1. **Plant Maintenance**						
- Surface Water Quality						
The residue of fertilizers and pesticides applied	The residue of fertilizers and pesticides carried away the flow of water runoff from the plantation area	The content of residue of fertilizers and pesticides in the water bodies along the plantation site	In all the clearing plantation area	To reduce the supply of pollution materials from the residues of fertilizers and pesticides flowing to the water bodies	1. Apply and provide the fertiliser to the crops efficiently and according to schedule planned	During the operation of PT PBJ
					2. Applications of pesticides in pest control and plant diseases should refer to the recommended amount and use materials that are allowed	
					3. For weed control , herbicide application should be a last priority , weed control is preferred in non-chemical treatment	
					4. strict supervision of the field application officers (application of fertilizers and pesticides) must conduct to avoid the deviations application in accordance with the established work procedures	

Impacts	Source of Impacts	Level of Impacts	Environment Management Plan (UPAYA PENGELOLAAN LINGKUNGAN HIDUP)			
			Location	Objective	Methods	Time
					5. Apply strict rules banning all farm workers either intentionally or accidentally spilled the fertilizers and pesticides to local water bodies	
					6. Prepare the proper place for the fertilizers and pesticides to shelters from scour flow run up and protected from the rain on the location of the distribution of planting areas	
					7. Establish SOP on preparation and distribution of fertilizer and pesticide applications in the field	
					8. Suspend fertilization and pesticide application during raining time	
					9. Entire trench gardens leading down to the local water bodies should be made settling ponds that serve as the test pond fertilizer and pesticide residues are carried by water runoff	
					10. Collect all of the former packing fertilizers and pesticides applied and collected in the sheltersprepared	
					11. Provide training to all the workers that involve in fertilizer and pesticide applications with emphasis on the security aspects of the environment	
					12. To reduce the use of chemical fertilizers by replace with organic fertilizers that are derived from plant waste oil and waste plant	

Impacts	Source of Impacts	Level of Impacts	Environment Management Plan (UPAYA PENGELOLAAN LINGKUNGAN HIDUP)			
			Location	Objective	Methods	Time
					13. Construct water storage ponds / reservoir to meet the water needs	
2. Harvesting of Fresh Fruit Bunches (FFB)						
- Field						
Creating a business opportunities to the surrounding community	Presence of activities through partnership with community	The proportion of local workers who are employed	Project location	To optimize the positive impact of a component activities through partnership with local entrepreneurs	Provides the opportunity for the local community or individual business units that are located in and around the location of the plantation to participate, especially in FFB harvesting	During the operation of PT PBJ
3. Transportation of Fresh Fruit Bunches (FFB)						
- Water Quality						
A decline in the quality of ambient air along the roads/ transportation way of FFB	Scattered dust generated by the friction of the wheel truck body surface with plantation roads	Standard quality content of dust in the air of 0.23 mg/m3 (ambient air quality standards) based on PP. 41 of 1999 on Air Pollution Control	Along the transportation area of fresh fruit bunches (FFB) to the location of demolition	To prevent the degradation of air quality due to the activities	1. The setting speed of the vehicle is limit to a maximum of 20 km / hour, as it passes the settlement area, agricultural activity site and plantation area(where the workers exist)	During the operation of PT PBJ

Impacts	Source of Impacts	Level of Impacts	Environment Management Plan (UPAYA PENGELOLAAN LINGKUNGAN HIDUP)			
			Location	Objective	Methods	Time
					2. Perform a hardening compaction and special haul to the road with aggregates, especially the road at plantation area	
					3. Watering the road minimum at least 2 times a day on transit road that pass near the settlement and plantation area especially in hot weather	
- Traffic (Land)						
Traffic disruption on public roads within the area of the plantation	Repeated crossing of the FFB carrier vehicles	level of the traffic disruption on roads that traversed the transportation	At the location of the plantation way/ path that is used as the public road use/accessibility	To avoid the traffic disruptions during the transportation activities of FFB	1. Socialisation to affected communities about the details planning on the plantation roads network	During the operation of PT PBJ
					2. Implement the traffic rules to all the road users	
					3. Provide the traffic signs along the public roads that are used for the company transportation and vehicles in accordance with applicable regulations of the Department of Transportation	
					4. Give the priority for the public road users	
4. CORPORATE SOCIAL RESPONSIBILITY (CSR)						
- Views and Perception of Local Community						

Impacts	Source of Impacts	Level of Impacts	Environment Management Plan (UPAYA PENGELOLAAN LINGKUNGAN HIDUP)			
			Location	Objective	Methods	Time
Creation of the positive views and perceptions of the community to the oil palm plantation operations of PT. PBJ	Caring attitudeand responsibility of company to the corporate social conditions in the existing villages	The percentage of people who support the existence of PT. PBJ	The villages included in the study area	To develop the positive attitudes and perceptions of the communities that will effect for the business continuity of the PT. PBJ	1.The PT. PBJ should design Corporate Social Responsibility program that fits the needs and desires of the community around the estate and align CSR programs with government programs that can actually have positive implications	During the operation of PT PBJ
					2. Immediately carry out consultation with community leaders from the villages in the project area related to the preparation of a Corporate Social Programme (CSR) involving Local Government, represented by the BAPPEDA	
					3. Implement any agreement resulting from the consultation in accordance with the company's ability	
- Human Resources						
An increase in local community education and skills,	development of education and training of the local workforce in the implementation of CSR activities	General education and skill levels	In every unit implementation of CSR programs	To increase the level of public education and specialized skills	1. Immediately implement all the program from the public consultation outcomes	During the operation of PT PBJ

Impacts	Source of Impacts	Level of Impacts	Environment Management Plan (UPAYA PENGELOLAAN LINGKUNGAN HIDUP)			
			Location	Objective	Methods	Time
					2. Conduct technical coordination with agencies associated for the program units that will be implemented	
D. POST OPERATION PHASE						
1. Termination of The Employment/PemutusanHubunganKerja (PHK)						
- Field work						
Garden/ plantation workers will loss the jobs	As a result of PHK in the activity rationalizatio n of manpower	Local community lose their jobs as the source of livelihood	At the workplace of PT PBJ/ Plantation area	Field work and effort for the former plantation workers of PT. PBJ	1. The implementation of PHK should be done gradually	At least 2 years prior to the implement ation of the rationaliza tion of labour
					2. Provide the early preparation for the worker before implement the PHK such as providing the education and training efforts to manage the garden so that they can survive and obtain the employments	
					3. Provide the compensation amount in accordance with the applicable Labour Regulations	
2. Equipment Demobilisation						
- Traffic (Land)						

Impacts	Source of Impacts	Level of Impacts	Environment Management Plan (UPAYA PENGELOLAAN LINGKUNGAN HIDUP)			
			Location	Objective	Methods	Time
Traffic congestions on roads that are used in equipment mobilization activities	Repetitive crossing of heavy vehicles (trailers)	The level of traffic congestion in the surrounding area	Along the road passes by the equipment demobilization activities	To avoid interference with traffic-control equipment when demobilization activities	1. The timing of the demobilization activities, especially at the time of vehicle traffic decreased frequency / low	During demobilisation process
					2. Provide accessible road signs around the access in and out of the vehicle to the location of the project site	
					3. Priority to advance of roads to public users	
					4. Cooperate with related parties (Department of Transportation) to provide escort to the demobilization process	
- Traffic (Water)						
disruption in the smooth flow of the local sail/journey on the local waters area	Transportation activities of vehicles and carrier to transfer the tools and equipment.	the frequency and intensity of the water traffic movement	In the local water bodies	To avoid interference of traffic on local water bodies when the equipment demobilization activities	1. The demobilization activities should be dronegradually	During demobilisation process
					2. Provide enough information when doing demobilization activities during the night time	
3. Land Returns						
- Behaviour and Perception						

Impacts	Source of Impacts	Level of Impacts	Environment Management Plan (UPAYA PENGELOLAAN LINGKUNGAN HIDUP)			
			Location	Objective	Methods	Time
The indicators of the support and rejection level of local community to the plans of returning the public in the oil palm plantation activities of PT. PBJ	Due to informal and formal socialization process	The percentage of people who support the existence of oil palm plantations PT. PBJ	At the location of the land return and PT PBJ management office.	To develop the positive attitudes and perceptions of the communities that will effect for the business continuity of the PT. PBJ	1. Conduct formal and informal socialization for the activities related to the returning of the land	During the operationa l process
					2. Provide an explanation to the public about the positive and negative impacts that have been felt by the public during the development and activities of oil palm plantation of PT. PBJ	
					3. Cooperation with village officials and relevant technical agencies in conducting land returns	
					4. Accommodate suggestions and aspirations of the local community	

1.2 Summary of Management and Mitigation Plans (SIA)(4b)

Mitigation &management plans to minimise negative for socio economic impacts.

Potential Impacts	Management Objective	Management approaches / Action plan	Timing

Potential Impacts	Management Objective	Management approaches / Action plan	Timing
Social conflict within local communities andPT. PBJ 2-Kaltim due to different viewpoints towards plantation development, land release and land acquisition.	• To avoid any conflicts from arise and smooth the process of development project • To ensure the process of land acquisition follow the rules of free, prior and consent as well as SOP planned by the company. • To strengtheningcommunication and social relationship with local communities	• Socialisation process in order to provide the information about the process of land clearing that involved local communities lands • Make a deal for the compensation value with local communities and company and avoiding the areas that have potential conflicts • Involves all the stakeholders and parties including Administrative institution in land acquisition process	Prior to land acquisition activities
Jealousy and social conflicts will arise involving land rights and ownership	• To avoid social conflicts between local communities that can reduce the well-being of the community. • To create harmonious communication within local communities continuously	• Location maps for plasma planning should be cleared immediately by the company to the community through socialisation process. • Company create a transparent MoU with cooperative/ local communities • Increase the capacity of the local labour and company policy not to hire or employed underage workforce (SOP)	Prior to land acquisition and clearing
Local community experience shortage of clean water especially during the dry season; - Supply of clean water for local communities is reduced, contaminated, due to the limited reservoir/ tanks provide by the company. - the water supply provided by the company always delayed	To improve the water quality supply for the local communities.	• Personnel training for clean water management was done by PT. PBJ2-Kaltim in handling clean water supply to local community • PT. PBJ 2-Kaltim should increase the water tanks up to at least three tanks so that enough water can be supply to local communities.	Continuous
The source of livelihood derived from the forest reduces and limited. (vegetables, protein, medicine, and woods)	To fulfill the basic requirement of local communities and ensure that the source of the needs will be available continuously.	• Establish the management and monitoring of HCV 5 by encouraging the PKK group on their production.	Continuous

Potential Impacts	Management Objective	Management approaches / Action plan	Timing
Traffic congestion and disruption of road (presence of big trucks and trailer)	To avoid the traffic congestion especially during the mobilization of equipment	• Socialisation to local communities regarding to the transportation and mobilization process of the equipment during the development process, • The schedule and frequency of the company mobilization and transportation should be done during the normal hours and avoid the process during peak hours • Provide the road sign around the entrance and exit of the project site to accommodate people. • The maximum speed limit for the vehicles is only 20km/h especially in the residential area. • Give the priority to the public transportation and other road users • Cooperation with the related parties especially Department of Transportation to monitor and control the mobilisation process • Prepare the rescue teams to anticipate if any road accidents happens (emergency rescue teams)	During the mobilization process and activities to PT. PBJ2-Kaltim
The water quality especially river around the project site is reduced.	To minimise the reduction of water quality and pollution of water body within the area to ensure that the supply of clean potable water is maintained.	• Development of road network in the plantation should be gradually planned according to the needs of opening to minimise the erosion • Make a trench on both side of the road • Make a sediment trap at each moats leading to the surface of the water bodies. • Regular maintenance and intensive treatment for the sediments traps and moats • Replanting all the open lands with cover crops. • Maintenance of coating and resurfacing the road layer with a mixture of coral and sand (quarry)	Early development phase and continuous
- CSR create a positive perceptions among the local communities towards the	To develop and expand the positive perceptions and attitudes of local communitieswhich indicates the	• PT. PBJ 2-Kaltim should design and establish the community empowerment programs to fulfill the basic needs of the local communities around the estate as well as aligning with	Continuously

Potential Impacts	Management Objective	Management approaches / Action plan	Timing
company - Changes in daily lifestyle and basic requirements of local communities	continuous support to the company	government programs so that CSR can really have positive and effective implication implications for the local community development. • Provide the education opportunities and improve the facilities by assisting local communities to continue their education. • Increasing the quality of public health and environment by collaboration with Department of Health especially to develop MCK/village water system for local communities. • Increased the religious value in community by providing the support and funds for the religious ceremony and house of worship support.	
Changes in local communities economic that result in alternative incomes and livelihood alternatives.	To provide the better income through oil palm production that involves local communities participation	• Provide and assist in the planning of income through regular management of Plasma income/ accounts. • Reduce the land clearing in the area that is still used by the local communities to fulfill their basic needs. • Increase the capacity building by improving the quality and quantity of production in the company • Increase the capacity of the financial management of family through social investment for local communities. • Opening new business opportunities and open up the employment opportunities for local communities according to the needs; employment recruitment socialise; conduct recruitment of local worker as needed.	Prior to the production phase and continuously

To manage the impacts and social issues mentioned above, the recommendation steps or activities that need to be done are:

1. Company should establish and clarify the plasma management model immediately and the socialisation process needs to be done for all the villages involved in the management of plasma (DesaKembangJanggut, Kelekat, Long BelehHaloqdanMuai).
2. PT. PBJ 2-Kaltim needs to develop policies and strategies for Social Management , which is the foundation and basic framework in developing programs of social management and smallholdings management or issues related to the social aspects (clear system of land release/land compensation, etc..).
3. Establish the Social Management Framework plan forthe company, which involves social mapping of local communities and village around the PT. PBJ 2-Kaltim. This process should be conducted comprehensively.
4. Conduct the Assessment of Needs for local communities and facilitate the planning process for every village. This entire process should be conducted in a participatory way (especially for the Plasma management planning).
5. Completing the basic social infrastructures for the community (education, health, clean water, electricity and etc.) in order to improve the quality of life
6. Initiated the development of local institutions (for villages that have not formed cooperatives) and improve the management capacity of local institutions/cooperatives.
7. Need to be more proactive and intensive in open communication, information, and visit the surrounding villages and be transparent with local people and community leaders. This effort does not have to be formal, and often more effective when done informally. This step is essential to build trust with the local community.

1.3 Summary of Management and Mitigation Plans (HCV) (4c)

Table 1.1: Survey findings of HCV Present and Plan for Monitoring and Data Review

HCV	Survey findings	Management recommendations
HCV 1.1	There is no Protected Area in or adjacent to the area of interest	Not applicable (NA)
HCV 1.2	At least four CR species of trees *Dipterocarpuscornutus, D. hasseltii, D. tempehes*and*Shoreasmithiana* are found in the estate. These require specific species/ individual management conservation management action.	Initiate studies to assess presence, location and population of selected ERT species and start conservation efforts
HCV 1.3	Several species of plants and animals that are protected under Indonesian laws are also found in the site and these include a number of Dipterocarps and ulin (*Eusideroxylonzwageri*) as well as the Orangutan, Mueller's gibbon, white-fronted leaf monkey, Bearded Pig, and Sun bear and probably the Marble cat and/or the Borneo Bay Cat and the lesser adjutant stork and the Short-toed coucal. These also require appropriate management action for the conservation of their habitats.	Establish pockets of appropriate habitats and corridors to link them up; especially river buffers which may need to be widened
HCV 1.4	While not directly surveyed, it is likely that the natural areas with forests and water bodies could be used for nesting and breeding by fishes, amphibians, reptiles and birds. This conservation value can be incorporated into 1.3 above	See 1.3 above
HCV 2.1	There is a Production Forest to the north of the plasma site but it is highly degraded and identified for coal mining. Its latest status need to be confirmed and appropriate action may be necessary. If still confirmed as a legally enacted Production Forests, the area is HCV 2.1 (***The area is however outside the boundary but is still contiguous with the HCV areas identified)***	Although a buffer would be appropriate, the status of the land and condition of the forest does not warrant establishing the buffer.
HCV 2.2	Much of the area of interest is disturbed; the riverine forests can technically be an interphase of the river ecosystem and the relatively dry lowland alluvial dipterocarp forest.	The riverine areas should be protected by establishment of the river buffer which function as a corridor and should not be planted but be conserved and restored/ rehabilitated.
HCV 2.3	Although much of the area is disturbed there may be representative populations still existing in adjacent production forests and less disturbed areas of forests; this may require further studies - see HCV 2.1 above;	Initiate studies/ census on selected species
HCV 3	There is Production Forests to the north of the plasma	as 2.2 above

	site but it is highly degraded and presumed to have lost its conservation value. The riverine buffers which are intact are thus considered to be a rare and endangered ecosystem. Conservation value can be incorporated with 2.2 above	
HCV 4.1	Not directly assessed as source of water for consumption; but rivers and vegetated riverine areas probably may attenuate water flow during floods and reduce erosion	Ensure river buffers are established and maintained and restored where necessary
HCV 4.2	Vegetated riverine buffers to reduce soil erosion into streams and rivers.	as 4.1 above
HCV 4.3	Although not assessed in the survey, vegetated riverine buffers may function as natural barriers to fire	as 4.1 above
HCV 5	No sites identified within proposed plasma area. Some HCV 5 areas are known outside the site.	NA
HCV 6	No sites identified within proposed plasma area. Some HCV 5 areas are known outside the site.	NA

RSPO

Management and monitoring plans to enhance or maintain conservation values of identified HCV Area

HCV present	Management objective	Enabling actions	Monitoring activities
HCV 1.3	Minimise the site threats to threatened species - orangutan and marbled cat.	1) Socialisation with local community to minimise impacts from their activities. 2) Secure assistance of acknowledged wildlife experts for management recommendations and monitoring. 3) Establish communications channels with wildlife management agencies & authorities and include in co-management body with local experts and local community.	1) Routine patrols note presence/ absence of target species; incidences; and threats to habitat. 2) Periodic survey by local stakeholder experts. 3) Periodic review by co-management committee on state of habitat and status of target species to validate HCV status. Report published for general stakeholders.
HCV 2.2	Maintain connection between dry forest to the north, and remaining patches and conservation area to the south.	1) Secure assistance of acknowledged wildlife/ forestry experts for management recommendations and monitoring. 2) establish communications with upstream and downstream stakeholders	1) Routine patrols note local incidences and threatening activities to ecosystem. 2) Periodic survey by local stakeholder experts. 3) Periodic review by co-management committee on state of habitat and status of target species to validate HCV status. Report published for general stakeholders.
HCV 2.2	Minimise threats and activities that degrade connectivity between conservation areas to the south and landscape to the north.	1) Secure assistance of acknowledged wildlife/ forestry experts for management recommendations and monitoring. 2) establish communications with upstream and downstream stakeholders 3) Keep regional wildlife authorities informed.	1) Routine patrols to note local incidences and activities that threaten the ecosystem. 2) Periodic survey by local stakeholder experts on status as biological corridor. 3) Periodic review by co-management committee on state of habitat and status of target species to validate HCV status. Report published for general stakeholders.
HCV2.3	Maintain habitat and connectivity for naturally occurring species	as for HCV 2.2 above	1) as part of periodic review examine trends for species presence, and validate HCV status for the site. Report published for general stakeholders.

HCV present	Management objective	Enabling actions	Monitoring activities
HCV 2.3	Minimise threats to local populations of naturally occurring species.	1) as for HCV 2.2 above to secure local expert opinion and local community support	1) as part of periodic review examine trends for species presence, and validate HCV status for the site. Report published for general stakeholders.
HCV3	Minimise threats to quality of local ecosystem - wetland forest and river.	1) Socialisation with local community to minimise impacts from their activities. 2) Secure assistance of acknowledged wildlife/ forestry experts for management recommendations and monitoring.	1) Routine patrols note local incidences and threatening activities to ecosystem. 2) Periodic survey by local stakeholder experts. 3) Periodic review by co-management committee on state of local ecosystem to validate HCV status. Report published for general stakeholders.
HCV4.2	Attenuate surface water flow and quality, minimise soil erosion.	1) Ensure contractors and their staff are informed of HCV proscriptions, and penalties for infringement put in all contract documents.	1) General monitoring and recording of incidences of misapplication 2) Undertake scheduled water quality monitoring on in-coming and out-flowing boundary. 3) Assess trends in water quality reports for annual review. Revise SOP and/or estate **practices as needed to** meet objectives.
HCV4.2	Attenuate surface water flow, minimise soil erosion.	1) Socialisation with local community to minimise impacts from their activities. 2) Establishment of co-management body with estate and desa representatives to empower responsibility. 3) Develop strategies with local community to minimise site disturbing activities. 4) With stakeholders, ensure mining activity is adequately regulated in region.	1) Record of meetings and/or discussions with local community on site issues. 2) Scheduled patrols and inspection observations recorded. 3) Review SOP and management activity at annual co-management meetings for areas of improvement and omissions, revise and retrain as needed
HCV4.2	Maintain capacity to store ground water in catchment and minimise soil erosion.	1) Ensure contractors and their staff are informed of HCV proscriptions, and penalties for infringement put in all contract documents.	1) general monitoring and recording of incidences of misapplication 2) Undertake scheduled water quality monitoring on in-coming and out-flowing boundary. 3) Assess trends in water quality reports for annual

HCV present	Management objective	Enabling actions	Monitoring activities
			review. Revise SOP and/or estate practices as needed to meet objectives.
HCV4.3	Protect function as a fire barrier	1) develop collective strategies with stakeholders to minimise fire risk	1) Monitor and record fire threat and incidences. 2) Annual review of SOP for omissions and areas of improvement, revise and retrain as needed. 3) Reports from scheduled patrols on incidences and post incidence recovery.

Management and mitigation plans for threats to HCV areas

The HCV sites identified in the PT. PBJ2-Kaltim plasma area would require appropriate management to ensure that the value is either maintained or enhanced. Historical clearing in the area is rampant and the local community has seen the area as an opportunity to expand their holdings. In view of the pressures on the site, a matrix has been developed providing guidance to management on site characteristics, management objective, enabling action and monitoring to ensure HCV intactness.
The area assessed did not have any HCV 5 or 6 areas within it. The findings were put through a public consultation for final confirmation. Public consultation was conducted to provide input as well as management actions and monitoring programs. Stakeholder mapping and analysis for measuring the level of interest and capacity of each different groups that aim to formulate a plan of action with appropriate interventions and program management monitoring HCV 5 and 6 for handling existing pressures and threats, overcome institutional gaps and identify potential conflicts and other social problems. The exercise however identified HCV5 and 6 sites outside the area which does not fall with the purview of this exercise.

In general there is no HCV 5-6 identified on areas planned for developing plasma where the area is shifting cultivation and community's palm oil plantation of KembangJanggut and Kelekat village. In the Muai and Long BelehHaloq village and Long BelehHaloqModang village most of the communities already planted oil palm and they are ready to harvest. Location that is plan for the plasma also has the potential of coal with mining permit and some of them already operate such as, PT. RMB, PT. Serangkai Jaya and PT. Indo. In Muai, from the scheme of 20% plasma mostly owned by outside people of the Muai village and the local communities just manage it. In addition, the area that should be conserved such as river buffer has been cleared by the communities for palm oil plantation.

Communities around PT.PBJ 2 are no more related with HCV 6 values, majority communities had embraced Islam. Some traditional ritual still performed by the communities on important event such as related with religious feast day or traditional customary ceremony. *Hudog* (mask) ceremony performed during important time such as; *BukaLahan-Ladang* initiation/forest clearing *(La Nos)*, *Nugal*/planting paddy seed *(NatokAdeat)*, *Panen*/Harvesting (MekinNuan) and *Syukuran/hajatan* (thanksgiving celebration). Nowadays, communities start leave the others traditional ceremony with reason most of the communities already embrace Islam and no more traditional leader that can lead process of traditional ritual.

Follow-up of these efforts should include the monitoring of the vegetation and site recovery and the monitoring of the wildlife utilising the areas as well as the prevention of encroachment for land clearing or hunting. Any initiative made by the project proponents to invest in HCV management for these species in their current locations will need the endorsement and constructive support by these communities. Without such support, current available the habitat quality for these species will continue to decline below a level that could support a viable population. Some of the actions will involve active socializing with the local communities.

To support the objectives and to maintain conservation values of identified HCV areas, the following are recommended.

- A commitment by the project proponents to maintain forest areas over which they have legal and management control,
- A commitment should be made by the local community to endorse, respect and support the land use planning and management activities of the project proponents
- An extension in to the project area of the 'green' spaces around the riverine areas be made to connect with those found in the adjacent estates of Lestari, Cakra and Damai,
- Secure the technical assistance and support of a knowledgeable local Indonesian entity to provide management planning and monitoring of the resident orangutan population,
- To establish within the company permanent staff positions to execute these expert plans and management recommendations, and
- To mark the locations of HCV sites and appropriate buffers for their effective protection/ conservation.
- To monitor the HCV areas periodically to ensure the identified values are maintained and the integrity of the areas sustained.

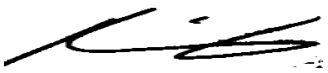
VERIFICATION STATEMENT:

The company opted for a document audit. Control Union Certifications auditors conducted desk study, pre-assessment check, discussions with the management team including the Head of Sustainability, Legal representative before the main document audit. During the main document audit, two Control Union auditors were present with the management team of PT Persada Bangun Jaya at their head office in Samarinda on 11th – 12th June 2014 to verify and review the relevant documents including interviewing the management team members.

PT Persada Bangun Jaya has adhered to the RSPO New Planting Procedures and has documented the assessments and plans according to the RSPO templates issued in May, 2010. The social and environmental assessments were detail, comprehensive and professionally carried out. The management plan has included the findings of the SEIA (AMDAL) conducted by the government approved consultants as well as incorporating the HCV and SIA assessments findings by consultants accredited and approved by the RSPO.

Control Union Certifications confirmed that the assessment and plans are comprehensive, professional and compliant of RSPO principles, criteria and indicators. It is the opinion of the Control Union Certifications auditors that PT Persada Bangun Jaya has complied with the RSPO New Planting Procedures enforced on 1st January, 2010.

Signed on behalf of Control Union Certifications



Mohd Rizal
Lead Auditor
Date: 12th June 2014

Signed on behalf of PT Persada Bangun Jaya

Date: 12th JUNE 2014