EXECUTIVE SUMMARY

1. INTRODUCTION

Project Title

This First Schedule Environmental Impact Assessment (S1EIA) is for the proposed “Development of Oil Palm Plantation at Lot PTD 1814, in Mukim Jemaluang, Daerah Mersing, Johor Darul Takzim” hereinafter referred as “project”.

Project Location

The proposed project site is located at Lot PTD 1814 in Mukim Jemaluang, Daerah Mersing, Johor with an approximate area of 5,412.819 acres (2,190.493 hectares) as shown in Figure ES-1. The proposed project site was part of the former Hutan Simpan Jemaluang, which have been degazetted and transferred to private ownership under HS(D) 6873 with an agricultural status. Demarcation plan for this lot is provided in Figure ES-2.
FIRST SCHEDULE ENVIRONMENTAL IMPACT ASSESSMENT (S1EIA) FOR THE PROPOSED OIL PALM PLANTATION AT LOT PTD 1814, MUKIM JEMALUANG, DAERAH MERSING, JOHOR DARUL TAKZIM

Figure ES-1: Location Plan

Source: GESB & Google Map, October 2016
Environmental Legal Requirement

The scope of the proposed project is a “Prescribed Activity” under First Schedule item 1 (b) of the Environmental Quality (Environmental Impact Assessment) Order 2015 and subject to Section 34A of the Environmental Quality Act, 1974 (Act 127), which requires the submission of First Schedule Environmental Impact Assessment (S1EIA) Report for the approval of the Director General of Environment prior to commencement of the project.

First Schedule Item 1(b):
Development of agricultural estates covering an area of 500 hectares or more involving changes in types of agricultural use.

The Terms of Reference (TOR) for this proposed Project has been approved by Department of Environment (DOE) Johor on 8th May 2017.

Project Proponent

The Project Proponent is AA Sawit Sdn Bhd (AASSB), a private company with their correspondence address and contact person as follows:

AA Sawit Sdn Bhd
Lot 9958, Batu 4, Jalan Mersing,
Kawasan Perindustrian Lau Kim Teck Fasa 2,
86000 Kluang, Johor.

Contact Person : Mr. Chow Chuin Hai
Designation : Director
E-mail : william@aasawit.com.my
Tel. No. : 07-776 6970/1
Fax. No. : 07-771 3816

EIA Consultant

Golden Ecosystem Sdn Bhd (GESB) was appointed by AA Sawit Sdn Bhd (AASSB) as a Consultant to carry out the EIA study for this project. Enquiries and correspondence pertaining to this report can be made to:-

Golden Ecosystem Sdn Bhd (534338-P)
D-06-01 – D-06-08, Menara Mitraland,
No. 13A, Jalan PJU 5/1,
PJU 5, Kota Damansara,
47810 Petaling Jaya,
Selangor Darul Ehsan.
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Contact Person : Dato’Azemi Abu Bakar
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Designation : Project Manager/EIA Team Leader
E-mail : ziela@gesbgroup.com.my
2. STATEMENT OF NEED

The proposed project arises in principal due to the need in new oil palm plantations area for the economic growth of Malaysia. Malaysia is the second largest country for oil palm cultivation after Indonesia, producing 19 million out of 57 million tonnes globally. The increase in palm oil based products in Malaysia and most part of the world makes the development of oil palm plantation as a viable proposal in order to support the ever increasing demand. Apart from that, the alternative uses of palm oil for diesel, vitamin and other ole-chemical products open up the market considerably. As of December 2015, oil palm planted area in Johor totalled 739,583 hectares which is equivalent to 13.1% of total oil palm plantation in Malaysia (MPOB, 2016). Johor has the highest percentage of planted area in Peninsular Malaysia. As Malaysia has an important role in fulfilling the growing global demand for oils and fats, the proposed project will benefit the Malaysian economy in particular and the world in general.

3. PROJECT OPTIONS

The selection of this area is based on the economic need for converting an unproductive land by planting oil palm trees which can generate revenue to the state based on the following criteria or options:

- Site suitability based on soil conditions for the planting of oil palm;
- Technology used which is in line with current oil palm plantation practices;
- Plantation method which considers the shortest time possible between land clearing and planting to reduce soil exposure;
- Raw material where nursery plants to be purchased from the nearest sources within Johor to generate income to the locals;
- Layout to consider the best drainage and terracing where required;
- Alignment of the oil palm trees which is designed based on the topographic profile to prevent future soil erosion; and
- Operation of the plantation to consider use of environmentally suitable fertilisers and pesticides.

4. PROJECT DESCRIPTION

Project Component

The concept of the proposed project is to develop and convert a forest area into a productive oil palm plantation. The main components for this project are as below:

- Land clearing;
- Planting of oil palm trees;
- Maintenance;
- Harvesting; and
- Replanting

Project Activities

The project activities can be classified into the following five (5) stages:

i. Pre-Planning Stage
ii. Development Stage
   - Site preparation – access road development, base camp, barriers and fencing, utility provision, logging and site clearing, biomass management and disposal, earthwork, drainage and sedimentation control
• Field establishment – field lining and holing, culling, transplanting and cover crop establishment
  
iii. Operations Stage
  • Maintenance
  • Harvesting
  
iv. Replanting Stage when there is a requirement to replant after the life span of the plantation is due.
  
v. Abandonment Stage where the plantation is to be abandoned, the site will then be restored and rehabilitated to ensure that there is no erosion or pollution generated from the site.

The Project site will be divided into five (5) plots with about 1000 acres per plot. The site clearing and plantation will be conducted plot by plot starting from first plot until the fifth plot. Each plot will take approximately 12 months for completion. Overall, the plantation project is estimated to take about five (5) years for completion.

5. EXISTING ENVIRONMENT

Land Use

The existing land use within the Project site is a forest area. There are workers camp and MATAU area that have been set up for the project which are located at the east side of the project area. The proposed site is surrounded by forested land in the north (PTD 1813) and south (PTD 1815) which are partly covered with shrubs. The eastern border is a private oil palm plantation (PTD 1701) which has been planted few years ago. The nearest residential area is located more than 2 km away at northwest (Kg. Wak Salam) and southwest (Taman Bahtera) of project boundary.

Topography

The topography within the project site is an undulating with elevation ranging from < 30 m to >70 m amsl. Cross-sectional analysis of the project site shows that the higher ground is located on the western part of the site and it gradually decreases toward eastern part.

Soil

The soils of the project area are best defined as the Marang-Apek Soil Association. The soils are characterized by pale colours, subsoil horizons of weak compact structure and usually shallow profiles on gentler slopes.

Geology

The project area is entirely located within meta-sedimentary bedrock classified as the 'Mersing Beds' or 'Mersing Group' which has a sequence of meta-sedimentary rocks comprising phyllite, schist and argillite with minor meta-quartzite.

Hydrology

There are two (2) main rivers that cross the project site namely tributary of Sg. Jemaluang and tributary of Sg. Sekakap. Surface runoff from western portion drains into tributary of Sg. Jemaluang then flows into Sg. Jemaluang and subsequently discharges into South China Sea. While surface runoff from eastern portion flows into tributary of Sg. Sekakap which drains into Sg. Sekakap and it finally discharges into South China Sea. There are no water intake stations downstream of the Project site. The nearest water intake is located at Loji Rawatan SAJ which is located at Sg. Mersing.
Meteorology

The climate of the study area is typically tropical with uniform temperature, high humidity and heavy rainfall. The climate is strongly influenced by the Southwest and Northeast Monsoon. The climatic data used in this report are based on data taken at Mersing Station from Malaysian Meteorological Department for a period of 2005 to November 2016.

- **Air Temperature**
  
The annual mean minimum and mean maximum temperature at Mersing Station are 23.7°C and 31.3°C, respectively. The mean temperature peaks in April and gradually falls towards December.

- **Rainfall**
  
The mean annual rainfall recorded at Mersing Station is 2531.7 mm. The wettest month is in December with a mean rainfall of 517 mm. The driest month is in April with 110.7 mm mean rainfall. The average number of raindays per year is 170 days with the highest raindays being in December (22 days) while the lowest raindays were in February with 7 days.

- **Pressure Level**
  
The average annual Mean Sea Level (MSL) Pressure is 1009.7 hectopascal. The highest pressure is in January (1011.1 hectopascal) while the lowest is in May and June (1008.9 hectopascal).

- **Humidity**
  
The annual mean daily relative humidity is 84.4% with the highest humidity in November (86.5%) while the lowest humidity is in February (80%).

- **Evaporation**
  
The evaporation rates indicate a mean of 3.6 mm/day with the highest evaporation rate in February (4.4 mm/day) while the lowest evaporation rate is in July (3.1 mm/day).

- **Wind Frequencies**
  
The predominant wind is from the southwest occurring about 23.5% of the time and the percentage occurrence of calm is averaging at 0.8%.

**Environmental Baseline Data**

**Ambient Air Quality**

Eight (8) sampling stations for ambient air quality were selected. The results showed that TSP and PM10 level around the project site were lower than the MRAQG limit at all sampling stations.

**Noise Level**

Eight (8) sampling stations for noise level were selected. The existing noise levels at most of the sampling stations were higher than the permissible level of 50 dBA (during day time) and 40 dBA (during night time) except for station N3, N4 and N5 during day time throughout the 24 hours of monitoring.
The high noise level at around the project site during day time could be contributed from vehicular movement especially logging and public vehicles passing through the area, whilst during night time noise may be contributed by nocturnal and vehicle movement.

**River Water Quality**

Nine (9) stations for river water quality designated as SW-1 to SW-9 were selected. River water quality results were compared with National Water Quality Standards for Malaysia (NWQS) Class III. The data showed that baseline pH, dissolved oxygen, ammoniacal nitrogen, iron and chemical oxygen demand were slightly exceeded in comparison to NWQS Class III at a few stations. Overall Water Quality Index (WQI) ranges between 47.6 to 86.7.

**Ground Water Quality**

Groundwater quality sampling was carried out at four (4) locations designated as GW-1 to GW-4. The data shows that all parameters comply with the Contaminated Land Management and Control Guidelines (CLMCG) No.1: Malaysian Recommended Site Screening Levels for Contaminated Land of Tap Water, 2009.

**Flora**

The current proposed project area is a mix-lowland dipterocarp forests, very close to the sea. It is not a ‘healthy’ and ‘productive’ forest in the sense that it is hardly difficult to find mature timber species with girth more than 30-40 cm dbl. A total of 234 plant species (including trees, palms, shrubs, herbs, climbers, creepers and ferns and fern allies) in 78 families was recorded during the survey. This represents about 2.8% of the 8,500 species of vascular plants recorded for Peninsular Malaysia.

**Fauna**

- **Mammalian Fauna**

  A total of 71 mammalian species is present or expected to be present within the proposed project area. Out of the 71 species found or expected to be found in the general proposed project area, 6 species are among the very large mammals (average adult weight 20 kg or more) which are elephants, tigers, tapirs, bears, pigs, leopard and deer species.

  Majority of the mammalian species are among the small and medium sized mammals, defined as those having average adult weight of 1 kg or less and between 1-7 kg respectively. Thirty seven small mammals’ species are expected to be present. Of this, 21 species are bats, 5 species of squirrels and 6 species of rats and moles. The remainder 19 species are the medium-sized mammals comprising the primates, civets, mongoose, small cats, small artiodactyls and porcupines.

- **Avian Fauna**

  A total of 133 wild bird species is present or expected to be present in and around the proposed project area. 123 or 92.4% of the birds species found or expected to be found in the proposed project area are absolute residents; 10 (7.6%) species each are either migrants or residents.

  118 or 89.4% of the avian species found or expected to be found in the proposed project area are ‘Totally Protected” species- listed under Schedule Two. It includes almost all the families of birds found there. Another six (6) species or 4.5% are assigned as ‘Protected’ under Schedule Two.
One of the law. Nine species were not given any legal protection. The sixth Schedule listed 2 bird species for aborigine’s consumption of which none is detected in the project area.

In terms of IUCN global conservation status, there are no birds found or expected to be found in the proposed project area that are placed in the higher risk categories of Critically Endangered (CR).

- Reptilian Fauna

A total of 10 snake species is present or expected to be present in and around the proposed project area. Out of this, 5 species are given legal protection as a ‘Protected’ species under the Wildlife Act 2010. None are accorded the ‘Totally Protected’ category.

Malaysia has 4 species of monitor lizards. Two of these, the Common Water Monitor Lizard (*Varanus salvator*) and the Rough-Necked Monitor Lizard (*Varanus rudicollis*) is present or expected to be present in the project area. The former is a ‘Protected’ species whilst the latter is a ‘Totally Protected’ species under the Malaysian law.

Two species of land turtles, the Spiny Hill Turtle (*Heosemys spinosa*) and the Asian giant tortoise (*Manouria emys*) are expected to be found in and around the proposed project area. Of the two, only the Asian giant tortoise is a “Protected” species listed under Schedule One of the Wildlife Act and together with the Spiny hill turtle are also assigned the “Endangered” under the 2016-3 IUCN conservation risk status.

- Amphibians

A total of 19 species of anurans in 6 families is present or expected to present in and around the project area. None of the species were accorded any legal protection. 84% or 16 species of frogs and toads found or expected to be found in and around the project area are endemic.

**Socio Economic**

The proposed project area is located in Mukim Jemaluang consisting of 12,445 ha total area which is one (1) of 10 Mukims under Mersing District. Total population in Mukim Jemaluang is 1,256 persons in 2010. In terms of ethnic ratio, the Chinese make up the higher percentage followed by Malay and Indian.

**Land Transportation**

The existing transportation network to the proposed project site is via Jalan Sekakap towards Kem Iskandar, Mersing from Jalan Jemaluang AH18. Access road to the proposed project site is via earth track which is approximately 4.8 km from Jalan Sekakap.

6. **IMPACT AND MITIGATION MEASURES**

The potential environmental impacts are identified and evaluated by studying the interaction of the existing environment with the project activities covering the following stages:

- Pre-Development Stage;
- Development Stage;
- Operation Stage;
- Replanting Stage; and
- Abandonment
The potential impact and proposed mitigation measures are summarized in Table ES-1 below:

<table>
<thead>
<tr>
<th>Environment Component</th>
<th>Potential Impact</th>
<th>Proposed Mitigation Measures</th>
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<tbody>
<tr>
<td><strong>Logging</strong></td>
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</table>
| Logging activities    | • Removal of logs will cause soil erosion and destruction of flora and fauna.  
                         • Loss of existing ecosystem due to deforestation activity.  
                         • Ambient noise level may contribute from heavy machineries  
                         • Deterioration of river water quality due to:  
                           - Suspension of contaminants found in sediment in the water column;  
                           - Improper handling of waste | • Logging activities to be conducted in phases to reduce soil erosion.  
                                 • Soil erosion and sediment control measures include installation of silt traps at locations specified in the LD-P2M2 study.  
                                 • Working hours to be limited to daytime hours. |
| Transportation of log to buyers | • Increase of total suspended particulate (TSP) in atmosphere.  
                                       • Soiling of roadways  
                                       • Risk of lorry collision and accident. | • The transportation of logs/tree trunks or machinery should be undertaken preferably during off-peak traffic hours.  
                                       • These machineries should also, as far as possible, avoid using the public roads during the weekends when more road users are expected to ply the road.  
                                       • Adequate warning signs should be put up at suitable locations to forewarn road users of the existence of the project activities.  
                                       • During busy times, flagmen should be employed to assist in the direction of traffic when site vehicles are converging to the main traffic flow.  
                                       • Wash trough to be provided at the exit points. |
| **Site Clearing**     |                  |                               |
| Vegetation Clearance  | • Soil erosion due to exposed surface.  
                                       • Improper biomass management can cause pollution of land and water bodies. | • Land clearing to be carried out in phases to reduce exposed surface.  
                                       • Replanting of the oil palm trees and cover crop to be carried out soon after the vegetation clearance to reduce the time of exposed land surfaces.  
                                       • Uneconomical biomass will be left on site and used as fertilizer or ground cover. |
| Ambience Air Quality  | • Movements of vehicles into and out of the project site will contribute to increased particulate levels in the air. | • Do not exceed the speed limit at the project site to avoid too much of suspended particulates (e.g; dust emission). |
| Noise Level           | • Ambient noise level may generate from heavy machineries. | • Regular maintenance and frequent servicing of machineries.  
                                       • Use of silencers and mufflers where required. |
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<tr>
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</table>
| **Water Quality**     | - Deterioration of water quality due to:  
- Leakage of oil from transport trucks.  
- Maintenance of machinery  
- Increased turbidity and TSS level compared to present levels. | - All scheduled waste generated from the maintenance activities shall be handled in accordance to the Environmental Quality (Scheduled Waste) Regulations, 2005.  
- The vegetation clearance and planting will be carried out within minimal time gap to reduce soil erosion.  
- Land Disturbing – Pollution Prevention and Mitigation Measures (LD-P2M2) has been prepared and the mitigation measures which include installation of silt traps will be implemented on site. |
| **Fauna**             | - Land clearing activities will destroy the habitat of the fauna found in the area.  
- The wildlife may pose a danger to workers at site. | - Wildlife management plan in consultation with Department of Wildlife and Natural Parks will be established to determine the best solution for the existing wildlife within the site. This will be incorporated in the EMP report at a later stage.  
- The mobilization route must be properly planned (refer to wild life management plan) to avoid wildlife areas wherever possible.  
- Project Proponent should inform their activities at the project site to the Department of Wildlife and Natural Parks who would issue notices to local nearby villagers regarding the movement of wild life.  
- Fence should be installed and functioning at all time to avoid any inconvenience from wild life.  
- Any relocation of wildlife to the nearest forest must be carried out in accordance to procedures set by Department of Wildlife and Natural Parks and in collaboration with other department where applicable such as Forestry Department and etc.  
- An elephant path (parit gajah) will be allocated along the western portion of the Project area. |
| **Flora**             | - Plants that are endemic to the area will be lost and cause destruction of biodiversity. | - In the event there are plants that are found to be within the endemic or protected category, it is recommended that they be transplanted or preserved where possible. |
| **Erosion**           | - Soil erosion and sedimentation.  
- Increase surface runoff. | - Land clearing shall be conducted in phases.  
- Clearing shall be confined within the plot area.  
- Site clearing shall be conducted during dry season.  
- Stabilize disturbed area within 14 days to minimize erosion. |
<table>
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<tr>
<th>Environment Component</th>
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<th>Proposed Mitigation Measures</th>
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</thead>
</table>
| Road Traffic           | Movement of transport vehicles on public roads may increase the traffic volume.  
                          | Vehicular traffic on the existing road may encounter inconveniences from the movement of heavy trucks into and out of the site. | The transportation of logs/tree trunks or machinery should be undertaken preferably during off-peak traffic hours.  
                          | Adequate warning signs should be put up at suitable locations to forewarn road users of the existence of the project activities.  
                          | During busy times, flagmen should be employed to assist in the direction of traffic when site vehicles are converging to the main traffic flow. |

**Plantation Stage (Oil Palm Plantation)**

<table>
<thead>
<tr>
<th>Environment Component</th>
<th>Potential Impact</th>
<th>Proposed Mitigation Measures</th>
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</thead>
<tbody>
<tr>
<td>Ambient Air Quality</td>
<td>Dust generation from vehicular movement at unpaved access road, during plantation activity.</td>
<td>Wash trough at the exit points can mitigate against soil carry over into public roads and reducing fugitive dust on public roads.</td>
</tr>
</tbody>
</table>
| Noise Level            | Moderate noise generation is expected due to the plantation nature of the project.  
                          | Increase noise level from plantation activities, vehicles transporting plantation materials and from heavy machineries. | Planting activities involving machinery that emits loud noise should be confined to the daytime, between 7am-7pm.  
                          | All equipment must be properly maintained so that they do not produce noise higher than that specified by the manufacturer.  
                          | All workers who are involved with extensive noise emission activities should be equipped with hearing protective devices such as ear-muffs and ear plug. In addition to this, warning signs should be installed at high-level noise (>90dB) areas to alert workers of the noise danger (if any). |
| Water Quality          | The use of pesticide and fertilizer could cause an increase in total phosphate, nitrate and BOD. | Proper storage areas to be allocated for the fertilizer and pesticides to avoid spillage into the water bodies.  
                          | Ensure the measurement for spraying of pesticide and fertilizer is referred to the packaging recommendation. Over usage of the chemicals can contaminate the water bodies. |
| Road Traffic           | Movement of trucks and vehicles on public roads may increase the traffic volume.  
                          | Vehicular traffic on the existing road may encounter inconveniences from the movement of heavy trucks into and out of the site. | The transportation trucks and machinery should be undertaken preferably during off-peak traffic hours.  
                          | Adequate warning signs should be put up at suitable locations to forewarn road users of the existence of the project activities.  
<pre><code>                      | During busy times, flagmen should be employed to assist in the direction of traffic when site vehicles are converging to the main traffic flow. |
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<th>Environment Component</th>
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<tr>
<td>Social and Health</td>
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<td></td>
<td>• Enhancement of employment and commercial opportunity.</td>
<td>• Priority of employment to be given to the local population.</td>
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<td>• Improper housekeeping and waste management at the work areas provides breeding ground for mosquitoes, flies and rats that will result in health hazards to the workers.</td>
<td>• Work areas should be kept clean at all times. Garbage and solid wastes should be disposed into the designated waste bins and stored at a central location prior to disposal off-site by licensed contractors.</td>
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<td>• Increase in communicable and parasitic disease.</td>
<td>• All foreign workers are to be screened for health and security purposes.</td>
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<td>• In the event there are foreign workers, it could pose health and security issues.</td>
<td>• Have a schedule inspection from Ministry of Health especially dealing with aedes mosquitoes.</td>
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<td>• Awareness campaign on contagious disease such as malaria, tuberculosis etc.</td>
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<td>Schedule Waste Management</td>
<td>• Schedule waste from equipment and maintenance of machinery</td>
<td>• All scheduled wastes including used oil and spent/waste oil generated during the construction works from machines, generators, chemical containers, etc. shall be collected and disposed off-site by licensed contractors for disposal.</td>
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<td>• Wastes generated are mainly packing materials, oil filters, rags and used oil. These wastes will be segregated into scheduled and non-scheduled wastes and transported for final disposal. Waste generated will be minimal in quantity therefore its impact will be insignificant. Improper disposal and management of scheduled wastes can result in contamination of water bodies.</td>
<td>• All used pesticides and fertilizer containers shall be collected and disposed off-site by licensed contractors for disposal.</td>
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<td>• Empty containers with pesticides and fertilizer residues can cause pollution to soil and water with improper storage and disposal.</td>
<td>• Storage and handling of scheduled waste is to be carried out according to the Environmental Quality (Scheduled Wastes) Regulations, 2005.</td>
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<td>• The wastes should be stored in sealed drums, labeled and placed in a designated scheduled waste storage area.</td>
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<td>• Separate compartments should be provided for different groups of incompatible wastes.</td>
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<td>• The quantity of scheduled wastes accumulated on site shall not exceed 20 metric tons and the wastes stored for a period not exceeding 180 days.</td>
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<td>• Scheduled wastes will be collected by licensed collector and disposed at approved licensed facility which is Kualiti Alam.</td>
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<td>Post-Plantation Stage (Harvesting Period)</td>
<td>• Movement of vehicles on public roads may increase the traffic volume.</td>
<td>• The transportation of fruit bunches should be undertaken preferably during off-peak traffic hours.</td>
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<td>• Vehicular traffic on the existing road may encounter inconveniences from the movement of heavy vehicles into and out of the site.</td>
<td>• The transportation trucks should also, as far as possible, avoid using the public roads during the weekends when more road users are expected to ply the road.</td>
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<td>• Adequate warning signs should be put up at suitable locations to forewarn road users of the existence of the project site.</td>
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<td>• During busy times, flagmen should be employed to assist in the direction of traffic when site vehicles are joining the main traffic flow.</td>
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<td>Environment Component</td>
<td>Potential Impact</td>
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<td><strong>Replanting</strong></td>
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<td>Clearing of Old</td>
<td>Soil erosion</td>
<td>Clearing to be conducted</td>
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<td>Oil Palm Tree</td>
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<td>rivers.</td>
<td>can reduce surface runoff</td>
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<td>Water quality</td>
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<td>of rivers due to</td>
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<td>Clearing to be minimized</td>
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<td>during the wet season.</td>
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<td>Replanting of Oil</td>
<td>Dust emission</td>
<td>The silt trap that has been</td>
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<td>Palm Tree</td>
<td>and dispersion</td>
<td>developed during site</td>
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<td>during replanting</td>
<td>clearing is recommended to</td>
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<td>be maintained so that during</td>
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<td>Abandonment</td>
<td>Soil runoff from</td>
<td>In the event the project</td>
</tr>
<tr>
<td></td>
<td>the top soil</td>
<td>does not materialise as</td>
</tr>
<tr>
<td></td>
<td>filling may</td>
<td>planned and has to be</td>
</tr>
<tr>
<td></td>
<td>increase the</td>
<td>abandoned, then all</td>
</tr>
<tr>
<td></td>
<td>Total Suspended</td>
<td>materials and equipment on</td>
</tr>
<tr>
<td></td>
<td>Solid (TSS) and</td>
<td>site will be sent back to</td>
</tr>
<tr>
<td></td>
<td>turbidity levels</td>
<td>supplier or sold.</td>
</tr>
<tr>
<td></td>
<td>of the river</td>
<td>All structures will be</td>
</tr>
<tr>
<td></td>
<td>water.</td>
<td>dismantled and sold to</td>
</tr>
<tr>
<td></td>
<td></td>
<td>recyclers or sent back to</td>
</tr>
<tr>
<td></td>
<td></td>
<td>suppliers.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The plantation will usually</td>
</tr>
<tr>
<td></td>
<td></td>
<td>remain as it is until the</td>
</tr>
<tr>
<td></td>
<td></td>
<td>future plan for the site</td>
</tr>
<tr>
<td></td>
<td></td>
<td>has been determined.</td>
</tr>
</tbody>
</table>

### 7. ENVIRONMENTAL MANAGEMENT PLAN

An EMP has been proposed that outlines both the institutional framework for reporting and the responsibilities for monitoring of specific environmental risks and mitigating measures. This includes management plan on solid waste, scheduled waste, wildlife, biomass and emergency response which required to be in place by the Project Proponent in collaboration with other government agencies and regulated parties.

### 8. CONCLUSION

Overall, no transboundary of impact will be occurred once all proposed plans are well prepared by the Project Proponent prior to execution of this proposed project. Most impacts can be prevented or minimized by careful planning during the various stages of development. With the incorporation of appropriate design, sound implementation methods and mitigation measures, the proposed project by AA Sawit Sdn. Bhd. can be implemented in an environmental acceptable manner.