## **New Planting Procedure - Summary of Integrated Management Plan**

<b>RSPO</b> Roundtable on Sustainable Palm Oil	Goodhope	SGS				
NPP Reference Number	SGS-NPP22-0002					
Country of the NPP submission:	Indonesia	Indonesia				
RSPO Membership Number	1-0175-14-000-00					
Reference to the management unit management plan	PT Agro Wana Lestari - Plasma 2022_NPP Summary of Integrated Management Plan					
Name(s) of estate(s) covered under this management plan:	PT Agro Wana Lestari - Plasma	PT Agro Wana Lestari - Plasma				

## **Guidance Notes:**

This summary management plan shall indicate at a minimum but not be limited to the following:

- Key findings of the various assessments (e.g., potential minor environment and/or social risk requiring mitigation actions; total conservation areas).
- Key mitigation and monitoring regime, covering both the environmental and social aspects.
- Evidence of FPIC and key agreements with local communities (if any).
- An action plan describing operational actions consequent to the findings of the various assessments, referencing the grower's relevant operational procedures.
- Designation of the management team and responsible person for the implementation.

1	SEIA	Social Environmental impact management and monitoring Plan
		Purpose of management and monitoring report compilation is:
		a. Provide information on the implementation of environmental management and monitoring plan by PT AWL - PLASMA to government agencies and agencies to assist in monitoring environmental management by the regions.
		b. Provide information on management and monitoring implementation of PT AWL - PLASMA to central management to assist policy- making on environmental management.
		c. As control to the company for the implementation of management and monitoring in its operational area.
		d. Formulate the environmental management and monitoring plan (issues, strategies, programs and activities) that the company needs in managing the environmental aspect to create a healthy and safe environment.
		Output:
		<ul> <li>Output expected from the implementation of those activities are the formulation of environmental management and monitorin plan of PT AWL - PLASMA that contain issues/problem, and efforts to solve them (strategy, program, activity, location and time of implementation).</li> </ul>
		Benefits:
		a. As a guideline for the company to manage significant environmental aspects resulting from the company's activities to minimize significant environmental impacts.
		b. As material for the company in creating environmental management programs, both short-term, medium-term and long-term programs, based on applicable laws and regulations.
		c. To foster harmonious relationship between the company and the surrounding community

## PT AWL - PLASMA's Environmental Impact Assessment (EIA) management plan

	MANACED					PERIOD OF	MA	<b>NAGING INSTITUTI</b>	ON
NO	ENVIRONMENTAL IMPACT	MANAGED ENVIRONMENTAL IMPACT SOURCES SUCCESS FORM	LOCATION	MANAGEMENT	DOER	SUPERVISOR	REPORT RECEIVER		
1.	PHYISICAL – CHEMICAL COMPO	ONENTS							
1.1	Air Ambient Quality								
	Based on the significant impacts evaluation indicate that the parameters of the impact is air quality degradation in the form of increased dust and emissions which are significant negative impacts and direct.	<ol> <li>Oil palm planting activities.</li> <li>Harvesting and transportation of FFB.</li> <li>Mill operations.</li> <li>Workshop and generator</li> </ol>	Air quality degradation in the form of dust and gas emissions not exceeding the established environmental quality standard:	<ol> <li>On oil palm planting activities:</li> <li>a. Limit the speed of the transporting vehicles at maximum 20 km/ hour, particularly if passing residence or concentration of agriculture society.</li> </ol>	<ol> <li>On oil palm planting, harvesting and transporting activities of FFB's, management need to be performed along the road and</li> </ol>	<ol> <li>Oil palm planting, harvesting &amp; transportation activities are managed every working day.</li> </ol>	PT AWL - PLASMA	<ol> <li>Plantation and forestry office of Kotawaringin Timur regency.</li> </ol>	<ol> <li>Plantation and Forestry Office of Kotawaring in Timur Regency</li> </ol>

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<ul> <li>environmental quality these activities impacts on public and workers' health.</li> <li>impacts on public and workers' health.</li> <li>of ambient dust the air quality in the form of ambient dust to working truck, generator engine and boller at the mill.</li> <li>Different and emissions sourced from mill.</li> <li>Dust at workplace is through the settlement.</li> <li>Dust at through the settlement is antime or generation of antiwiter society.</li> <li>Dust at through the settlement is antime settlement is antime or generation of antiwite society.</li> <li>Dust at through the settlement is antime settlement is antime settlement is antime settlement is antime or generation on a settlement is antime settlement.</li> <li>Dust at through the settlement is antime and opacity as ason, water the settlement is antime settlement.</li> <li>Dust at through the settlement is antime settlement.</li> <li>Dust at through the settlement is antime and opacity as aso</li></ul>	,	•		5 5	the surrounding	2. On mill operations	2. Regional	2. Environme
standard may have further impact the air workers' health.	that exceeds the	which series of	standard of		area.	maintenance to mill	Environment	nt agency
standard may have further impact the air workers' health.					2. On mill operations	machinery need to	Agency of	of
impacts on public and workers' health. Workers'	-	•	•			be done at least		
worker's neath.     of amolen ous concentration due to vehicle wheel friction with the road and emissions sourced from transportation furce, generator engine and boiler at the mill.     c. During dry season, water the massed on participation transportation route near the section workshop and transportation route near the section workshop and transportation or the respecially when passing through the settlement, management and based on Decree of Environment transportation route near the secielar workplace through the settlement, management and threshold values a the workplace through the settlement, farming and concentration due threshold values a the workplace through the settlement, farming and concentration and threshold values a the workplace through the settlement, farming and concentration or mumber 51 year a settlement, farming and concentration and threshold values a the workplace through transportation or mumber 52 year a Stationary Emission Source Standards are (Mo2 = 1000 g (m <sup>2</sup> , Stationary Based on Decree Standards are difficiency level of combustion far in appecially on plantic or compaction of environmental difficiency level of combustion far in appecially on plantic or compaction of particulate z society. 3) Mill Operations:     3. On workshop and generator and boiler at the carried out is on the operations.     3. On workshop and generator to be done once a month.     3. On workshop and generator and boiler at the carried out is on the operations.     3. On workshop and generator to be done once a month.     3. On workshop and generator and boiler at the carried out is on the operations.     3. On workshop and generator and boiler at the carried out is on the carried out is on the carried out is on the concentration on agriculture society.     3. On workshop and generator and boiler at the carried out is on the carried out is on the concentration on agriculture society.     3. On workshop a					=		•	•
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3. Stationary       especially on plantation road network.         C. During dry season, water the based on Decree of Environmental Minister number 13/MENLH/3/200       c. During dry season, water the settlement, farming and concentration of agriculture society.         7       m³, SO2 = 8000mg / m³, Particulate = 350 and Opacity = 35% 1)       3) Mill Operations:         a. Chop as smooth as possible the oil palm waste used as boiler fuel in order to increase high efficiency level of combustion       a. Chop as mooth as possible			at the workplace.					
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5 (NO2 = 1000 mg / m³, SO2 = 8000mg / m³, Particulate = 350 and Opacity = 35% 1)society.3) Mill Operations: a. Chop as smooth as possible the oil palm waste used as boiler fuel in order to increase high efficiency level of combustion								
<pre>/ m³, SO2 = 8000mg / m³, Particulate = 350 and Opacity = 35% 1)</pre> 3) Mill Operations: a. Chop as smooth as possible the oil palm waste used as boiler fuel in order to increase high efficiency level of combustion				6				
8000mg / m³,       3) Mill Operations:         Particulate = 350       a. Chop as smooth as possible the         and Opacity = 35%       oil palm waste used as boiler         1)       fuel in order to increase high         efficiency level of combustion				society.				
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and Opacity = 35% oil palm waste used as boiler 1) fuel in order to increase high efficiency level of combustion			• • •	, .				
1) fuel in order to increase high efficiency level of combustion								
efficiency level of combustion				•				
			1)	6				
b. Installing dust collector device				· · · · · · · · · · · · · · · · · · ·				
on boiler's chimney.								
c. Construct higher boiler chimney				,				
as high as 5 x higher than the								
surrounding buildings.				0				
d. Emissions generated by				0 0				
generator and boiler				6				
operations, these emissions				5				

				generally released to open air.					
				Particulate releseased by boiler					
				in the form of ashes generally					
				controlled by installing dust					
				collector to catch the dust. Dust					
				collected by the dust collector					
				can be used to harden the lower					
				area.					
				e. Allocate area specific for					
				reforestation around the mill					
				area in order to reduce					
				pollutant concentration due to					
				boiler activity.					
				f. Require the workers primarily					
				who work in mill location to					
				wear personal protective					
				equipment.					
				g. Perform periodic and regular					
				maintenance on machines to					
				keep the condition well					
				maintained and still in					
				accordance with the technical					
				age.					
				4)Workshop and generator					
				operations:					
				a. Perform regular maintenance					
				on generator at regular					
				intervals to maintain machine					
				performance.					
				b. Generator chimney should be ±					
				2.5 times higher than the					
				surrounding buildings.					
				c. Generator should be located at					
				least 75 meters from the					
				location of estate employees					
				housing.					
1.2	Noise		1	noosing.	1				<u> </u>
1.2	Based on significant impact	Due to the operation	The level of noise	1). On mill operation activities:	1. On mill operations	1. On mill operations	PT AWL -	1. Plantation	1. Plantation
	evaluation results indicate	of mill's machinery and	emitted does not	a. Perform periodic and regular	management	maintenance to mill	PLASMA	and forestry	and
	that impact parameters on	generator engine and	exceed the	maintenance on machines to	0				
	occurrence of increased noise	heavy equipment	established	keep the condition well	carried out is on	machinery need to		office of	Forestry
	intensity which is negative	repair on workshop	environmental	maintained and still in	mill's machinery/	be done at least		Kotawaringin	Office of
	and direct impact. The	and generator area.	standard:		boiler unit.	once in 2 weeks.			Kotawaring
	and ancer impact. The		otandulu.		1		l	l	

	intensity of the impact that		1. Quality standard of	accordance with the technical	2. On workshop and	2. On workshop and		Timur	in Timur
	exceeds environmental		noise in housing and	age.	generator	generator		regency.	Regency.
	quality standard may have		residential area is	b. Require the workers, especially	operations,	operations		2. Regional	2. Environme
	further impacts on the health		55 dB (A) based on	workers working at mill location	management	management need		Environment	nt agency
	of working people.		decree of	to use personal protective	carried out is on the	to be done once a		Agency of	of
			Environment	equipment. c. Placing the boiler in a separate	operation locations.	month.		Kotawaringin	Kotawaring
			Minister Number 48	area with reinforced concrete				Timur	in Timur
			year 1996 on Noise	foundation, indoor and closed				Regency	Regency.
			Quality Standards.	to reduce boiler noise level.				Regency	3. Environme
				d. Allocate area specific for					
			2. Quality standard of	reforestation around the mill					nt Agency
			noise for working	area in order to reduce					of Central
			environment as	pollutant concentration due to					Kalimantan
			stated in decree of	boiler activity.					Province.
			Minister of Labour	e. Delivering information to					
			and Workforce	communities living around the					
			Number 51 year	plant site on the equipment/					
			1999 is 85 Db (A).	machinery activity and the					
				noise it generates.					
				2). On workshop and generator					
				operation activities					
				a. Generator units must be placed					
				on area specifically designed for					
				generator to reduce the noise					
				emitted.					
				b. Perform maintenance on					
				generator periodically and					
				regularly so that the condition is					
				well maintained and still in					
				accordance with its technical age.					
				c. Require all workshop workers					
				to use ear plugs at the time of					
				work in progress.					
1.3	Surface Run off					L			
	Based on significant impact	Road network	There is no surface	1. Carry out land clearing for	At the road points and	Once during road	PT AWL -	1. Plantation	1. Plantation
	evaluation results indicate	construction activities	flow disruptions.	plantations road network in a	natural paths	network construction	PLASMA	and forestry	and
	that impact parameters on	with surface runoff		planned and efficient manner.		and evaluated once a		office of	Forestry
	occurrence of disruption on			2. Constructing culvert at each		year for improvements		Kotawaringin	Office of
	surface flow in which the			intersection equipped with		against damaged		Timur	Kotawaring
	impact is negative and direct			drainage ditch with appropriate		sections or material.		regency.	B
	due to micro and macro flow			size.				regency.	

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	cut off on natural surface			3. Creating bridge on areas with				2. Regional	in Timur
	during cut and fill process.			river flowing.				Environment	Regency.
				4. Conduct routine maintenance				Agency of	2. Environme
				on bridges and culverts				Kotawaringin	nt agency
				constructed.				Timur	of
								Regency	Kotawaring
								hegeney	in Timur
									Regency.
									3. Environme
									nt Agency
									of Central
									Kalimantan
									Province
1.4	Erosion Rates								Trovince
1.4	Based on significant impact	Vegetation	Resulted erosion rate	Development of Estate	On erosion-prone	Once during work on	PT AWL -	1.Plantation	1. Plantation
	evaluation results indicate	degradation on areas	does not exceed	Emplacement.	areas especially estate	progress and evaluated	PLASMA	and forestry	and
	that impact parameters on	cleared:	critical threshold of 9	a. Implementation of estate	emplacement location,	once in 6 months.		office of	Forestry
	occurrence of increased	a. Development of	ton/ ha/ year based	emplacement development	road network, nursery			Kotawaringin	Office of
	erosion rates in which the	estate	on Government	should be carried out in a	site planting location			Timur regency.	Kotawaring
	impact is negative, significant	emplacement	Regulation No. 150	planned manner and does not	and mill's site.				in Timur
	and derivatives.	b. Development of	year 2000.	allow open land to be neglected					Regency.
		road network		for long term.					2. Environme
		c. Preparation of		b. Land clearing carried out to					nt agency
		nursery land		construct estate emplacement					of
		d. Preparation of		should be done in a planned					Kotawaring
		planting area		manner and according to the					in Timur
		e. Preparation of mill site.		needs. c. Immediately plant land cover					Regency. 3. Environme
		Site.		crops on areas cleared for					nt Agency
				emplacement.					of Central
				d. On sloping area with gradient >					Kalimantan
				8% should have terraces to					Province m
				avoid erosion prone areas.					
				Dood notwork operative					
				Road network construction a. Land clearing should be done in					
				a planned and efficient manner.					
				b. Construct terraces on runoff					
				areas near river riparian.					
				c. Immediately plant land cover					
				crops on areas cleared.					
. <b>-</b>	1					1 I			

	d. Surfacing the road with coral
	mixture
	Preparation of nursery site
	a. Establish nursery site on sloping
	area.
	b. Development of nursery land
	should be conducted in a
	planned and efficient manner.
	c. Setting the pre-nursery site that
	cuts the slope.
	d. Immediately plant land cover
	crops on nursery site that have
	been left.
	veen leit.
	Preparation of planting site
	a. Land preparation should be
	conducted in a well and
	planned manner.
	b. Land clearing remnants should
	be stacked lengthwise and cut
	into the slope.
	c. Immediately plant oil palm &
	LCC on areas planned.
	d. Do not carry out land clearing
	by burning.
	Preparation of mill site
	a. Land clearing should be
	conducted in a planned and
	gradual manner.
	b. Land clearing should be carried
	out during dry season.
	c. Do not carry out land clearing
	by burning.
	d. Immediately commence
	construction activities after
	land clearing completed.
	e. Immediately conduct
	reforestation on surrounding
	area of the ste with fast-growth
	plant type and LCC to minimize
	erosion.
1.5 Sediment Load	

	Based on significant impact	This is a derivative		oad of	1) Emplacement Development	Surronding drainage	Once during work in	PT AWL -	1. Plantation	1. Plantation
	evaluation results indicate	effect of the increased	sediment	in	a. Estate emplacement	ditch that áre	progress and evaluated	PLASMA	and forestry	and
	that impact parameters on	erosion rate caused by	surrounding	water	construction should be	connected with	at least once in 3		office of	Forestry
	occurrence of increased	the activities	bodies.		conducted in a planned	sediment trap and	months during PT AWL		Kotawaringin	Office of
	sediment load rates in which	implemented such as:			manner and gradually.	wáter body.	- PLASMA operations.		Timur	Kotawaring
	the impact is negative, significant and may result in	a. Development of			b. Construct drainage ditch				regency.	in Timur
	water quality degradation.	estate			which equipped with				2. Regional	Regency.
	water quality degradation.	emplacement			sediment trap around the area				Environment	2. Environme
		b. Development of			that has been cleared for				Agency of	nt agency
		road network			estate emplacement site				8,	of
		c. Preparation of			construction.				Kotawaringin	
		nursery land			c. Immediately plant LCC on area				Timur	Kotawaring
		d. Preparation of			that has been cleared.				Regency	in Timur
		planting área								Regency
		e. Preparation of mill			2) Construction of road network					3. Environme
		site.			a. Road network construction					nt Agency
					should be conducted in a					of Central
					planned manner and gradually					Kalimantan
					according to the needs.					Province m
					b. Construct drainage ditch on					
					the right and the left side of					
					the road					
					c. Create sediment trap at each					
					end of the drainage ditch that					
					leads to water body.					
					d. Conduct intensive					
					maintenance to each					
					sediment trap on each					
					drainage ditch.					
					e. Conduct land clearing for oil					
					palm planting in a planned and					
					effective manner.					
					f. Create terraces for land					
					cleared close to river riparian.					
					g. Surfacing the road with coral					
					mixture.					
11					mixture.					
					3) Preparation of nursery site					
	l	l			s, reparation of hursely site	l			1	

a. Development of nursery land
should be conducted in a
planned and efficient manner.
b. Setting the pre-nursery site
that cuts the slope.
c. At the end of drainage ditch
construct sediment trap
measuring 40m x 15m x 2m
which divide into 2
components.
d. Conduct periodic
maintenance on sediment
trap.
4) Preparation of planting site
a. Land preparation should be
conducted in a well and
planned manner.
b. Land clearing remnants
should be stacked lengthwise
and cut into the slope.
c. Immediately plant oil palm &
LCC on areas planned.
d. Do not carry out land clearing
by burning.
by burning.
5) Preparation of mill site
a. Land clearing should be
conducted in a planned and
gradual manner.
b. Land clearing should be
carried out during dry season.
c. Do not carry out land clearing
by burning.
d. Immediately commence
construction activities after
land clearing completed.

				e. Immediately conduct					
				reforestation on surrounding					
				area of the ste with fast-					
				growth plant type and LCC to					
				minimize erosion.					
1.6	Surface wáter quality								
	Based on significant impact	Derivative impact due	Declining quality	Emplacement development:	Surronding drainage	Once during work in	PT AWL -	1. Plantation	1. Plantation
	evaluation results indicate	to increased	occurred does not	a. Estate emplacement	ditches that áre	progress and evaluated	PLASMA	and forestry	and
	that impact parameters on	sedimentation load	exceed the quality	construction should be	connected with	at least once in 3		office of	Forestry
	occurrence of surface water	(TSS) of fertilizers	standard as set by	conducted in a planned manner	sediment trap and	months during PT AWL		Kotawaringi	Office of
	quality degradation in which	residue carried away	local government	and gradually.	WWTP.	- PLASMA operations.		n Timur	Kotawarin
	the impact is negative,	to wáter bodies	regulation PERDA	b. Construct drainage ditch which				regency.	gin Timur
	significant and direct. Impact intensity that exceed	includes liquid waste sourced from mill,	number 02 year 2011 on water quality	equipped with sediment trap				2. Regional	Regency.
	environmental guality	workshop and	management & water	around the area that has been				Environment	2. Environme
	standard can cause further	generator operations:	pollution control with	cleared for estate emplacement				Agency of	nt agency
	impacts of decreasing the	a. Development of	value	site construction.				Kotawaringi	of
	diversity of aquatic biota.	estate	TSS = 50mg / L	c. Immediately plant LCC on area				n Timur	
		emplacement.	Pg = 6 - 9 in sediment	that has been cleared.					Kotawaring in Timur
		b. Development of	basin and water	that has been cleared.				Regency	-
		road network.	bodies.	Road network construction					Regency
		c. Preparation of		a. Road network construction					3. Environme
		nursery site.		should be conducted in a					nt Agency
		d. Nursery activities.		planned manner and gradually					of Central
		e. Preparation of		according to the needs.					Kalimantan
		planting área.		b. Construct drainage ditch on the					Province
		f. Preparation of mill		right and the left side of the					
		site.		road.					
		g. Plantation upkeep		c. Create sediment trap at each					
		h. Mill operation		end of the drainage ditch that					
		•		5					
		i. Workshop and		leads to water body. d. Conduct intensive maintenance					
		generator							
		operations		to each sediment trap on each					
		j. Fertilizer and		drainage ditch.					
		pesticide warehouse		e. Construct terraces on area					
		activities		cleared close to riparian river.					
				f. Conduct land clearing for oil					
				palm road network in a planned					
1				and effective manner.					

g. Create terraces for land cleared
close to river riparian.
h. Surfacing the road with coral
mixture.
Preparation of nursery site
a. Provide coagulation treatment
on sediment basin to accelerate
the precipitation process of
suspended fertilizers &
pesticides.
b. Application of fertilizers and
pesticides are implemented
effectively & efficiently.
circularly a circularly.
Nursery
a. Fertilizers & pesticides are
applied in accordance with the
doses that have been
determined so as not to cause
environmental pollution,
especially resulting in
hazardous and toxic waste
around the nursery area.
b. Conducting pesticides spraying
in hot weather.
c. Conducting fertilization after
raining and applying only
around the seeds.
d. Create a drainage network that
leads to the retention basin in
each division so that the water
flow does not flow to water
bodies.
e. Using a biodegradable and
environmentally friendly
pesticide type.
f. Collect plastic waste from
pesticide bottles and other

plastic waste at temporary
storage facility for hazardous
and toxic waste.
Preparation of planting area.
a. Land preparation should be
conducted in a well and
planned manner.
b. Land clearing remnants should
be stacked lengthwise and cut
into the slope.
c. Immediately plant oil palm &
LCC on areas planned.
d. Do not carry out land clearing
by burning.
e. Not clearing area close to river
border zones and maintain
springs and natural vegetation
in river border zones.
Preparation of mill site
a. Construct WWTP to treat
wastewater generated from
milling activities.
b. Based on the characteristics of
waste and pollution loads,
wastewater management is
effective if WPH is more than 75
days so that COD and TTS levels
can be lowered to below quality
standards. For this intention PT
AWL - PLASMA plans to handle
wastewater generated by
constructing WWTP that uses
biological system (anaerobic
and aerobic system) with a
hydrological retention time
(WPH) of approximately 150

days (5 months), the increased
WPH is expected to decrease
the quality of waste water and
pollution loads to below
environmental quality
standards and not pollute the
waste recipient.
c. Implementation of Land
Application in which requires
assessment in advance on
pollution aspect that will occur
previously conducted in the
previous assessment of the
aspect of pollution that will
occur, the carrying capacity of
land in the plantation area and
influence on the soil, especially
the microbiology/ biology of the
soil, surface water and its
permit (This assessment is
intended to obtain Land
Application permit from the
Regent/ Mayor in accordance
with decree of Environmental
Minister Number 28 year 2003
and Number 29 year 2003.
d. For handling of used lubricants
should be collected/ stored in a
specific container (barrel) and
then submitted to the farm or
sold to the third party (local
entrepreneurs who have
received license from the
Ministry of Environment based
on recommendation from
Kotawaringin Timur regency
government. Company should
consult with Environmental
Agency of Central Kalimantan

Province in advance when appointing used lubricants	
appointing used lubricants	
collector.	
incorporating environmental	
impact control programs.	
f. In collaboration with relevant	
agencies such as plantation	
office and forestry of	
Kotawaringin Timur regency	
and universities on wastewater	
treatment techniques.	
Plants upkeep:	
a. Provision of fertilizer in a	
planned and efficient manner	
to oil palm plant.	
b. Application of pesticides to	
prevent pests and diseases	
should refer to doses that have	
been recommended and using	
permitted materials.	
c. Herbicide application in weed	
control should be the last	
resort, non-chemical weeding is	
the priority.	
d. Conduct strict supervision on	
field workers applying fertilizers	
and pesticides in order to avoid	
irregularities during the	
application by following the	
work procedures that have	
been set.	
e. Apply strict rules that prohibit	
all estate workers either	
intentionally	
not to spill fertilizers or	
pesticides to water bodies	

f.       Preparing safe storage for fertilizers and pecticides from runoff and protected from rain at distribution application of fertilizers and application of fertilizers and pesticides in the field.         h.       Create SOP's on storage, distribution and applications temporarily during rain.         i.       A.I.I. estable drainage ditches leading to local water basis should have sediment basis that serves to test fertilizer and pesticide that carried away by water.         j.       Collect used fertilizer and pesticide training to all workers who apply fertilizers and pesticide training to all workers been provided.         k.       Provide training to all workers who apply fertilizers and pesticide training to all workers who apply fertilizers and pesticide.         k.       Provide training to all workers who apply fertilizers and pesticide.         k.       Provide training to all workers who apply fertilizers and pesticide.         k.       Provide training to all workers who apply fertilizers and pesticides by prioritizing aspects of environmental security.         i.       Construct worker location and local community residential location.         Mill maintenance:	
Image: Section of the section of th	f. Preparing safe storage for
at distribution points at planting area. g. Greate SOP's on storage, distribution and application of fertilizers and pesticides in the field. h. Cease fertilization activities and pesticide applications temporarily during rain . All estate drainage ditches leading to local water bodies should have sediment basin that serves to test fertilizer and pesticide that carried away by water. j. Collect used fertilizer and pesticide that carried away by water. j. Collect used fertilizer and pesticide that carried away by water. j. Collection location that has been provided. k. Provide training to all workers who apply fertilizers and pesticides by prioritizing aspects of environmental security. l. Construct monitoring wells within the project location and local community residential location. Mill maintenance:	fertilizers and pesticides from
g       planting area.       g         g       Create SOP's on storage, distribution and application of fertilizers and pesticides in the field.         h       Crease fertilization activities and pesticides in the pesticide applications temporarily during rain.         i       All estate drainage ditches         g       Identification activities and pesticide local water bodies         should have sediment basin       that serves to test fertilizer and pesticide avay by water.         j       Collection location that has been provided.         k       Provide training and laworkers who apply fertilizers and pesticides by prioritizing aspects of environmental security.         i       Construct monitoring wells         within miniterance:       Identifier and local worker	runoff and protected from rain
g       planting area.       g         g       Create SOP's on storage, distribution and application of fertilizers and pesticides in the field.         h       Crease fertilization activities and pesticides in the pesticide applications temporarily during rain.         i       All estate drainage ditches         g       Identification activities and pesticide local water bodies         should have sediment basin       that serves to test fertilizer and pesticide avay by water.         j       Collection location that has been provided.         k       Provide training and laworkers who apply fertilizers and pesticides by prioritizing aspects of environmental security.         i       Construct monitoring wells         within miniterance:       Identifier and local worker	at distribution points at
g. Create SOP's on storage, distribution and application of fertilizers and pesticides in the field.       h.         h. Case fertilization activities and pesticide applications temporarily during rain.       i.         i. All estate drainage ditches leading to local water bodies should have sediment basin that serves to test fertilizer and pesticide that carried away by water.       j.         j. Collect used fertilizer and pesticide location that has been provided.       k.         k. Provide training to all workers who apply fertilizers and pesticides by prioritizing aspects of environmental security.       j.         i. Construct monitoring wells within the project location and local community residential location.       j.	
Image: Section of the section of th	
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field.       h. Cease fertilization activities and pesticide applications temporarily during rain.         i. All estate drainage ditches leading to local water bodies should have sediment basin that serves to test fertilizer and pesticide that carried away by water.         j. Collect used fertilizer and pesticide should have sediment basin that serves to test fertilizer and pesticide containers on collection location that has been provide training to all workers who apply fertilizers and pesticides by prioritizing aspects of environmental security.         i. Construct monitoring wells with the project location and local community residential location.         Mill maintenance:	
h. Cease fertilization activities and pesticide applications temporarily during rain. i. All estate drainage ditches leading to local water bodies should have sediment basin that serves to test fertilizer and pesticide that carried away by water. j. Collect used fertilizer and pesticide containers on collection location that has been provided. k. Provide training to all workers who apply fertilizers and pesticides by prioritizing asspects of environmental security. i. Construct monitoring wells within the project location and local community residential location. Mill maintenance:	
pesticide       applications         temporarily during rain.       i. All estate drainage ditches         leading to local water bodies       should have sediment basin         that serves to test fertilizer and       pesticide that carried away by         water.       j. Collect used fertilizer and         pesticide containers on       collection location that has         been provided.       k. Provide training to all workers         who apply fertilizers and       pesticides by prioritizing         aspects of environmental       security.         i. Construct monitoring wells       within the project location and         local community residential       local community residential	
i. All estate drainage ditches leading to local water bodies should have sediment basin that serves to test fertilizer and pesticide that carried away by water.       i. Collect used fertilizer and pesticide containers on collection location that has been provided.         k. Provide training to all workers who apply fertilizers and pesticides by prioritizing aspects of environmental security.       i. Construct monitoring wells within the project location and local community residential location.         Mill maintenance:       Mill maintenance:       i. Mill maintenance:	
<ul> <li>i. All estate drainage ditches leading to local water bodies should have sediment basin that serves to test fertilizer and pesticide that carried away by water.</li> <li>j. Collect used fertilizer and pesticide containers on collection location that has been provided.</li> <li>k. Provide training to all workers who apply fertilizers and pesticides by prioritizing aspects of environmental security.</li> <li>l. Construct monitoring wells within the project location and local community residential location.</li> </ul>	
leading to local water bodies should have sediment basin that serves to test fertilizer and pesticide that carried away by water. j. Collect used fertilizer and pesticide containers on collection location that has been provided. k. Provide training to all workers who apply fertilizers and pesticides by prioritizing aspects of environmental security. I. Construct monitoring wells within the project location and local community residential location. Mill maintenance:	
should have sediment basin that serves to test fertilizer and pesticide that carried away by water. j. Collect used fertilizer and pesticide containers on collection location that has been provided. k. Provide training to all workers who apply fertilizers and pesticides by prioritizing aspects of environmental security. i. Construct monitoring wells within the project location and local community residential location. <b>Mill maintenance:</b>	
that serves to test fertilizer and pesticide that carried away by water. j. Collect used fertilizer and pesticide containers on collection location that has been provide training to all workers who apply fertilizers and pesticides by prioritizing aspects of environmental security. I. Construct monitoring wells within the project location and local community residential location. <b>Mill maintenance:</b>	
pesticide that carried away by water.       j. Collect used fertilizer and pesticide containers on collection location that has been provided.         k. Provide training to all workers who apply fertilizers and pesticides by prioritizing aspects of environmental security.       i. Construct monitoring wells within the project location and local community residential location.         Mill maintenance:       Mill maintenance:       i. Mill maintenance:	
water.   j. Collect used fertilizer and   pesticide containers on   collection location that has   been provided.   k. Provide training to all workers   who apply fertilizers and   pesticides by prioritizing   aspects of environmental   security.   I. Construct monitoring wells   within the project location and   locat community residential   location.	
j. Collect used fertilizer and pesticide containers on collection location that has been provided. k. Provide training to all workers who apply fertilizers and pesticides by prioritizing aspects of environmental security. I. Construct monitoring wells within the project location and local community residential location. Mill maintenance:	
pesticide containers on collection location that has been provided.         k. Provide training to all workers who apply fertilizers and pesticides by prioritizing aspects of environmental security.         i. Construct monitoring wells within the project location and local community residential location.         Mill maintenance:	
collection location that has been provided.         k.       Provide training to all workers who apply fertilizers and pesticides by prioritizing aspects of environmental security.         l.       Construct monitoring wells within the project location and local community residential location.         Mill maintenance:       Mill maintenance:	
been provided.         k. Provide training to all workers         who apply fertilizers and         pesticides         by prioritizing         aspects of environmental         security.         I. Construct monitoring wells         within the project location and         local community residential         location.         Mill maintenance:	
k. Provide training to all workers         who apply fertilizers and         pesticides         by prioritizing         aspects         of environmental         security.         I. Construct monitoring wells         within the project location and         local community residential         location.         Mill maintenance:	
who apply fertilizers and   pesticides   aspects   of   environmental   security.   I.   Construct   monitoring   wells   within the project location and   local   local   location.     Mill maintenance:	
Image: security in the project location and local community residential location.       Image: security in the project location and location.         Image: security in the project location and local community residential location.       Image: security in the project location and location.         Image: security in the project location and local community residential location.       Image: security in the project location and location.	
Image: security.       Image: security.         Image: security.	
security. I. Construct monitoring wells within the project location and local community residential location. Mill maintenance:	
I. Construct monitoring wells within the project location and local community residential location. Mill maintenance:	
within the project location and       local community residential         location.       location.         Mill maintenance:       location	
local community residential       location.       Mill maintenance:	
location. Mill maintenance:	
Mill maintenance:	
wastewater generated from milling activities	
milling activities.	
b. Based on the characteristics of	
waste and pollution loads,	
wastewater management is	
effective if WPH is more than 75	effective if WPH is more than 75

days so that COD and TTS levels
can be lowered to below quality
standards. For this intention PT
AWL - PLASMA plans to handle
wastewater generated by
constructing WWTP that uses
biological system (anaerobic
and aerobic system) with a
hydrological retention time
(WPH) of approximately 150
days (5 months), the increased
WPH is expected to decrease
the quality of waste water and
pollution loads to below
environmental quality
standards and not pollute the
waste recipient.
c. Implementation of Land
Application in which requires
assessment in advance on
pollution aspect that will occur
the carrying capacity of land in
the plantation area and
influence on the soil, especially
the microbiology/ biology of the
soil, surface water and its
permit (This assessment is
intended to obtain Land
Application permit from the
Regent/ Mayor in accordance
with decree of Environmental
Minister Number 28 year 2003
and Number 29 year 2003.
d. For handling of used lubricants
should be collected/ stored in a
specific container (barrel) and
then submitted to the farm or
sold to the third party (local
entrepreneurs who have

received     license     from the       Ministry of Environment based     on     recommendation       Kotawaringin     Timur     regency	
on recommendation from	
on recommendation from	1 1
in the main in the best of	
government. Company should	
consult with Environmental	
Agency of Central Kalimantan	
Province in advance when	
appointing used lubricants	
collector.	
e. Training employees by	
incorporating environmental	
impact control programs.	
f. In collaboration with relevant	
agencies such as plantation	
office and forestry of	
Kotawaringin Timur regency	
and universities on wastewater	
treatment techniques.	
Workshop activities:	
a. Create a drainage channel to	
contain waste water from the	
workshop with dimensions of	
60 cm top width, 40 cm base	
width and 50 cm depth and	
connect it to oil trap unit.	
b. Construct oil trap with a size of	
0.75 x 0.75 x 1 m x 4 in one	
series.	
c. Temporary storage of	
hazardous and toxic waste	
should be equipped with permit	
specific for hazardous and toxic	
d. Temporary storage of	
hazardous and toxic waste is	
equipped with symbols in	

accordance with applicable
regulations
e. Containers used to
accommodate hazardous waste
should be equipped with
symbols and identification
labels in accordance with
applicable regulations.
f. In workshop area and generator
house should be equipped with
SOP on Fuel Management.
g. Use workshop for estate
equipment maintenance.
h. Avoid oil/ used lubricants spills
during estate equipment
maintenance in the field.
i. Accommodate used lubricants
resulted from equipment
maintenance in specific leak-
proof container further collect
them at specific storage.
j. Maintenance/ repair of
workshop equipment.
- Accommodate all used
lubricant on a leak-proof
container and collect them
in specific storage.
- Temporary storage for used
lubricants should be free
from flood.
- Used oil temporary storage
must be free from flooding.
k. Fuel loading and distribution
unit:
- Apply strict control and
supervision to prevent the
possibility of leakage on fuel
tank installation.

				<ul> <li>Immediately empty the fuel</li> </ul>					
				tank if there is a leak and					
				immediately fix the leak.					
				- Construct bund wall made					
				of concrete that surrounds					
				the fuel tank. The bund wall					
				should have the capacity to					
				contain fuel tank maximum					
				capacity.					
				- Create and place warning					
				board around the workshop					
				location to avoid the					
				occurrence of pollution to					
				local water bodies due to					
				used oil and fuel spilled.					
				- Remove all used lubricants					
				that have been collected at					
				the project site and					
				submitting them to a					
				business entity that has the					
				official license from the					
				Ministry of Environment to					
				manage hazardous and					
				toxic waste.					
				- Provide periodic guidance					
				to all personnel at workshop					
				operations related to oil					
				pollution control to water					
				bodies around the project					
				site.					
1.7	Surface wáter debit								
	Based on significant impact	Increased surface	Runoff occured sti	I a. Implementation of planting site	On áreas designated as	Once during land	PT AWL -	1. Plantation	1. Plantation
	evaluation results indicate	wáter flow to wáter	can be we	I preparation activities gradually &	planting áreas.	preparation activities	PLASMA	and forestry	and
	that impact parameters on	bodies around the	overcome.	planned as needed.				office of	Forestry
	occurrence of increased	planting áreas.		b. Conducting land clearing				Kotawaringi	Office of
	surface wáter flow in which			с				Ũ	Kotawarin
	the impact is negative,			activities during the dry season.					
	significant and direct. Impact			c. Not clearing land in river border				regency.	gin Timur
	intensity that exceed			zones and maintaining the				2. Regional	Regency.
	environmental quality			existence of natural vegetation				Environment	2. Environme
	standard can cause further			as conservation zones.				Agency of	nt agency
	impacts in the form of			d. Adjust the slope and steep				Kotawaringi	of
	increased erosion rate.			terraces on the steep terrain.				n Timur	Kotawarin
								Regency.	Notawarin
			1		1	1	1	negency.	

								•	
				e. Create trenches equipped with					gin Timur
				sediment trap around the field.					Regency
				f. Maintenance of erosion					3. Environme
				inhibitors is done regularly every					nt Agency
				week, especially in rainy season.					of Central
				g. Immediately plant the planting					Kalimanta
				area after land clearing is					n Province.
				completed.					in novince.
				completed.					
2	BIOLOGICAL COMPONENTS								
2.1	Vegetation								
2.1	Based on significant impact	Degradation on áreas	Percentage of areas	Environmental management	Restoration is	Once a year,	PT AWL -	1. Plantation	1. Plantation
	evaluation results indicate	cleared for:	and type of cover	activities for estate	conducted on áreas	conducted gradually	PLASMA	and forestry	and Forestry
	that impact parameters on	a. Development of	vegetation with total		that have been	adjucted tol and	-	office of	Office of
	occurrence of land cover	estate	area cleared.	emplacement development, road network construction,	cleared so that	cleared on each			
	decreased in which the	emplacement.			impact the	división and evaluated		Kotawaringin	Kotawaringi
	impact is negative, significant	b. Development of		Preparation of nursery site,	vegetations that are	twice, first evaluation		Timur	n Timur
	and direct. Impact intensity	road network.		preparation of planting area and	degraded.	at the age of 6 months		regency.	Regency.
	that exceed environmental			preparation of mill site.		and second at the age			2. Environmen
	quality standard can cause	•		a. Planting area preparation		of 1 year to obtain			t agency of
	further impacts in the form of	nursery site.		should be done gradually and		sucess rate.			Kotawaringi
	increased erosion rate and	d. Preparation of		planned according to the					n Timur
	wildlife migration.	planting área.		needs.					Regency.
		e. Preparation of mill		b. Land clearing is conducted on					3. Environmen
		site.		areas designated for road					t Agency of
				network construction,					Central
				preparation of nursery area,					Kalimantan
				Preparation of planting area (±					Province.
				2,226 Ha).					
				c. Enriching and maintaining					
				conservation areas.					
				d. Warning board installation to					
				prohibit hunting on protected					
				wildlife and land clearing on					
				protected areas.					
				e. Immediately plant the areas					
				cleared with LCC.					
				f. Employee training by					
				incorporating environmental					
				impact control programs.					
	•	•	•				•	•	

g. Slope maintained at 8% on
road network construction.
h. Road signs installation
according to the needs.
i. Maintain road surfacing to
prevent slippery road.
j. Protect trees that can be
protected as home for
wildlife.
2) Land rehabilitation ad
restoration.
a. Land reclamation activities are
carried out after the location
permit has expired.
b. Immediately undertake
reclamation by conducting
reforestation on the location.
c. Land that has been restored is
surfaced with top soil then
planted with LCC.
d. Conducting land regeneration
with plant spacing of 3x3m on
areas that have been restored
with fast growing plant
species.
e. On regeneration areas need to
be planted with local fruit
rambutan, cempedak, durian
etc.
f. Plants maintenance and
fertilizing include:
- Planting hole measuring
30x30 cm –
- Dose of SP 36 fertilizer is
150 gr/tree
- Dose of NPK fertilizer is
100 gr/tree - Dose of calcium provided
is 1 ton/Ha

			<ul> <li>Plant insertion is done &lt;1 month on dead plants</li> <li>1 year old plant maintenance is done every 3 months by weeding on the circle.</li> <li>2 year old plant maintenance is done every 6 months by weeding on the circle.</li> <li>Fertilization for local fruit crops is done until the age of 3 years.</li> </ul>					
2.2 Wildlife habitat Based on significant impact evaluation results indicate that impact parameters on occurrence of wildlife migration in which the impact is significant negative and positive and derivative due to vegetation degradation.	Activities that have impact on wildlife migration are: a. Development of estate emplacement. b. Development of road network. c. Preparation of nursery site. d. Preparation of planting área.	Percentage of number and types of wildlife living in the conservation area around the plantation location.	<ul> <li>growing percentage of 90%</li> <li>h. Installing signing board on revegetation areas measuring of 200x80 cm</li> <li>i. Intensify patrol activities to prevent destruction on areas restored and rehabilitated.</li> <li>a. Installation of hunting prohibition board measuring 120x80 cm.</li> <li>b. Intensify patrol activity to prevent wildlife hunting and file a lawsuit to those who against it.</li> <li>c. Conservation areas and natural vegetation are wild animals' habitat, prevent disruption as much as possible and requires enrichment to maintain the existence of these locations.</li> <li>d. Conducting socialization to the community and workers to always protect the endangered species and if there is any endangered species kept please</li> </ul>	Forested areas around the project site as well as the location of the river border around the location that are designated as conservation area.	One time during plantation work in progress by PT AWL - PLASMA and evaluated once in every 6 months to obtain conservation área capacity compared with number of percentage of wildlife living in the área.	PT AWL - PLASMA	<ol> <li>Plantation and forestry office of Kotawaringin Timur regency.</li> <li>Regional Environment Agency of Kotawaringin Timur Regency.</li> </ol>	<ol> <li>Plantation and Forestry Office of Kotawaringi n Timur Regency.</li> <li>Environmen t agency of Kotawaringi n Timur Regency.</li> <li>Environmen t Agency of Central Kalimantan Province.</li> </ol>

				report to the authorities					
				immediately.					
2.3	Aquatic Biota	•	•						
2.3	Aquatic Biota Based on significant impact evaluation results indicate that impact parameters on occurrence of aquatic biota decreased in which the impact is significant negative and direct.	The continued impacts of fertilizers & pesticides residues pollution on local water bodies, used oil & TSS content exceeding the environmental standard determined in accordance with the Central Kalimantan Government Regulation No. 2 Year 2011 which is 50	Aquatic biota diversity are well maintained such as bentos and nekton.	<ul> <li>immediately.</li> <li>Road network construction <ul> <li>a. Road network construction</li> <li>should be conducted in a planned manner and gradually according to the needs.</li> <li>b. Construct drainage ditch on the right and the left side of the road.</li> <li>c. Create sediment trap at each end of the drainage ditch that leads to water body.</li> <li>d. Add alum to sediment basin until reaching pH 6-7.</li> </ul> </li> <li>Plants upkeep <ul> <li>a. Water polution control against fertilizers and pesticides residue should be conducted seriously and responsibly.</li> <li>b. Install notification boards in strategic areas and easily visible.</li> </ul> </li> <li>Mill Operations <ul> <li>a. Create surounding ditches that are connected to WWTP.</li> <li>b. Implementation of land application in which requires study in advance.</li> <li>c. For handling of used lubricants are collected and kept in barrels and submitted to third party who have obtained license from Environmental Ministry.</li> </ul> </li> </ul>	On sediment basin, oil trap and WWTP.	Once during work in progress and evaluated at least once in 3 months during operations.	PT AWL - PLASMA	<ol> <li>Plantation and forestry office of Kotawaringin Timur regency.</li> <li>Regional Environment Agency of Kotawaringin Timur Regency.</li> </ol>	<ol> <li>BLH Prov Kaltim Plantation and Forestry Office of Kotawarin gin Timur Regency.</li> <li>Environme nt agency of Kotawarin gin Timur Regency.</li> <li>Environme nt Agency of Central Kalimanta n Province.</li> </ol>
				Workshop and generator operations					

				a. Conduct strict control to					
				prevent mineral oil pollution					
				against local water bodies.					
				b. Implement oil handling					
				mechanism in accordance with					
				regulations from Ministry of					
				Energy and Mining.					
				Lifergy and Minning.					
				Fertilizer & pesticide warehouse.					
				a. Avoid leakage during storage					
				and distribution of pesticide					
				and fertilizer.					
				b. Apply storage provision for					
				fertilizer and pesticides in					
				accordance with regulations					
				apply.					
3	SOCIAL, ECONOMIC AND CUL								
3.1	Communitry attitude and per						DT 414	4 1 1 11	
	Significant impact in the form	Changes in	Positive attitudes and	1) Sosialization of activity plan	1. Socialization	1. Socialization activities	PT AWL - PLASMA	1. Village	1. Plantation
	of positive perception on PT AWL - PLASMA's plan is	community's negative attitudes who reject	perceptions of the community towards	a. Conducting socialization/	activities are	are conducted once at	PLASIVIA	officials of	and
	significant positive impact	the planned activities	PT AWL - PLASMA	public consultation relating to	conducted at.	the following villages:		Tumbang	forestry
	and direct impact. Number of	change their attitude		activity plan by PT AWL - PLASMA which involves	Tumbang	Tumbang Penyahuan,		Penyahuan,	office of
	human affected and happy or	into positive		related agencies and society	Penyahuan, Tanah	Tanah Haluan,		Tanah	Kotawaring
	agree with PT AWL -	perception and		around, Tumbang Penyahuan,	Haluan, Tumbang	Tumbang Kaminting,		Haluan,	in Timur
	PLASMA's activity plan.	support the		Tanah Haluan, Tumbang	Kaminting,	Tumbang Sapia,		Tumbang	regency.
		development plan of		Kaminting, Tumbang Sapia,	Tumbang Sapia,	Tumbang Getas,		Kaminting,	2. Regional
		PT AWL - PLASMA,		Tumbang Getas, Tumbang	Tumbang Getas,	Tumbang Batu,		Tumbang	Environme
		among others:		Batu, Tumbang Torung, Lunuk	Tumbang Batu,	Tumbang Torung,		Sapia,	nt Agency
		Sosialisasi rencana		Bagantung Villages.	Tumbang Torung,	Lunuk Bagantung		Tumbang	of
		kegiatan		b. Providing explanations to the	Lunuk Bagantung	Villages		Getas,	Kotawaring
		a. Socialization of		public on the positive and	Villages.	2. Penerimaan		Tumbang	in Timur
		activity plan		negative effects from PT AWL	2. Workforce	Workforce		5	
		b. Recruitment		- PLASMA's plantation &				Batu,	Regency
		c. CSR program		milling activities.	recruitment is	recruitment is		Tumbang	3. Regional
		d. Land rehabilitation		c. Collaborate with village	conducted at PT	conducted once in		Torung,	Environme
		and restoration.		officials and related	AWL - PLASMA's	the begining and		Lunuk	nt Agency
				institutions by conducting	location.	evaluated once a		Bagantung	of Central
				socialization	3. CSR Programs are	year at PT AWL -		Villages	Kalimantan
				SUCIDIIZACIUM	performed for	PLASMA's location.		2. Plantation	Province.
					Tumbang			and forestry	
í ———									•

d. Acmmodate the suggestions	Penyahuan, Tanah	3. CSR Programs are	office of
and aspirations of the	Haluan, Tumbang	performed for	Kotawaringin
community	Kaminting,	Tumbang	Timur
-	Tumbang Sapia,	Penyahuan, Tanah	regency.
2) Labour recruitment	Tumbang Getas,	Haluan, Tumbang	3. Regional
a. Prioritizing local employment	•	Kaminting, Tumbang	Environment
b. In the implementation of	-		Agency of
manpower, the initiator	Tumbang Torung,	Sapia, Tumbang	Kotawaringin
coordinates with village	Lunuk Bagantung	Getas, Tumbang	Timur
	Villages.	Batu, Tumbang	Regency.
government and Manpower	4. Lands that have	Torung, Lunuk	hegeney.
Department of Kotawaringin	been restored are	Bagantung Villages.	
Timur Regency.	returned to the	4. Rehabilitasi &	
c. Post an announcement at the	Kotawaringin Timur	pengembalian lahan	
village office relating to the	Regency Office.	dilakukan pada	
recruitment of workers for PT		tahun ke 1 seluruh	
AWL - PLASMA's activities.		areal efektif tanam.	
d. Announce the employee		Land rehabilitation	
recruitment results at the			
village office		and restoration are	
e. Provide training to local		conducted at the	
		first year at the end	
workforce to improve skills		of PT AWL -	
and expertise in accordance		PLASMA's operation	
with the level of education		to all planted áreas.	
f. Provide salaries to workers in			
accordance with the			
classification, level of			
education and position and			
refers to the rules applicable.			
•••			
3) CSR			
a. Designing a CSR program that			
suits the needs and wants of			
the community around the			
plantation and explains the			
government 7 CSR program			
that can really be positive for			
the surrounding community.			
b. Immediately performs a			
deliberation with local			
community leaders in the			
	•		

				project area relating to the					
				CSR programs preparation					
				whereby it also involves local					
				government represented by					
				Plantation and forestry office					
				of Kotawaringin Timur					
				regency.					
				c. Implement all agreement					
				resulted from deliberation in					
				earnest.					
				d. Entire activity plans are					
				carried out openly both to the					
				affected village apparatus and					
				the community.					
				e. The PT AWL - PLASMA works					
				closely with the affected					
				village government in					
				explaining the entire CSR					
				program					
				4) Land rehabilitation and					
				restoration					
				a. Perform restoration activities					
				gradually b. In restoration activities					
				involves local business actors.					
				c. Post an announcement at the					
				village office on PT AWL -					
				PLASMA's end of operations.					
				d. Lands that have been restored					
				are returned to the					
				Kotawaringin Timur Regency					
				Office.					
3.2	Social conflicto		l	onice.					
5.2	Significant impact in the form	A direct impact due to	There is no social	1. Conduct socialization on	Project site location	Once during land	PT AWL -	1. Land	1) Land
	of social conflict in which the	land acquisition	conflict occurred	boundaries of areas that will be	especially on	acquisition process at	PLASMA	Administration	Administrat
	impact is negative and direct	activities at Tumbang	which may disruPT	acquired.	agriculture area,	pre-construction		Division of	ion Division
	to PT AWL - PLASMA's	Penyahuan, Tanah	AWL - Plasmablic	2. Perform land acquisition	plantation and	stages.		Kotawaringin	of
	activities. Social conflict	Haluan, Tumbang	peace and inhibit the	process gradually according to	comunity field that				Kotawaringi
ı L	potential occured due to	Kaminting, Tumbang		,	will be acquired.				

	dipsute in land acquisition	Sapia, Tumbang Getas,	plantation activities	the progress of plantation				Timur	n Timur
	process such as overlapping	Tumbang Batu,	of PT AWL - PLASMA.	activity plan.				Regency.	Regency.
	in land ownership and	Tumbang Torung,		3. No land acquisition on areas				2. Village officials	2) Plantation
	dispute on land	Lunuk Bagantung		that have the potential to cause				of Tumbang	and
	compensation value on land acquired.	Villages.		land tenure disputes.				Penyahuan,	forestry
	acquired.			4. Determination of the				Tanah Haluan,	office of
				boundaries according to land				Tumbang	Kotawaringi
				owner agreement and				Kaminting,	n Timur
				acknowledged by Tabang Sub				Tumbang	regency.
				District officials.				Sapia,	3) Regional
				5. Provision of land				Tumbang	Environme
				compensation to each				Getas,	nt Agency
				community according to				Tumbang	of
				agreement, in terms of type of				Batu,	Kotawaringi
				compensation, amount, time of				Tumbang	n Timur
				delivery and parties entitled to				Torung, Lunuk	Regency 4) Regional
				receive directly without				Bagantung	4) Regional Environme
				intermediaries.				Villages	
				6. Implementation of land				3. Plantation and	nt Agency
				acquisition involves village and				forestry office	of Central
								of	Kalimantan
				0				-	Province.
				apparatus and coordinate with				Kotawaringin	
				related technical institution				Timur regency.	
				(Land Administration Division of				4. Regional	
				Kotawaringin Timur Regency).				Environment	
								Agency of	
								Kotawaringin	
								Timur	
								Regency.	
3.3	Employment opportunity					· - · · · ·			
	Significant impact in the form	It is the impact from	Number of local	1) Workforce recruitment.	The management	Once during	PT AWL -	1) Village	1) Manpower
	of employment opportunities	recruitment activity	people who are	a. 30 days' prior the operations,	office of PT AWL -	recruitment process on	PLASMA	officials of	and
	for the community in which the impact is direct and	and post-operations such as work	accepted to work in PT.PU with 60%	required for the company to	PLASMA, Settlement of Tumbang	progress in PT AWL - PLASMA and at the		Tumbang	Transmigrat
	significant positive. It can	termination.	percent of local	register the company to	Penyahuan, Tanah	time of termination of		Penyahuan,	ion Office of
	lead to continued impact in		workforce and wages	Workforce and	Haluan, Tumbang	employment.		Tanah Haluan,	Kutai
	increased of surrounding		provision in	Transmigration Department	Kaminting, Tumbang	. ,		Tumbang	Regency
	community income. In		accordance with	of Kotawaringin Timur	Sapia, Tumbang			Kaminting,	Kartanegar
	addition, it can also cause		government	Regency.	Getas, Tumbang Batu,			Tumbang	a.
	continued impact which is		regulations (UMSK in		Tumbang Torung,			Sapia,	

	nogotive and sumulative in		Katawaringin Timur	h Dublich concursion to Marco	Lunuk Dogontura			Turchere	2) Diantatia
	negative and cumulative in the form of perception and		Kotawaringin Timur Regency).	b. Publicly announcing to Muara	Lunuk Bagantung Villages.			Tumbang	2) Plantation
	attitude of the community		Regency).	Ritan Village, Muara Ritan	vinages.			Getas,	and
	against PT.PU activity plan.			Baru Village, Villages, Muara				Tumbang	forestry
				Pedohon Village and Umaq				Batu,	office of
				Dian Village on the job				Tumbang	Kotawaringi
				recruitment.				Torung, Lunuk	n Timur
				c. Prioritize local workforce to				Bagantung	regency.
				work in the company tailored				Villages	3) Regional
				to educational qualifications				2) Manpower	Environme
				required by the company.				and	nt Agency
				d. Job recruitment should be				Transmigratio	of
				based on the working age of				n Office of	Kotawaringi
				18 years in accordance with				Kutai Regency	n Timur
				government regulations on				Kartanegara	Regency
				employment.				3) Plantation and	4) Regional
				e. Inform the number, type, skills				forestry office	Environme
				and requirements of the				of	nt Agency
				labour needed widely to the				Kotawaringin	of Central
				surrounding community.				Timur regency.	Kalimantan
				f. Provide special training for				4) Regional	Province.
				local workers to improve skills				Environment	
				& expertise.				Agency of	
				2) Employment termination				Kotawaringin	
				a. Termination of employment				Timur	
				should be done in stages.				Regency.	
				b. Preparation for termination of					
				employment should be done					
				in advance and detailed.					
				c. Provide severance pay to					
				employees who will be					
				affected by layoffs in which					
				the amount is adjusted to the					
				provisions of legislation.					
3.4	Business Field		1	·				I	
	Significant impact in the form	Business activities that	Increasing &	1) Emplacement development	Settlement of	Once during the	PT AWL -	1. Village officials	1. Manpower
	of business opportunity	involve local business	developing local	a. Providing opportunities for	Tumbang Penyahuan,	development of	PLASMA	of Tumbang	and
	creation for the community in	actors in the activities	economic activity and	local carpenters in the	Tanah Haluan,	estate emplacement,		Penyahuan,	Transmigra
	which the impact is positive	such as:	the number of local	provision of carpentry services	Tumbang Kaminting,	land preparation,		Tanah Haluan,	tion Office
	and direct, this impact can		people who can be	during development activities.	Tumbang Sapia,	nurseries, planting		Tumbang	

 	•	-				-	
lead to continued positive	a. Development of	empowered by PT	b. Provide wages in accordance	Tumbang Getas,	area preparation, mill	 Kaminting,	of Kutai
impacts on increased	estate	AWL - PLASMA	with the agreement	Tumbang Batu,	area preparation.	Tumbang	Regency
incomes of surrounding	emplacement.			Tumbang Torung,		Sapia,	Kartanegar
communities.	b. Preparation of		2) Nursery location preparation	Lunuk Bagantung		Tumbang	a.
	nursery location.		a. Provide widespread	Villages.		Getas,	2. Plantation
	c. Nurseries.		opportunities to business			Tumbang	and
	d. Preparation of		actors from surrounding			Batu,	forestry
	planting area.		communities for nursery			Tumbang Torung, Lunuk	office of
	e. Planting of oil palm.		activities			Bagantung	Kotawarin
	f. Construction of		b. Provide wages in accordance			Villages	gin Timur
	palm oil mill.		with the agreement			2. Manpower	regency.
						and	3. Regional
			3) Nurseries			Transmigratio	Environme
			a. Provide announcement to the			n Office of	nt Agency
			community around the			Kutai Regency	of
			location on the needs of			Kartanegara	Kotawarin gin Timur
			services for nursery activities			3. Plantation	Regency
			by the company either type,			and forestry	4. Regional
			classification and expertise			office of	Environme
			required. b. Provide opportunities for			Kotawaringin	nt Agency
			business units/ individuals			Timur	of Central
			-			regency. 4. Regional	Kalimanta
			who are in and around the			Environment	n Province.
			plantation location to				
			participate particularly in the			Agency of	
			provision of goods and			Kotawaringin	
			services to meet the needs of			Timur	
			employees and companies.			Regency.	
			c. Involving the community of				
			the sub-district government in				
			the business unit activities.				
			4) Preparation of palnting area				
			a. Provide business				
			opportunities as wide as				
			possible to the surrounding				
			community in the provision of				
			land.				
			b. Provide wages in accordance				
			with the agreement.				
			5) Oil palm planting				
•	•	•	-		•	•	

				a. Set the speed of the					
				transporting vehicle at					
				maximum of 20 km/h,					
				especially if passing through					
				settlement or concentration					
				of community agriculture.					
				b. Conducting hardening &					
				compaction of haul roads with					
				special aggregate, especially					
				on seedlings transportation					
				path.					
				c. During dry season water the					
				road every 3 on the					
				transportation path that					
				passes the nursery.					
				6) Palm oil mil constrution					
				a. Conduct special open bidding					
				for business groups from local					
				communities for plant					
				construction activities.					
				b. Provide wages in accordance					
				with the agreement.					
3.5	Community Revenue		1	1				1	II
	Significant impact against	Is a derivative impact	Increasing or	1) Recruitment activity during	At PT AWL - PLASMA	Once during	PT AWL -	1. Village officials	1. Plantation
	community revenue in which	of the recruitment	decreasing revenue	emplacement development,	management office	operation in progress	PLASMA	of Tumbang	and
	a continued impact due to	activities that create	of the surrounding	preparation of nursery, planting	and community	ad evaluated once a		Penyahuan,	forestry
	land conversion which	jobs for the	community of PT AWL	area, oil palm plantation, plant	settlement around PT	year during PT AWL -		Tanah Haluan,	office of
	increase the community	surrounding	- PLASMA.	construction, harvesting	AWL - PLASMA.	PLASMA estate and		Tumbang	Kotawaringi
	revenue	community from the		transportation.		mill operations.		Kaminting,	n Timur
		following activities:		a. Provide wages/ salaries to				Tumbang	regency.
		a. Workforce		•				5	<b>J</b> ,
		recruitment		workers adjusted to				Sapia,	2. Regional
		b. Development of		classification, expertise and				Tumbang	Environme
		estate		level of education and refers				Getas,	nt Agency
		emplacement		to legislation relating to				Tumbang	of
		c. Preparation of		wages.				Batu,	Kotawaringi
		nursery area		b. Provide education and				Tumbang	n Timur
		d. Seedling		training to workers to improve				Torung, Lunuk	Regency
		e. Preparation of		skills and expertise.				Bagantung	3. Regional
		planting area						Villages	Environme
			1						

f. Oil palm planting	c. Encourage the development	2. Manpower nt Agency
g. Construction of a	of community business	and of Central
palm oil mill	around estate operations so	Transmigratio Kalimantan
h. Harvesting &	that can create non-formal job	n Office of Province.
transporting of	opportunities.	Kutai Regency
FFB's		Kartanegara
i. Mill operations	2) Mill operations	3. Plantation and
	a. Construct wastewater	forestry office
	treatment plants to manage	of
	liquid waste generated from	Kotawaringin
	plant operations.	Timur regency.
	b. Based on the waste	4. Regional
	characteristic & pollution	Environment
	load, the effluent treatment is	Agency of
	effective if WPH is more than	Kotawaringin
	75 days so that the COD & TSS	Timur
	level can be decreased to	Regency.
	below the standard. PT AWL -	
	PLASMA plans the wastewater	
	treatment with a biologically	
	WWTP system (anaerobe &	
	aerobe system) with	
	hydrological retention time of	
	150 days so that WPH increase	
	is expected to decrease the	
	quality of waste water &	
	pollution loads to below the	
	quality standard.	
	c. Implementation of land	
	applications in which requires	
	study in advance on pollution	
	aspect that may occur, the	
	carrying capacity of the land,	
	the effect on soil and ground	
	water and surface water.	
	d. Convert the local people's	
	livelihoods sources from	
	farming to estate workers. If	
	the degradation of water	

								r	
				quality at the site is					
				considered to exceed the					
				quality standard of water					
				pollution.					
3.6	General Traffic (Land)								
	Significant impact in the form	Is a direct impact from	1. No traffic	1) Employees transportation	At public road used by	During the operations	PT AWL -	1. Village officials	1. Plantation
	of traffic disturbance in which	the following activities	congestion and traffic	a. Time arrangement for	the company for	of PT AWL - PLASMA	PLASMA	of Tumbang	and
	the impact is negative and	a. Employees	accidents during	employee transportation to	transporting.	estates.		Penyahuan,	forestry
	direct. The occurrence of impact may cause	transportation.	transporting employees activities,	work in the morning is at				Tanah Haluan,	office of
	inconvenience for road users	b. Harvesting and	transportation &	06:00 pm				Tumbang	Kotawaringi
	in their if disturbance is not	transportation of	harvesting of FFB's	b. Time arrangement for				Kaminting,	n Timur
	managed well.	FFB's	5	employee transportation to				Tumbang	regency.
				return to home in the				Sapia,	2. Regional
				afternoon is at 14:00 wita.				Tumbang	Environme
				c. Limit the speed of the				Getas,	nt Agency
				transporting vehicles at max				Tumbang	of
				20 km / hour, especially when				Batu,	Kotawarin gin Timur
				passing through the				Tumbang	Regency
				settlement.				Torung, Lunuk	
				d. Use appropriate vehicle in				Bagantung	Environme
				accordance with its function				Villages	nt Agency
				such bus/car for passenger.				2. Manpower	of Central
								and	Kalimantan
				2) Harvesting & transportation of				Transmigratio	Province.
				FFB's				n Office of	
				a. Disseminate to affected				Kutai Regency Kartanegara	
				workers on the detailed plan				3. Plantation	
				estate road network.				and forestry	
				b. Allowing the local community				office of	
				to use the estate road for their				Kotawaringin	
				accessibility.				Timur	
				c. Prioritize maintenance of				regency.	
				estate road which used by the				4. Regional	
				community as access roads.				Environment	
				d. Implement traffic rules to all				Agency of	
				road users.				Kotawaringin	
				e. At the section of the road				Timur	
				which used by the community				Regency.	
				as access roads are installed					
			1						

				with traffic signs in						
				accordance with applicable						
				laws and regulations.						
				f. Prioritizing public road user						
				first.						
				g. Placing officer at the						
				intersection of public roads						
				and estate roads.						
				h. To limit the capacity of CPO						
				transporting unit at max 8						
				tons.						
27	Water traffic			tons.						<u> </u>
3.7	Significant impact in the form	Impacts arising from	No disruption on	1. Conduct socialization to the	On Belayan	river	Once during	PT AWL -	L. Village officials	1. Plantation
	of water traffic disturbance in	the following activities	water traffic during		wáter body.	liver	mobilization and	PLASMA	-	
	which the impact is negative	such as:	the mobilization and	surrounding community on	water bouy.		demobilization		of Tumbang	and
	and direct. The occurrence of	Mobilisasi peralatan	demobilization of	estate equipment mobilization			process in progress.		Penyahuan,	forestry
	impact may cause	a. Mobilization of	equipment.	and demobilization plan					Tanah Haluan,	office of
	inconvenience for public	equipment.		2. Setting the port location for					Tumbang	Kotawaringi
	transportation due to the	b. Demobilization of		heavy machine unloading zone.					Kaminting,	n Timur
	operations of LCT.	equipment.		3. Provide adequate lighting during					Tumbang	regency.
				equipment mobilization &					Sapia,	2. Regional
				demobilization process.					Tumbang	Environme
				4. Provide adequate signs for the					Getas,	nt Agency
				activities around the area.					Tumbang	of
				5. Conduct estate equipment					Batu,	Kotawaringi
				mobilization and demobilization					Tumbang	n Timur
				in stages and periodically for the					Torung, Lunuk	Regency
				entire heavy equipment.					Bagantung	3. Regional
				6. Coordinate with the relevant					Villages	Environme
				Kotawaringin Timur Regency					2. Manpower	nt Agency
				office transportation to provide					and	of Central
				guard at the time of mobilization					Transmigratio	Kalimanta
				and demobilization.					n Office of	n Province.
									Kutai Regency	
									Kartanegara	
									3. Plantation and	
									forestry office	
									of	
									Kotawaringin	
									Timur regency.	L]

								4. Regional	
								Environment	
								Agency of	
								Kotawaringin	
								Timur	
								Regency.	
3.8	Environmental Hygiene							-	
	Significant impact against	Impact arises due to	Hygiene and	1) Mill operations	At the location of	Twice, in the evening	PT AWL -	1. Health	1. Plantation
	environmental higiene and	mill operations, office	sanitation are well	a. Accommodate the	activities such as	and in the morning	PLASMA	Department of	and
	sanitation due to estate	and housing activities.	managed at the	remaining liquid waste from	office, employees	during the operations of PT AWL - PLASMA.		Kotawaringin	forestry
	emplacement activities which may lead to degradation of		Project location.	mill operation in barrels then	housing and clinic.	OI PT AWL - PLASIVIA.		Timur	office of
	sanitation quality in the			submitted to a licensed third				Regency.	Kotawaringi
	project environment.			party.				2. Plantation and	n Timur
				b. Create surrounding ditches				forestry office	regency.
				that are connected with				of	2. Regional
				WWTP.				Kotawaringin	Environme
				c. Implementation of Land				Timur regency.	nt Agency
				Applications which requires				3. Regional	of
				assessment in advance.				Environment	Kotawarin gin Timur
								Agency of	
				2) Office and housing activities				Kotawaringin	3. Regional
				a. Provide solid waste				Timur	Environme
				container at each unit that				Regency.	nt Agency
				produces solid waste both				<i>. .</i>	of Central
				organic & inorganic.					Kalimantan
				b. Prohibit waste disposal to					Province.
				water bodies.					
				c. Create waste disposal					
				system for housing unit.					
				d. Toilet provision should have					
				septic tank.					
				e. Use biological					
				decomposition for septic					
				tank.					
				3) Clinic operations					
				a. Accommodate all solid					
				waste generated from					
				clinical operational activities					
		1	1					1	

				by preparing waste					
				container at several strategic					
				locations.					
				b. Installing warning board on					
				the obligation to maintain					
				the environment					
				c. Provide waste container at					
				the location that generates					
				waste.					
				d. Immediately deliver solid					
				waste generated by clinical					
				operations to a licensed					
				third party that have					
				obtained from Ministry of					
				Environment					
				e. Cooperate with Kota					
				Bangun hospital for medical					
				waste destruction generated					
				by clinical operations.					
3.9	Occupational Health and Safet		1	T					-
1	Significant impact to	Impact arised due to	Occupational health	1) Estate emplacement	At the project location	During the operations	PT AWL -	1. Health	1. Health
	occupational helath and safety in which the impact is	the following activities. a. Development of	and safety disturbance at work.	development	of the following activities:	of PT AWL - PLASMA.	PLASMA	Department of	Department
	potentialy harmful for the	estate	uistui barice at work.	a. Determine and implement	a. Development of			Kotawaringin	of Kutai
	workforce working at Project	emplacement.		safety procedures relating to	estate			Timur	Regency
	location during work in	b. Road network		estate emplacement	emplacement.			Regency.	Kartanegara.
	progress.	construction.		development.	b. Road network			2. Manpower	2. Plantation
		c. Preparation of		b. Provide means of first aid	construction.			and	and forestry
		nursery location.		and medical personnel	c. Preparation of			Transmigratio	office of
		d. Preparation of		c. Perform periodic medical	nursery location.			n Office of	Kotawaringi
		planting area.		examinations	d. Preparation of			Kutai Regency	n Timur
		e. Planting of oil palm.		d. Provide an evacuation unit	planting area.			Kartanegara.	regency.
		f. Plants upkeep		to evacuate workers who	e. Planting of oil palm.			3. Plantation and	J
		g. Harvesting and transportation of		suffered injury due to	f. Plants upkeep			forestry office of	Environmen
		FFB's		accident at workplace and	g. Harvesting and				t Agency of
1		h. Fertilizer and		require further treatment to	transportation of			Kotawaringin	Kotawaringi
1		pesticides		hospital or public health	FFB's			Timur regency.	n Timur Bogongy
1		warehouse		centre.	h. Fertilizer and			4. Regional	Regency
		activities.		e. Provide hearing &	pesticides			Environment	4. Regional
				respiratory protection.				Agency of	Environmen

f. Insuring all the labour	warehouse	Kc	tawaringin t Agency
involved in the project	activities.	Ti	mur Regency Central
		5	Kalimantai
2) Road network construction			Province.
<b>a.</b> Socialization of the use of			
occupational health and			
safety equipment especially			
for workers			
b. Determination &			
implementation of safety			
procedures relating to the			
operations undertaken			
c. Provide first aid facilities			
along with medical			
personnel			
d. Perform periodic health			
checks e			
e. Provide an evacuation unit			
to evacuate workers who			
suffered injury due to			
accident at workplace and			
require further treatment to			
hospital or public health			
centre.			
f. Provide hearing &			
respiratory protection.			
g. Insuring all the labour			
involved in the project.			
3) Nursery location preparation			
a. Socialization of the use of			
occupational health and			
safety equipment especially for workers			
b. Determination &			
implementation of safety			
procedures relating to the			
operations undertaken.			
c. Provide first aid facilities			
---------------------------------			
along with medical			
personnel.			
d. Perform periodic health			
checks.			
e. Provide an evacuation unit			
to evacuate workers who			
suffered injury due to			
accident at workplace and			
require further treatment to			
hospital or public health			
centre.			
f. Insuring all the labour			
involved in the project			
4) Planting area preparation			
a. Socialization of the use of			
occupational health and			
safety equipment especially			
for workers			
b. Determination &			
implementation of safety			
procedures relating to the			
operations undertaken.			
c. Provide first aid facilities			
along with medical			
personnel.			
d. Perform periodic health			
checks.			
e. Provide an evacuation unit			
to evacuate workers who			
suffered injury due to			
accident at workplace and			
require further treatment to			
hospital or public health			
centre.			
f. Insuring all the labour			
involved in the project.			
5) Oil palm planting			
a. Socialization of the use of			
occupational health and			

safety equipment especially
for workers
b. Determination &
implementation of safety
procedures relating to the
operations undertaken.
c. Provide first aid facilities
along with medical
personnel.
d. Perform periodic health
checks.
e. Provide an evacuation unit
to evacuate workers who
suffered injury due to accident at workplace and
require further treatment to
hospital or public health
centre.
f. Insuring all the labour
involved in the project.
6) Plant upkeep
a. Socialization of the use of
occupational health and
safety equipment especially
for workers
b. Determination &
implementation of safety
procedures relating to the
operations undertaken.
c. Provide first aid facilities
personnel.
d. Perform periodic health
checks.
e. Provide an evacuation unit
to evacuate workers who
suffered injury due to
accident at workplace and
require further treatment to

hospital or public health centre. f. Insuring all the labour involved in the project. 7) Harvesting and Transportation of FF8's a. Socialization of the use of occupational health and safety equipment especially for workers b. Determination & implementation of safety procedures relating to the operations undertaken. c. Provide first aid facilities along with medical personnel. d. Perform periodic health checks. e. Provide an evacuation unit to evacuate workplace and require further treatment to hospital or public health centre. f. Insuring all the labour involved in the project. 8) Fortuicer and pesticides weekeen estivities		
f. Insuring all the labour involved in the project.         7) Harvesting and Transportation of FFB's         a. Socialization of the use of occupational health and safety equipment especially for workers         b. Determination         b. Determination         c. Provide first aid facilities along with medical personnel.         c. Provide first aid facilities along with medical personnel.         c. Provide an evacuation unit to evacuate workers who suffered minyr due to accident at workplace and require further treatment to hospital or public health centre.         f. Insuring all the labour involved in the project.         8) Fertilizer and pesticides	hospital or public health	
involved in the project.         7) Harvesting and Transportation of FFB's         a. Socilization of the use of occupational health and safety equipment especially for workers         b. Determination & & implementation of safety procedures relating to the operations undertaken.         c. Provide first aid facilities along with medical personnel.         d. Perform periodic health checks.         e. Provide an evacuation unit to evacuate workers who suffered injury due to accident at workplace and require further treatment to require further treatment to require further treatment to insplaid or public health centre.         f. Insuing all the labour involved in the project.         8) Fertilizer and pesticides	centre.	
involved in the project.         7) Harvesting and Transportation of FFB's         a. Socialization of the use of occupational health and safety equipment especially for workers         b. Determination & & implementation of safety procedures relating to the operations undertaken.         c. Provide first aid facilities along with medical personnel.         d. Perform periodic health checks.         e. Provide an evacuation unit to evacuate workers who suffered injury due to accident at workplace and require further transment to hospital or public health centre.         f. Insuring all the labour involved in the project.         8) Fertilizer and pesticides	f. Insuring all the labour	
7) Harvesting and Transportation of FPS a. Socialization of the use of occupational health and safety equipment especially for workers b. Determination & implementation of safety procedures relating to the operations undertaken. c. Provide first aid facilities along with medical personnel. d. Perform periodic health checks. e. Provide an evacuation unit to evacuate workers who suffered injury due to accident at workplace and require further treatment to hospital or public health centre. f. Insuring all the labour involved in the project. 8) Fertilizer and pesticides	involved in the project.	
offFB's         a. Socialization of the use of occupational health and safety equipment especially for workers         b. Determination &         implementation of safety procedures relating to the operations undertaken.         c. Provide first aid facilities along with medical personnel.         d. Perform periodic health checks.         e. Provide an evacuation unit to evacuate workers who suffered injury due to accident at workplace and require further treatment to hospital or public health cherts.         e. Insuring all the labour involved in the project.		
offFB's         a. Socialization of the use of occupational health and safety equipment especially for workers         b. Determination &         b. Determination of safety procedures relating to the operations undertaken.         c. Provide first aid facilities along with medical personnel.         d. Perform periodic health checks.         e. Provide an evacuate workers who suffered injury due to accident at workplace and require further treatment to hospital or public health centre.         f. Insuring all the labour involved in the project.         8) Fertilizer and pesticides	7) Harvesting and Transportation	
occupational health and safety equipment especially for workers         b. Determination         wimplementation of safety procedures relating to the operations undertaken.         c. Provide first aid facilities along with medical personnel.         d. Perform periodic health checks.         e. Provide an evacuation unit to evacuate workers who suffered injury due to accident at workplace and require further treatment to hospital or public health centre.         f. Insuring all the labour involved in the project.         8) Fertilizer and pesticides	of FFB's	
safety equipment especially for workers         b. Determination         wimplementation of safety procedures relating to the operations undertaken.         c. Provide first aid facilities along with medical personnel.         d. Perform periodic health checks.         e. Provide an evacuation unit to evacuate workers who suffered injury due to accident at workplace and require further treatment to hospital or public health centre.         f. Insuring all the labour involved in the project.         8) Fertilizer and pesticides	a. Socialization of the use of	
safety equipment especially for workers b. Determination & implementation of safety procedures relating to the operations undertaken. c. Provide first aid facilities along with medical personnel. d. Perform periodic health checks. e. Provide an evacuation unit to evacuate workers who suffered injury due to accident at workplace and require further treatment to hospital or public health centre. f. Insuring all the labour involved in the project.	occupational health and	
for workers         b. Determination         b. Determination         implementation of safety         procedures relating to the         operations undertaken.         c. Provide first aid facilities         along       with medical         personnel.         d. Perform periodic health         checks.         e. Provide an evacuation unit         to evacuate workers who         suffered injury due to         accident at workplace and         require further treatment to         hospital or public health         chert.         f. Insuring all the labour         involved in the project.		
implementation of safety         procedures relating to the         operations undertaken.         c. Provide first aid facilities         along with medical         personnel.         d. Perform.         e. Provide an evacuation unit         to evacuate workers who         suffered injury due to         accident at workplace and         require further treatment to         hospital or public health         centre.         f. Insuring all the labour         involved in the project.		
implementation of safety         procedures relating to the         operations undertaken.         c. Provide first aid facilities         along with medical         personnel.         d. Perform.         e. Provide an evacuation unit         to evacuate workers who         suffered injury due to         accident at workplace and         require further treatment to         hospital or public health         centre.         f. Insuring all the labour         involved in the project.	b. Determination &	
Provide first aid facilities         along with medical         personnel.         d. Perform periodic health         checks.         e. Provide an evacuation unit         to evacuate workers who         suffered injury due to         accident at workplace and         require further treatment to         hospital or public health         centre.         f. Insuring all the labour         involved in the project.		
operations undertaken.       c. Provide first aid facilities along with medical personnel.         d. Perform periodic health checks.       d. Perform periodic health checks.         e. Provide an evacuation unit to evacuate workers who suffered injury due to accident at workplace and require further treatment to hospital or public health centre.         f. Insuring all the labour involved in the project.         8) Fertilizer and pesticides		
<ul> <li>c. Provide first aid facilities along with medical personnel.</li> <li>d. Perform periodic health checks.</li> <li>e. Provide an evacuation unit to evacuate workers who suffered injury due to accident at workplace and require further treatment to hospital or public health centre.</li> <li>f. Insuring all the labour involved in the project.</li> </ul>		
along with medical personnel. d. Perform periodic health checks. e. Provide an evacuation unit to evacuate workers who suffered injury due to accident at workplace and require further treatment to hospital or public health centre. f. Insuring all the labour involved in the project. 8) Fertilizer and pesticides		
personnel.         d. Perform periodic health         checks.         e. Provide an evacuation unit         to evacuate workers who         suffered injury due to         accident at workplace and         require further treatment to         hospital or public health         centre.         f. Insuring all the labour         involved in the project.		
<ul> <li>d. Perform periodic health checks.</li> <li>e. Provide an evacuation unit to evacuate workers who suffered injury due to accident at workplace and require further treatment to hospital or public health centre.</li> <li>f. Insuring all the labour involved in the project.</li> <li>8) Fertilizer and pesticides</li> </ul>		
checks. e. Provide an evacuation unit to evacuate workers who suffered injury due to accident at workplace and require further treatment to hospital or public health centre. f. Insuring all the labour involved in the project. 8) Fertilizer and pesticides		
<ul> <li>e. Provide an evacuation unit to evacuate workers who suffered injury due to accident at workplace and require further treatment to hospital or public health centre.</li> <li>f. Insuring all the labour involved in the project.</li> <li>8) Fertilizer and pesticides</li> </ul>		
to evacuate workers who suffered injury due to accident at workplace and require further treatment to hospital or public health centre.       Image: Comparison of the second of the secon		
suffered injury due to         accident at workplace and         require further treatment to         hospital or public health         centre.         f. Insuring all the labour         involved in the project.         8) Fertilizer and pesticides		
accident at workplace and require further treatment to hospital or public health centre.       hospital or public health centre.         f. Insuring all the labour involved in the project.       8) Fertilizer and pesticides		
require further treatment to         hospital or public health         centre.         f. Insuring all the labour         involved in the project.         8) Fertilizer and pesticides		
hospital or public health centre. f. Insuring all the labour involved in the project. 8) Fertilizer and pesticides		
centre.       f. Insuring all the labour involved in the project.         8) Fertilizer and pesticides		
f. Insuring all the labour involved in the project.         8) Fertilizer and pesticides		
involved in the project. 8) Fertilizer and pesticides		
8) Fertilizer and pesticides		
	8) Fertilizer and pesticides	
warenouse activities.	warehouse activities.	
a. Socialization of the use of	a. Socialization of the use of	
occupational health and		
safety equipment especially		
for workers		
b. Determination &	b. Determination &	
implementation of safety		

3.10	Human Resources			<ul> <li>procedures relating to the operations undertaken</li> <li>c. Provide first aid facilities along with medical personnel</li> <li>d. Perform periodic health checks e</li> <li>e. Provide an evacuation unit to evacuate workers who suffered injury due to accident at workplace and require further treatment to hospital or public health centre.</li> <li>f. Provide hearing &amp; respiratory protection.</li> <li>g. Insuring all the labour involved in the project.</li> </ul>					
	Human resources development is a positive significant impact and direct. The impact will develop local community human resorce for both skilled and non- skilled and have immediate impact against increased local community income.	Developed human resources due to CSR activities.	Meningkatnya keterampilan dan produktifitas masyarakat sekitar akibat program CSR	<ol> <li>Conducting socialization to the surrounding community on company CSR program.</li> <li>Company provides special field experts to train the workers enrolled in the program</li> <li>Conduct skills tests to program participants</li> <li>Conduct placement activities and course on the community so that people can be more independent to fulfil their economic needs.</li> <li>Together with the government to develop local business by using public facility as facilitator for local economy development.</li> </ol>	Tumbang Penyahuan, Tanah Haluan, Tumbang Kaminting, Tumbang Getas, Tumbang Batu, Tumbang Torung, Lunuk Bagantung Villages	During the estate operation of PT AWL - PLASMA.	PT AWL - PLASMA	<ol> <li>Village</li> <li>Officials of Tumbang</li> <li>Penyahuan,</li> <li>Tanah Haluan,</li> <li>Tumbang</li> <li>Kaminting,</li> <li>Tumbang</li> <li>Sapia,</li> <li>Tumbang</li> <li>Getas,</li> <li>Tumbang</li> <li>Batu,</li> <li>Tumbang</li> <li>Torung, Lunuk</li> <li>Bagantung</li> <li>Villages.</li> <li>Land</li> <li>Administration</li> <li>Division of</li> <li>Kotawaringin</li> </ol>	<ol> <li>Plantation Office of Kotawaringi n Timur Regency</li> <li>Regional Environme nt Agency of Kotawaringi n Timur Regency</li> <li>Environme nt Agency of Central Kalimantan Province.</li> </ol>

4 COMMUNITY HEALTH COMP	ONENTS						Timur Regency. 3. Plantation Office of Kotawaringin Timur Regency. 4. Environment Agency of Kotawaringin Timur Regency.	
4.1       Community Health         Significant impact is the occurrence of public health problems with indicators of increased morbidity rate among local community.	Impact arised due to the following activities a. Nursery b. Planting of oil palm c. Plant upkeep d. Harvesting & transportation of FFB's e. Mill operations.	No increase in public health problems in the vicinity of the project site.	<ul> <li>1) Nursery</li> <li>a. Nursery activities should be conducted in a planned manner and gradually according to the estate development.</li> <li>b. Construct drainage network that lead to retention basin at each división.</li> <li>c. Use environmentally friendly pesticide type.</li> <li>d. Collect hazardous and toxic waste at hazardous and toxic waste storage facility.</li> <li>2) Oil palm planting <ul> <li>a. Avoid air pollution along the seedling transportation routes.</li> <li>b. Inventory number of resident who affected by nursery activities.</li> <li>c. Conducting intensive road watering, especially in the</li> </ul> </li> </ul>	At the project location of the following activities: a. Preparation of nursery location. b. Preparation of planting area. c. Planting of oil palm. d. Plants upkeep e. Harvesting and transportation of FFB's f. Mill operations.	Once during activities on progress and evaluated once a month during the operations of PT AWL - PLASMA.	PT. PU	<ol> <li>Health         <ul> <li>Department of                 Kotawaringin                 Timur                 Regency.</li> <li>Plantation                 Office                 of                 Kotawaringin                 Timur                 Regency.</li> </ul> </li> <li>Plantation         <ul> <li>Office of                 Kotawaringin                 Timur                 Regency.</li> <li>Environment                 Agency                 of                 Kotawaringin                 Timur                      Regency.</li> </ul> </li> </ol>	<ol> <li>Health Departmen t of Kotawaringi n Timur Regency.</li> <li>Environme nt Agency of Kotawaringi n Timur Regency.</li> <li>Environme nt Regency</li> <li>Environme nt Regency</li> <li>Environme nt Regency.</li> </ol>

dry season on the
community residential areas
once in 2 hours
3) Plant upkeep
a. Planting activities should be
conducted in a planned
manner and gradually
according to the estate
development.
b. Construct drainage network
that lead to retention basin
at each división.
c. Use environmentally friendly
pesticide type.
d. Collect hazardous and toxic
waste at hazardous and toxic waste storage facility.
waste storage raciity.
4) Harvesting and transportation
of FFB's
a. Minimize the dust caused by
transporting activities by
limiting the transportation
vehicle speed.
b. Installing notification board
on the need to use mask
especially on dusty áreas.
c. Provision of dust mask to
community affected by the
dust on the transporting
route.
d. Incorporate CSR program as
main program.
5) Mill operations
a. Construct wastewater
treatment plants to manage
liquid waste generated from
plant operations.

				b. Based on the waste					
				characteristic & pollution					
				load, the effluent treatment is					
				effective if WPH is more than					
				75 days so that the COD & TSS					
				level can be decreased to					
				below the standard. PT AWL -					
				PLASMA plans the wastewater					
				treatment with a biologically					
				WWTP system (anaerobe &					
				aerobe system) with					
				hydrological retention time of					
				150 days so that WPH increase					
				is expected to decrease the					
				quality of waste water &					
				pollution loads to below the					
				quality standard.					
				c. Implementation of land					
				applications in which requires					
				study in advance on pollution					
				aspect that may occur, the					
				carrying capacity of the land,					
				the effect on soil and ground					
				water and surface water.					
4.2	Public safety								
	Impact on public safety	Impact arised from	No traffic accident	1) Equipment mobilization and	At public road	During the	PT AWL -	1. Health	1. Health
	disturbance in which the	activities such as:	occured during the	1) Equipment mobilization and demobilization	intersection passed by	operational activities	PT AWL - Plasma	1. Health Department of	1. Health Departmen
	disturbance in which the impact is significant	activities such as: a. Mobilization of	occured during the following activities:		intersection passed by or areas prone to	0			
	disturbance in which the impact is significant negativem and direct. The	activities such as: a. Mobilization of equipment	occured during the following activities: 1) Mobilization of	demobilization	intersection passed by	operational activities		Department of	Departmen
	disturbance in which the impact is significant negativem and direct. The impact may occur durig the	activities such as: a. Mobilization of	occured during the following activities:	demobilization a. Conduct mobilization to equipment in stage to entire	intersection passed by or areas prone to	operational activities		Department of Kotawaringin Timur	Departmen t of Kotawaringi
	disturbance in which the impact is significant negativem and direct. The impact may occur durig the estate operations of PT AWL -	activities such as: a. Mobilization of equipment	occured during the following activities: 1) Mobilization of	demobilization a. Conduct mobilization to equipment in stage to entire heavy equipment.	intersection passed by or areas prone to	operational activities		Department of Kotawaringin Timur Regency.	Departmen t of Kotawaringi n Timur
	disturbance in which the impact is significant negativem and direct. The impact may occur durig the	activities such as: a. Mobilization of equipment b. Transport of employees	occured during the following activities: 1) Mobilization of equipment	<ul> <li>demobilization</li> <li>a. Conduct mobilization to equipment in stage to entire heavy equipment.</li> <li>b. Coodinate with Transport</li> </ul>	intersection passed by or areas prone to	operational activities		Department of Kotawaringin Timur Regency. 2. Plantation	Departmen t of Kotawaringi n Timur Regency.
	disturbance in which the impact is significant negativem and direct. The impact may occur durig the estate operations of PT AWL -	activities such as: a. Mobilization of equipment b. Transport of employees c. Harvesting &	occured during the following activities: 1) Mobilization of equipment 2) Transport of	<ul> <li>demobilization</li> <li>a. Conduct mobilization to equipment in stage to entire heavy equipment.</li> <li>b. Coodinate with Transport Department of Kotawaringin</li> </ul>	intersection passed by or areas prone to	operational activities		Department of Kotawaringin Timur Regency. 2. Plantation Office of	Departmen t of Kotawaringi n Timur Regency. 2. Environme
	disturbance in which the impact is significant negativem and direct. The impact may occur durig the estate operations of PT AWL -	activities such as: a. Mobilization of equipment b. Transport of employees c. Harvesting & transportation of	occured during the following activities: 1) Mobilization of equipment 2) Transport of employees 3) Harvesting &	<ul> <li>demobilization</li> <li>a. Conduct mobilization to equipment in stage to entire heavy equipment.</li> <li>b. Coodinate with Transport Department of Kotawaringin Timur regency on LCT</li> </ul>	intersection passed by or areas prone to	operational activities		Department of Kotawaringin Timur Regency. 2. Plantation Office of Kotawaringin	Departmen t of Kotawaringi n Timur Regency. 2. Environme nt Agency
	disturbance in which the impact is significant negativem and direct. The impact may occur durig the estate operations of PT AWL -	activities such as: a. Mobilization of equipment b. Transport of employees c. Harvesting & transportation of FFB's	occured during the following activities: 1) Mobilization of equipment 2) Transport of employees 3) Harvesting & transportation of	<ul> <li>demobilization</li> <li>a. Conduct mobilization to equipment in stage to entire heavy equipment.</li> <li>b. Coodinate with Transport Department of Kotawaringin Timur regency on LCT operations.</li> </ul>	intersection passed by or areas prone to	operational activities		Department of Kotawaringin Timur Regency. 2. Plantation Office of Kotawaringin Timur	Departmen t of Kotawaringi n Timur Regency. 2. Environme nt Agency of
	disturbance in which the impact is significant negativem and direct. The impact may occur durig the estate operations of PT AWL -	activities such as: a. Mobilization of equipment b. Transport of employees c. Harvesting & transportation of FFB's d. Demobilization of	occured during the following activities: 1) Mobilization of equipment 2) Transport of employees 3) Harvesting & transportation of FFB's	<ul> <li>demobilization</li> <li>a. Conduct mobilization to equipment in stage to entire heavy equipment.</li> <li>b. Coodinate with Transport Department of Kotawaringin Timur regency on LCT</li> </ul>	intersection passed by or areas prone to	operational activities		Department of Kotawaringin Timur Regency. 2. Plantation Office of Kotawaringin	Departmen t of Kotawaringi n Timur Regency. 2. Environme nt Agency of Kotawarin
	disturbance in which the impact is significant negativem and direct. The impact may occur durig the estate operations of PT AWL -	activities such as: a. Mobilization of equipment b. Transport of employees c. Harvesting & transportation of FFB's	occured during the following activities: 1) Mobilization of equipment 2) Transport of employees 3) Harvesting & transportation of FFB's 4) Demobilization of	<ul> <li>demobilization</li> <li>a. Conduct mobilization to equipment in stage to entire heavy equipment.</li> <li>b. Coodinate with Transport Department of Kotawaringin Timur regency on LCT operations.</li> </ul>	intersection passed by or areas prone to	operational activities		Department of Kotawaringin Timur Regency. 2. Plantation Office of Kotawaringin Timur	Departmen t of Kotawaringi n Timur Regency. 2. Environme nt Agency of Kotawarin gin Timur
	disturbance in which the impact is significant negativem and direct. The impact may occur durig the estate operations of PT AWL -	activities such as: a. Mobilization of equipment b. Transport of employees c. Harvesting & transportation of FFB's d. Demobilization of	occured during the following activities: 1) Mobilization of equipment 2) Transport of employees 3) Harvesting & transportation of FFB's	<ul> <li>demobilization</li> <li>a. Conduct mobilization to equipment in stage to entire heavy equipment.</li> <li>b. Coodinate with Transport Department of Kotawaringin Timur regency on LCT operations.</li> </ul>	intersection passed by or areas prone to	operational activities		Department of Kotawaringin Timur Regency. 2. Plantation Office of Kotawaringin Timur Regency.	Departmen t of Kotawaringi n Timur Regency. 2. Environme nt Agency of Kotawarin gin Timur Regency.
	disturbance in which the impact is significant negativem and direct. The impact may occur durig the estate operations of PT AWL -	activities such as: a. Mobilization of equipment b. Transport of employees c. Harvesting & transportation of FFB's d. Demobilization of	occured during the following activities: 1) Mobilization of equipment 2) Transport of employees 3) Harvesting & transportation of FFB's 4) Demobilization of	<ul> <li>demobilization</li> <li>a. Conduct mobilization to equipment in stage to entire heavy equipment.</li> <li>b. Coodinate with Transport Department of Kotawaringin Timur regency on LCT operations.</li> <li>c. Install adequate lightings.</li> </ul>	intersection passed by or areas prone to	operational activities		Department of Kotawaringin Timur Regency. 2. Plantation Office of Kotawaringin Timur Regency. 3. Environment Agency of	Departmen t of Kotawaringi n Timur Regency. 2. Environme nt Agency of Kotawarin gin Timur Regency. 3. Environme
	disturbance in which the impact is significant negativem and direct. The impact may occur durig the estate operations of PT AWL -	activities such as: a. Mobilization of equipment b. Transport of employees c. Harvesting & transportation of FFB's d. Demobilization of	occured during the following activities: 1) Mobilization of equipment 2) Transport of employees 3) Harvesting & transportation of FFB's 4) Demobilization of	<ul> <li>demobilization</li> <li>a. Conduct mobilization to equipment in stage to entire heavy equipment.</li> <li>b. Coodinate with Transport Department of Kotawaringin Timur regency on LCT operations.</li> </ul>	intersection passed by or areas prone to	operational activities		Department of Kotawaringin Timur Regency. 2. Plantation Office of Kotawaringin Timur Regency. 3. Environment Agency of Kotawaringin	Departmen t of Kotawaringi n Timur Regency. 2. Environme nt Agency of Kotawarin gin Timur Regency. 3. Environme nt Regency
	disturbance in which the impact is significant negativem and direct. The impact may occur durig the estate operations of PT AWL -	activities such as: a. Mobilization of equipment b. Transport of employees c. Harvesting & transportation of FFB's d. Demobilization of	occured during the following activities: 1) Mobilization of equipment 2) Transport of employees 3) Harvesting & transportation of FFB's 4) Demobilization of	<ul> <li>demobilization</li> <li>a. Conduct mobilization to equipment in stage to entire heavy equipment.</li> <li>b. Coodinate with Transport Department of Kotawaringin Timur regency on LCT operations.</li> <li>c. Install adequate lightings.</li> </ul>	intersection passed by or areas prone to	operational activities		Department of Kotawaringin Timur Regency. 2. Plantation Office of Kotawaringin Timur Regency. 3. Environment Agency of Kotawaringin Timur	Departmen t of Kotawaringi n Timur Regency. 2. Environme nt Agency of Kotawarin gin Timur Regency. 3. Environme nt Regency of Central
	disturbance in which the impact is significant negativem and direct. The impact may occur durig the estate operations of PT AWL -	activities such as: a. Mobilization of equipment b. Transport of employees c. Harvesting & transportation of FFB's d. Demobilization of	occured during the following activities: 1) Mobilization of equipment 2) Transport of employees 3) Harvesting & transportation of FFB's 4) Demobilization of	<ul> <li>demobilization</li> <li>a. Conduct mobilization to equipment in stage to entire heavy equipment.</li> <li>b. Coodinate with Transport Department of Kotawaringin Timur regency on LCT operations.</li> <li>c. Install adequate lightings.</li> </ul>	intersection passed by or areas prone to	operational activities		Department of Kotawaringin Timur Regency. 2. Plantation Office of Kotawaringin Timur Regency. 3. Environment Agency of Kotawaringin	Departmen t of Kotawaringi n Timur Regency. 2. Environme nt Agency of Kotawarin gin Timur Regency. 3. Environme nt Regency of Central Kalimanta
	disturbance in which the impact is significant negativem and direct. The impact may occur durig the estate operations of PT AWL -	activities such as: a. Mobilization of equipment b. Transport of employees c. Harvesting & transportation of FFB's d. Demobilization of	occured during the following activities: 1) Mobilization of equipment 2) Transport of employees 3) Harvesting & transportation of FFB's 4) Demobilization of	<ul> <li>demobilization</li> <li>a. Conduct mobilization to equipment in stage to entire heavy equipment.</li> <li>b. Coodinate with Transport Department of Kotawaringin Timur regency on LCT operations.</li> <li>c. Install adequate lightings.</li> </ul> 2) Employee transportation <ul> <li>a. Time arrangement for</li> </ul>	intersection passed by or areas prone to	operational activities		Department of Kotawaringin Timur Regency. 2. Plantation Office of Kotawaringin Timur Regency. 3. Environment Agency of Kotawaringin Timur	Departmen t of Kotawaringi n Timur Regency. 2. Environme nt Agency of Kotawarin gin Timur Regency. 3. Environme nt Regency of Central

work in the morning is at	
06:00 pm	
b. Time arrangement for	
employee transportation to	
return to home in the	
afternoon is at 14:00 wita. c.	
c. Limit the speed of the	
transporting vehicles at max	
20 km / hour, especially when	
passing through the	
settlement.	
d. Use appropriate vehicle in accordance with its function	
such bus/car for passenger.	
such bus/car for passenger.	
3) FFB's Harvesting and	
Transportation	
a. Carry out control measures	
of road traffic	
units, first aid facilities &	
medical personnel to	
anticipate traffic accidents.	
c. Prioritizing public road	
users first.	

5 forests (if ne elem main so th comp	general objective of HCV management is to maintain elements of the HCV; eded), the importance of the area can be enhanced. Maintenance of HCV ents is a minimum requirement in HCV management. This HCV tenance can be done by protecting the HCV area and mitigating its threats hat the important value of the HCV is not degraded. In addition, the bany is also expected to be able to recover from the significant decline in alue of HCV caused by the negative impact of the company's operational ities.
The r follow	nanagement recommendations for managing HCV areas in general are as ws:
1.	The Plasma Cooperative Institution PT AWL as a partner or plasma of PT Agro Wana Lestari shall demarcate the boundaries of the HCV (HCV) and HCS (HCS) areas that have been identified and issue the area as a conservation area and issue it as land to be cleared for plantations. This is done starting from land clearing planning activities as outlined in the land clearing plan map.
2.	Conduct consultations and socialization to the community, especially to cooperative members regarding the existence of HCV and HCS areas as
3.	well as future management and monitoring plans. Re-socialization regarding the plasma program and the location of plasma plantations in the villages surrounding the PT AWL plasma permit
4.	Finalize and finalize agreements with the community, especially members of the cooperative regarding the Plasma plantation development plan in partnership with PT AWL as the last step as part of the FPIC (FPIC) process.
	Resolve agreements with villages that have not yet formed a cooperative and have not partnered with PT AWL. Finalize the ICLUP plan map that has been mutually agreed upon by
	referring to the results of the HCV and HCS studies and input from stakeholders.
7.	Carry out land clearing activities that refer to the final ICLUP.
The cond of Hu whet Mon cove moni value 1. In or (c 2. In	s area monitoring plan general objective of monitoring is to know the development of the ition of the elements and the size of the designated HCV area. Monitoring CV elements is related to the value/function inherent in the HCV area, her it is increasing (getting better) or decreasing (getting worse). toring the size of the HCV area that has been determined is related to the rage area that still has HCV value/function (HCV1-5). In addition to toring the indicators for HCV elements, the management strategy is also tored. There is a possibility that over time there will be a decrease in the e/function of the HCV. Monitoring of the management strategy includes: nplementation of the management strategy in the field, related to whether not the planned HCV management strategy is carried out in the field perational monitoring) nplementation of management strategy is done poorly. Even if the planned anagement strategy is good, if it is carried out poorly it will not achieve the
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effective The results of the impleme with its goa system is an make contin Recommend	changed threats/conditions. Management over time may not always be effective forev of this monitoring serve as a basis for evalua- entation of the HCV area management stra- als and objectives. The direction in this H adaptive management system where the n huous improvement in the management and dations for management and monitoring a Tables 48 (Document HCV & HCS).	ver (threat monitoring) tion to ensure whether ategy is in accordance ICV area management nanager always tries to d monitoring of HCVs.
Objective(s)	Action(s)	Timeline
HCS Forest	<ol> <li>Socialization and prohibition of timber harvesting and land clearing in conservation areas to communities in HCV/HCS areas and socialization of applicable laws and regulations related to the protection of protected plants.</li> <li>Installation sign boards on the prohibition of timber harvesting and land clearing in conservation areas (HCV and HCS) and remaining forested areas.</li> <li>Regular patrols to secure conservation areas</li> </ol>	Field delineation: 2022
HCV 1	<ol> <li>Socialization of protected and/or rare wildlife species, especially those with RTE status, to the public and socialization of applicable laws and regulations related to wildlife protection.</li> <li>Installation of hunting ban boards especially in conservation areas (HCV)</li> <li>Installation of sign boards about the importance of protected wildlife</li> <li>Awareness-raising on the importance of wildlife to the community and the area where the wildlife is located.</li> <li>Collaborate with BKSDA and security forces (police) to prevent and</li> </ol>	Start 2022 and continuous

	<ul> <li>enforce protected wildlife trade laws.</li> <li>6. Take measures to prevent land/forest fires, through socialization, installation of fire hazard warning boards, prohibition of actions that can cause fires.</li> <li>7. Provision of fire fighting equipment</li> <li>8. Make a fire hazard index board</li> </ul>
HCV 3	<ol> <li>Socialization and prohibition of timber harvesting and land clearing in conservation areas to communities in HCV/HCS areas and socialization of applicable laws and regulations related to the protection of protected plants.</li> <li>Socialization of HCV/HCS areas to the government and the importance of the functions of these areas</li> <li>Advise against infrastructure development and regional development in HCV/HCS areas.</li> <li>Take action to prevent land/forest fires, through socialization, installation of fire hazard warning boards, prohibition of actions that can cause fires.</li> <li>Installation of timber harvesting and land clearing in conservation areas (HCV and HCS) and remaining forested areas.</li> </ol>
HCV 4	<ol> <li>Socialization and prohibition of timber harvesting and land clearing in conservation areas to communities in HCV/HCS areas and socialization of applicable laws and regulations related to the protection of protected plants</li> <li>Installation of warning/sign boards on the prohibition of timber</li> <li>Installation of timber</li> </ol>

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	<ul> <li>harvesting and land clearing in conservation areas (HCV and HCS) and remaining forested areas</li> <li>3. Routine patrols to secure conservation areas</li> <li>4. Take action to prevent land/forest fires, through socialization, installation of fire hazard warning boards, prohibition of actions that can cause fires.</li> <li>5. Provision of fire fighting equipment</li> <li>6. Improve employee, contractor, and community fire management skills</li> <li>7. Establish SOPs prohibiting or limiting the use of agrochemicals (fertilizers, herbicides, and pesticides) on farm areas near water sources (their boundary zones) such as rivers and water sources</li> <li>8. Use of eco-friendly agrochemicals</li> </ul>	land cover of conservation area will start 2023 and continuous 3. Monitoring of river water quality standards, on a regular basis (every 6 months)
HCV 5	<ol> <li>Socialization and prohibition of timber harvesting and land clearing in conservation areas to communities in HCV/HCS areas and socialization of applicable laws and regulations related to the protection of protected plants</li> <li>Installation of warning/sign boards on the prohibition of timber harvesting and land clearing in conservation areas (HCV and HCS) and remaining forested areas</li> <li>Routine patrols to secure conservation areas</li> <li>Socialization of HCV/HCS areas to the government and the importance of the functions of these areas</li> <li>Advise against infrastructure development and regional development in HCV/HCS areas.</li> </ol>	water quality has been started on 2022 will be continued as long as plasma (cooperation with company operation)

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		(every 6 months) Supervision of workers in the field by foremen at work sites using agrochemicals
3	Stakeholder and local people engagement (FPIC process)	<ul> <li>The presence and operation of PT AWL - Plasma oil palm plantations has the potential to give social impact on the communities in the surrounding villages of the company's HGU areas and associated employees. The impacts arise from various activities undertaken relating to the development process and operations of the estate.</li> <li>Discussion of impacts are identified from the facts or sources of occurring impact within the employee, community surrounding the company, as well as within the scope of neighbourhood, village, sub-district and district and can have both negative and positive dimensions on Pentagonal Assets. The explanation are as follows:</li> <li>Social impacts are positive or negative changes to one or more of social pentagon assets occurred at the time of the assessment as a direct or indirect result due to company operations (estates and mill); policies of management practices or corporate social management performance.</li> <li>Potential social impacts are positive or negative changes to one, or more, possible social pentagon assets that may occur in the future as a direct or indirect result due to company operations (estate and mill); policies of management practices or corporate social management performance.</li> <li>Social risks are social conditions, social issues or social reactions that are likely to disrupt the performance of the company's operations and or sustainability.</li> <li>Social issue in this case is the perception of a particular social group about a matter.</li> <li>Explanation on the relation and explanation on social impacts of PT AWL - Plasma's existence to society, social risks and social issues need to be done so that we can understand the cause-and-effect relationship between these three issues and the source of the cause.</li> </ul>
		Social risk is a social condition that has the potential to cause material or immaterial losses/damage for the company so that the company is forced to stop operating or has to bear high social cost due to social issues. The source of the risk

<ul> <li>in question comes from the surrounding community as an outside party. Based or the social conditions in the study area and the conditions of the people who have interaction with the company, it was found that there are social risks faced by the company. There are three risks identified by reviewing the condition of the community: <ul> <li>Prohibition of any activities until the request of the Villages community is approved, which stems from the failure to reach an initial agreement with the Villages community. The problem is that there are some requests o expectations that are quite demanding from certain individuals or groups.</li> <li>Low land acquisition rates and high social costs due to land disputes and conflicts. The low level of land acquisition is classified as operational risk but because the source comes from the community who controls the land in the HGU area, it can be categorized as social risk.</li> <li>Disturbance from the community which has high social costs originating from the development of plasma plantations which if not carried out in conjunction with the nucleus plantations.</li> </ul> </li> <li>The level of risk is highly dependent on the company's attitude, leadership policies/decisions, and ways of communicating. The level of risk is categorized as high if the land acquisition is far below the target and the company's plantation development planning is hampered. In addition to the risks mentioned above there are other risks with a medium or low level, the sources of which are the internal environment itself or the control measures tend to be less complex which do not depend on external parties or factors:</li> <li>Did not get full support from all community groups. There are community groups in Villages who feel that the company is only communicating with a certain person or community group. This group feels less involved in matter: related to PT AWL - PLASMA.</li> </ul>		
	enness have made the commu WL - PLASMA is the same as oth sting in the village area.	
Objective(s)	Action(s)	Timeline
Communication, social relations and partnerships, forms of activities include: Socialization of land clearing plans and plasma development plans	<ol> <li>Re-identification of current social conditions includes assessing the impact and control to existing social issues. Changes in perceptions that occur in the field today need to be done study first.</li> <li>Creat FPIC plans through key stakeholder engagement. Among others:</li> <li>Establish communication and consultation mechanisms as</li> </ol>	At the time of the plantation development plan will be initiated (2022).

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		<ul> <li>a guide in communicating effectively to the community</li> <li>Determine FGD schedules or regular meetings to collect information relating to level of public perception towards the company</li> <li>Periodic analysis against developed strategic issues within the community resulted from FGD results or community merceptions surveys</li> <li>Adopt an accountable Community development program, such as donations of religious activities, communication and coordination assistance, superior fruit seed support, national day activities assistance, provision of working capital such vegetable carts, community economic improvement in the form of women group assistance , home finance management training, educational assistance, assisting women's groups in home industry products, indigenous activities assistance for youth organization</li> <li>Building public trust back through socialization and/ or community activities prior to plantation development plan at PT AWL - PLASMA is commenced</li> <li>Establishment of a committee to resolve the status of plasma land</li> <li>Transparency and socialization map).</li> </ul>	
	Land acquisition process	<ol> <li>Implementation of FPIC to:</li> <li>Develop a participatory mechanism in handling conflict / complaints.</li> <li>Socialization, FGD.</li> </ol>	During land acquisition process is undertaken.

	<ol> <li>Participatory mapping during land acquisition including joint review for HCV determination &amp; SIA review.</li> <li>Transparent land acquisition process</li> <li>Implement an accountable community development program.</li> <li>Preparing the community for the changes that will occur and their implications Plans/ system / model of plasma division</li> </ol>	
Nursery	<ol> <li>Informing nursery jobs to affected villages in accordance with skills and expertise required. For local people who are not recruited to work in the company, can be developed through the community empowerment program through improving self-skills training and soft capital loans</li> <li>Establishing environmental management aspects, policies and procedures. Environmental management and monitoring are conducted periodically including HCV/ flora fauna studies prior to land clearing for nursery</li> <li>Ensuring that the aspects of OHS &amp; environment management are properly implemented and monitored. Environmental programs that can be applied such as road watering especially on the village roads that are located within company immediate vicinity and often used by the company as access road.</li> </ol>	During nursery activities undertaken.
Land clearing	<ul> <li>Implementation of FPIC for:</li> <li>1. Ensure that the community has a perceptual understanding of land clearing plans.</li> <li>2. Local communities accept land clearing plan. 3. Conduct</li> </ul>	During land clearing activities undertaken.

	<ul> <li>HCV &amp; SIA studies prior to land clearing.</li> <li>3. Develop program and mitigation plan of social impact arising from land clearing.</li> <li>4. Strengthening local institutional capacity and intensive assistance for the independence of local organizations.</li> <li>5. Land clearing activities are done in stages</li> <li>Ensuring the aspects of OHS &amp; environment management are properly implemented and monitored. Environmental programs that can be applied such as road watering, especially village roads that are located within immediate vicinity of company's location and often used by the company.</li> </ul>	
Planting	<ul> <li>Implementation of FPIC for :</li> <li>1. Developing a program and mitigation plan social impact, one of which is counseling, socialization</li> <li>2. Strengthening local institutional capacity and intensive facilitation for local organizational independence</li> <li>3. Ensuring the aspects of OHS &amp; environment are implemented and monitored properly</li> </ul>	During planting activities undertaken.
Plant upkeep	<ol> <li>Company must have all clear working procedures on the oil palm plantations upkeep activities.</li> <li>Socialization and training activities to workers.</li> <li>Ensure environmental management and monitoring are implemented well.</li> <li>Provision of PPE to all workers and installation of traffic signs at estate roads and housing and periodic health checks to all workers.</li> </ol>	During the operations of the company.

4 Soil and Topogra	System (USDA, 1982) and its Center Classification System plasma and landscape areas plantation area are Ultisols Tropaquepts). Inceptisol; is a young soil, but from the word Inceptum wh horizon. This land is not yet of with the old classification sys humus soils. The Inceptisol so form of clay deposits on sand to acidic, ripe and drainage we gray. Sometimes there is yello the consistency is sticky and sour. This layer contains sulfid surface.	Is plantation area based on the Soil Taxonomy equivalent according to the Bogor Soil Research (1981) there are 2 associations of soil types in 5, while the dominant soil types in PT AWL's (tropudults) and Inceptisols (Dystropepts, and t more developed than Entisol. Inceptisol comes ich means beginning. Generally have a cambic developed, so most of it is quite fertile. Matches stem include Alluvial, Andosol, Regosol and Glei bil order developed from alluvial material in the deposits, the reaction of the soil was very acidic as hampered. Horizon A is very dark gray to light wish brown rust, the texture is clay to dusty clay, slightly plactic, the soil reaction is very acidic to lic material (pyrite) at a depth of >50 cm from the in the lower horizon, acidic, base saturation (KB)
	approximated by measuring pNoSoil Name1Inceptisol2UltisolTotalBased on the image of the Na Geospatial Information Agen topography of PT AWL's plasm 219 masl. In general, the slope	e soil surface is less than 35%. KB < 35% can be H (soil acidity) < 6.5. Detail see table bellow: Plasma Area (HA) 440.28 4,069.54 4,509.82 ational Digital Elevation Model (DEMNAS) of the expression of 8 meters. The na plantation area is at an altitude between 7 to e in the PT AWL plantation area is dominated by a
	slope of 0 – 8% (flat). See deta No Hiight (MDPL) 1 7-36 2 36-54 3 54-79 4 79-115 5 115-162 6 162-219 Total	Plasma Area (HA)         1,766.03         2,322.34         367.87         37.52         12.41         3.63         4,509.82
	No         Slope (%)           1         0-8           2         8-15           3         15-25           4         25-45           5         >40           Total	Plasma Area (HA)           1,860.58           1,580.76           857.24           197.87           13.38           4,509.82

		Objective(s)	Action(s)	Timeline	
		Soil quality improvement of Tropudults and Tropaquepts	Adding organic fertilizer to soils that have a high flood intensity, or lime to soils that have iron/rust deposition that is toxic to plants.	During the operations of the company.	
		Soils with suitability classes S3 and N have poor nutrient status.	Management of land with S3 and N classes can be done with a combination of applying organic fertilizers, inorganic fertilizers, and lime in high enough quantities.	During the operations of the company.	
		high slope issues	terracing each block or disk in the planting area	During land clearing activities undertaken	
5	GHG	<ul> <li>The objects of mitigation and monitoring within the scope of new plantations are divided into three categories, namely (1) land clearing, (2) use of fuel, and (3) use of fertilizers. Land clearing is one of the mitigation objects because potential lands for new plantations (land that have not been planted) have potential for biomass carbon stocks, especially on lands covered with forest and scrub. The use of fuel and fertilizers is also the main object of mitigation because they are a significant source of GHG emissions. In the calculation, the production rate of fresh fruit bunches (FFB) per hectare is obtained from data from surrounding companies (Group Goodhope Kalteng), which is on average 14-15 tons-FFB/ha. Explanation of the mitigation object, as follows:</li> <li>Plantations scope:</li> <li>High Carbon Stock (HCS) and High Conservation Value (HCV) areas Biomass carbon stocks on potential lands for new planting were identified through the HCSA assessment and high value areas were determined from the HCV assessment results. Low-medium density secondary forest (HKR) is the area with the highest AGB carbon stock in the PT AWL - PLASMA area, followed by young regeneration forest (HRM) or Shrubs. Meanwhile, open land (shrubs and inland swamps) is the area with the lowest AGB carbon stock. In the GHG emission mitigation plan, the company's management unit decided to exclude areas of conservation value and high carbon stock from the development plan (defined as non-development areas). This mitigation plan is embodied in the land use plan in the field for new developments and conservation.</li> <li>Projected fuel use in plantation area</li> <li>GHG emission mitigation plans through fuel use planning are carried out based on projections of fuel use based on the planned area of new plantation development. The amount of fuel used is a variable in plant maintenance</li> </ul>			

that depends on the area of the new plantation. Therefore, land use plans in GHG mitigation efforts have a direct effect on the projection of fuel use.

### Table IV-9. Projected fuel use in plantation areas

No	Fuel Type	Usage per Year per Hectare (liter/ha)	Total Usage per Year (liter)*	Projected GHG Emissions (ton CO₂e/Year)
1	Diesel	99.37	571,780.87	1,784
2	Premium	1.88	10,817.63	30

## 3. Projected use of fertilizers in plantation areas

The GHG emission mitigation plan through fuel use planning is carried out based on the projected use of fertilizers based on the types of fertilizers used and the area of new plantations. Like the projected use of fuel, the amount of fertilizer use is also directly and directly proportional to the area of land use for new plantations.

N	Fertiliser	Usage Per Year	Total Usage	Projected GHG Emissions (ton CO <sub>2</sub> e)			
0	Туре	per Hectare (ton/ha)	oer Year (ton)*	Transportation	N <sub>2</sub> O Emissions	CO <sub>2</sub>	
1	Urea	0.314	1806.8	2,861.75	5,152.21	1,324.97	
2	RP	0.203	1168.1	971.72	-	-	
3	МОР	0.321	1847.1	819.91	-	-	
4	Kieserite	0.149	857.4	380.58	-	-	

#### Table IV-10. Projected use of fertilizers in plantation areas

## Milling scope:

PT AWL - PLASMA does not plan to build a palm oil mill. The results of the FFB will be brought to the nearest PKS, namely Bukit Santui POM (PT AWL - Bukit Santui POM). Therefore, GHG mitigation originating from mill s is not under the authority PT AWL - PLASMA, but in the management of the Perdana POM unit. The amount of emission from this mill depends on the contribution of FFB supplied by PT AWL - PLASMA's plantation. The parameters used in estimating GHG emissions from the scope of palm oil (CPO) production are presented in Table III-43.

# Mitigation and monitoring plan GHG emissions strategic

The GHG emission mitigation strategy is prepared based on practical achievements that can be realized as part of the company's operational activities. In addition, the GHG emission mitigation strategy also considers increasing productivity. In other words, an increase in productivity without an increase in the amount of significant emissions is also a form of reducing GHG emissions relative to the level of production, while a decrease in GHG emissions that causes a decrease in productivity will increase the amount of GHG emissions relative to the level of production.

Mitigation and monitoring plans can be divided into two, namely specific mitigation and monitoring plans, and general mitigation and monitoring plans. In the new plantation development plan stage, specific GHG emission mitigation plans are focused on land use as the main variable affecting the amount of

<ul> <li>the scope of palm oil productivities are implemented to source materials. In other work mitigation and monitoring measurable manner by follow and fuel use that has been dereased. A general mitigation and memission sources that cannot components of GHG emission. The company does not yet has emissions from mill operation.</li> <li>General mitigation plan General GHG emission mitigation activities will be example the decrease in fuel decrease in fertilizer use due.</li> <li>The success achieved in the also be applied as a specific a in the next period. Therefore terms, a general mitigation implement new innovations by increasing productivity.</li> <li>Some of the recommended generation of FFB transed. Turning off vehicle engine as some of the recommended generation. The success achieves of the success achieves for the success achieves in fuel decrease in fertilizer use due.</li> <li>The success achieves are in fuel decrease in fertilizer use due.</li> <li>The success achieves in fuel decrease in fertilizer use due.</li> <li>The success achieves are in fuel decrease in fertilizer use due.</li> <li>The success achieves in the also be applied as a specific a in the next period. Therefore, terms, a general mitigation implement new innovations by increasing productivity.</li> <li>Some of the recommended generation. The success achieves are interested as a specific as a specific as a specific as in the next period. Therefore, terms, a general mitigation implement new innovations by increasing productivity.</li> <li>Some of the recommended generation. The success achieves are interested as a specific as a specific</li></ul>	aonitoring plan is made for comparison sources from the palm oil properted by the comparison sources from the palm oil properse a mill, so measurable measurable measurable are not yet relevant and activities are not yet relevant and activities are not yet relevant and activities are not yet relevant and the successful implement of FF to technology application, etc. Implementation of a general in and measurable mitigation plan to an effort to reduce emissions are an effort to reduce emissions and the plantation. The plant is in the plantation are as when not in use for transportation, especially those that are general mitigation areas. For a plan growth, anologies that support GHG erich are support and the support and the support and the support and the support areas.	other operational easurable emission cific GHG emission a practical and amount of fertilizer mponents of GHG y. In this case, the roduction process. ares to reduce GHG it. aspects within the tation of general management, for B transport routes, nitigation plan can to be implemented aportant. In simple for companies to s, either directly or ation. nerated with fuel.		
<ol> <li>Implementing the use of mitigation efforts.</li> </ol>	alternative materials that supp			
Objective(s) Action(s) Timeline				
Arrangement of FFB Road improvement and During the transport routes in the maintenance from plantation operations of to mill.				
Turning off vehicle engines when not in use for transportation.	Conduct socialization to employees and staff to turn off the vehicle engine when	During the operations of the company		

				not used for transportation.	
		Save electricity co especially those generated with fu	that are	Conduct socialization to employees and staff to Save electricity consumption, especially those that are generated with fuel	During the operations of the company
		Preventing fires		Provision of fire fighting equipment	During the operations of the company
		Maintain and conservation area	0 -	Monitor the Conservation Area from any other activities	During the operations of the company
		Maintain and/or enhance oil palm growth.		Use best management practice in agronomy activites	During the operations of the company
		Implementing new technologies that support GHG emission mitigation efforts.		Development and Use of Methane Capture	During the operations of the company
		Implementing the use of alternative materials that support GHG emission mitigation efforts.		Use of Compost from Mill Waste Activities	During the operations of the company
6	Acceptance of Management Plans	Name of Person Responsible	Mr. Donald		
		Designation	Managemei	nent Representative	
		Signature			
		Date     14 Desember 2022			