

Agricultural Plantation and Animal Feed Mill

I. ENVIRONMENTAL IMPACTS AND CLIMATE CHANGE RISK MANAGEMENT PLAN

Possible Environmental/ Social Impacts	Baseline Environment	Preventive/ Mitigating Measures	Monitoring Parameters/ Implementation	Remarks
		<input checked="" type="checkbox"/> Cost of preventive/mitigating as well as monitoring integrated in the construction /operation cost		
LAND				
<input checked="" type="checkbox"/> Consistency with land use	Current land use w/in 1km radius (as per zoning ordinance): <input type="checkbox"/> Residential <input type="checkbox"/> Commercial/ Institutional <input type="checkbox"/> Industrial <input type="checkbox"/> Agricultural/ Recreational <input type="checkbox"/> Protected Areas <input type="checkbox"/> Others, specify Actual land uses w/in 1km radius: <input type="checkbox"/> Residential <input type="checkbox"/> Commercial/ Institutional <input type="checkbox"/> Industrial <input type="checkbox"/> Agricultural/ Recreational <input type="checkbox"/> Protected Areas	<input checked="" type="checkbox"/> See attached proof of compatibility with land use <input checked="" type="checkbox"/> Limit project activities to what is compatible to the land use <input type="checkbox"/> Others, specify		

	<input type="checkbox"/> Others, specify			
<input checked="" type="checkbox"/> Land tenure / compatibility issue	Land tenure / compatibility issues: <input type="checkbox"/> CARP <input type="checkbox"/> CADC/ CADT/ CALC/ CALT <input type="checkbox"/> ROW <input type="checkbox"/> Informal settlers <input type="checkbox"/> Ecologically sensitive or protected area <input type="checkbox"/> Others, specify	<input type="checkbox"/> Obtain appropriate clearances/ permits from concerned agencies: <input type="checkbox"/> Resettlement Plan prepared <input type="checkbox"/> Provide relocation/disturbance compensation packages <input type="checkbox"/> Ensure participation of IPs in consultations and dialogues <input type="checkbox"/> MOA prepared/signed <input type="checkbox"/> Provide adequate buffer <input type="checkbox"/> Others, specify	<input checked="" type="checkbox"/> Regularly monitor presence/absence of complaints <input checked="" type="checkbox"/> Regular coordination with LGU or appropriate agencies <input type="checkbox"/> Others, specify	

<input type="checkbox"/> Disturbance to wildlife due to vegetation clearing <input type="checkbox"/> Pest/disease infestation	Existing vegetation in the area: <input type="checkbox"/> Forestland <input type="checkbox"/> Marshland <input type="checkbox"/> Grassland <input type="checkbox"/> Mangrove <input type="checkbox"/> Wetland <input type="checkbox"/> Others, specify	<input checked="" type="checkbox"/> Compliance with conditions of DENR/LGU CLUP, Tree Cutting Permit, ROW Permit <input checked="" type="checkbox"/> Limit land clearing as much as possible <input checked="" type="checkbox"/> Provide temporary fencing for vegetation that will be retained <input checked="" type="checkbox"/> Promote restoration of damaged or destroyed vegetation where possible (e.g., tree planting); <input type="checkbox"/> Provide adequate buffer zone <input type="checkbox"/> Employ Integrated Pest Management System <input type="checkbox"/> Practice inter-cropping (e.g., nitrogen fixing crops)	<input checked="" type="checkbox"/> Annual inspection of area replanted/ re-vegetated <input type="checkbox"/> Others, specify <input type="checkbox"/> Regular monitoring of buffer zones <input type="checkbox"/> Monitoring/inspection of planted crops for signs and symptoms of disease	
<input type="checkbox"/> Change in surface landform/ topography/ terrain/slope <input type="checkbox"/> Soil Erosion	Slope: <input type="checkbox"/> Flat (0-3%) <input type="checkbox"/> Gently sloping to rolling (3-18%) <input type="checkbox"/> Steep (>18%) Is the project site located in an area identified by MGB/PAGASA/ PHIVOLCS as hazard prone? <input type="checkbox"/> Yes <input type="checkbox"/> No	Considering the natural hazards and climate projections in the area: <input type="checkbox"/> Employ appropriate soil erosion control and slope protection measures (e.g. contour farming, hedgerow planting, etc.) Stabilization of embankment with grasses or other soil cover <input type="checkbox"/> Others, specify	<input type="checkbox"/> Regular inspection of slope protection measures in erosion-prone areas <input type="checkbox"/> Regular inspection for new eroded areas near the site <input type="checkbox"/> Others, specify	<input type="checkbox"/> Slope/ Erosion Control Cost: <input type="checkbox"/> Others, specify

<p>Building of Structure and Improper solid waste disposal leading to</p> <p><input checked="" type="checkbox"/> Impairment of visual aesthetics</p> <p><input type="checkbox"/> Devaluation of land values</p>	<p>Solid Waste Management Scheme in the area:</p> <p><input type="checkbox"/> SLF</p> <p><input type="checkbox"/> MRF</p> <p><input type="checkbox"/> Composting</p> <p><input type="checkbox"/> Regular Collection of Solid Wastes</p> <p>Presence of visually significant landforms/landscape/structures?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p>	<p><input checked="" type="checkbox"/> Implement recovery re-use and recycling of waste materials</p> <p><input checked="" type="checkbox"/> Provide receptacles / bins for solid wastes</p> <p><input type="checkbox"/> Composting of Organic Wastes</p> <p><input type="checkbox"/> Coordinate with the municipal / city waste collectors</p> <p><input type="checkbox"/> Implement landscaping and other beautification measures</p> <p><input type="checkbox"/> Provide adequate buffer</p> <p><input type="checkbox"/> Compensate adjacent property owners</p> <p><input type="checkbox"/> Others, please specify</p>	<p><input checked="" type="checkbox"/> Daily inspection for presence of garbage in the facility</p> <p><input checked="" type="checkbox"/> Weekly inspection of waste accumulated</p> <p><input type="checkbox"/> Regular inspection of landscaping and other beautification activities</p> <p><input type="checkbox"/> Regular monitoring of buffer zones</p> <p><input type="checkbox"/> Regularly monitor presence/absence of complaints from adjacent property owners</p> <p><input type="checkbox"/> Others, specify</p>	
<p><input type="checkbox"/> Soil/Land contamination due to agrochemicals (inorganic fertilizer, pesticides, herbicides etc.)</p> <p><input checked="" type="checkbox"/> Depletion of soil</p>	<p>Existing soil type in the area:</p> <p><input type="checkbox"/> sandy</p> <p><input type="checkbox"/> clay</p> <p><input type="checkbox"/> sandy-loam</p> <p><input type="checkbox"/> Others, specify</p>	<p><input type="checkbox"/> Promote application of organic fertilizer (i.e. composting, mulching, etc.)</p> <p><input type="checkbox"/> Practice inter-cropping (e.g., nitrogen fixing crops)</p> <p><input type="checkbox"/> Others, specify</p>	<p><input checked="" type="checkbox"/> Monitoring of soil physical and chemical properties</p>	

nutrient content/soil productivity/Change in acidity/alkalinity of soil	Soil acidity/alkalinity <input type="checkbox"/> acidic <input type="checkbox"/> basic <input checked="" type="checkbox"/> Conduct of soil test/analysis			
WATER				

<input type="checkbox"/> Increased siltation due to project activities <input type="checkbox"/> Water quality degradation <input type="checkbox"/> Others, specify	<p>Specify nearest/receiving water body:</p> <p>Distance to nearest/receiving water body:</p> <p><input type="checkbox"/> 0 to less than 0.5 km</p> <p><input type="checkbox"/> 0.5 to 1 km</p> <p><input type="checkbox"/> More than 1 km</p> <p>Classification of nearest water body:</p> <table border="1"> <tr> <td><input type="checkbox"/> Freshwater</td> <td><input type="checkbox"/> Marine/coastal water</td> </tr> <tr> <td><input type="checkbox"/> AA</td> <td><input type="checkbox"/> SA</td> </tr> <tr> <td><input type="checkbox"/> A</td> <td><input type="checkbox"/> SB</td> </tr> <tr> <td><input type="checkbox"/> B</td> <td><input type="checkbox"/> SC</td> </tr> <tr> <td><input type="checkbox"/> C</td> <td><input type="checkbox"/> SD</td> </tr> <tr> <td><input type="checkbox"/> D</td> <td></td> </tr> </table> <p>Current Water Use:</p> <p><input type="checkbox"/> Fishery</p> <p><input type="checkbox"/> Tourist Zone / Park</p> <p><input type="checkbox"/> Recreational</p> <p><input type="checkbox"/> Industrial</p>	<input type="checkbox"/> Freshwater	<input type="checkbox"/> Marine/coastal water	<input type="checkbox"/> AA	<input type="checkbox"/> SA	<input type="checkbox"/> A	<input type="checkbox"/> SB	<input type="checkbox"/> B	<input type="checkbox"/> SC	<input type="checkbox"/> C	<input type="checkbox"/> SD	<input type="checkbox"/> D		<input checked="" type="checkbox"/> Set-up proper and adequate sanitary facilities <input type="checkbox"/> Strictly require the workers to observe proper waste disposal and proper sanitation <input checked="" type="checkbox"/> Strictly observe proper waste handling and disposal Provision of wastewater treatment facility <input checked="" type="checkbox"/> Set up silt trap/settling ponds to minimize downstream siltation <input type="checkbox"/> Others, specify	<p>Regular (ocular) inspection of:</p> <p><input type="checkbox"/> Drainage / canal systems</p> <p><input type="checkbox"/> Wastewater treatment facility</p> <p>Regular ambient water monitoring for the following:</p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> pH</td> <td> <input type="checkbox"/> Annual <input type="checkbox"/> Semi-annual <input type="checkbox"/> Quarterly </td> </tr> <tr> <td><input type="checkbox"/> TSS concentration</td> <td> <input type="checkbox"/> Annual <input type="checkbox"/> Semi-annual <input type="checkbox"/> Quarterly </td> </tr> <tr> <td><input type="checkbox"/> BOD</td> <td> <input type="checkbox"/> Annual <input type="checkbox"/> Semi-annual <input type="checkbox"/> Quarterly </td> </tr> <tr> <td><input type="checkbox"/> Color</td> <td> <input type="checkbox"/> Annual <input type="checkbox"/> Semi-annual <input type="checkbox"/> Quarterly </td> </tr> <tr> <td><input type="checkbox"/> Nitrates</td> <td> <input type="checkbox"/> Annual <input type="checkbox"/> Semi-annual <input type="checkbox"/> Quarterly </td> </tr> <tr> <td><input type="checkbox"/> Phosphates</td> <td> <input type="checkbox"/> Annual <input type="checkbox"/> Semi-annual <input type="checkbox"/> Quarterly </td> </tr> <tr> <td><input type="checkbox"/> Pesticides/herbicide</td> <td> <input type="checkbox"/> Annual <input type="checkbox"/> Semi-annual </td> </tr> </tbody> </table>	Parameter	Frequency	<input type="checkbox"/> pH	<input type="checkbox"/> Annual <input type="checkbox"/> Semi-annual <input type="checkbox"/> Quarterly	<input type="checkbox"/> TSS concentration	<input type="checkbox"/> Annual <input type="checkbox"/> Semi-annual <input type="checkbox"/> Quarterly	<input type="checkbox"/> BOD	<input type="checkbox"/> Annual <input type="checkbox"/> Semi-annual <input type="checkbox"/> Quarterly	<input type="checkbox"/> Color	<input type="checkbox"/> Annual <input type="checkbox"/> Semi-annual <input type="checkbox"/> Quarterly	<input type="checkbox"/> Nitrates	<input type="checkbox"/> Annual <input type="checkbox"/> Semi-annual <input type="checkbox"/> Quarterly	<input type="checkbox"/> Phosphates	<input type="checkbox"/> Annual <input type="checkbox"/> Semi-annual <input type="checkbox"/> Quarterly	<input type="checkbox"/> Pesticides/herbicide	<input type="checkbox"/> Annual <input type="checkbox"/> Semi-annual	
<input type="checkbox"/> Freshwater	<input type="checkbox"/> Marine/coastal water																															
<input type="checkbox"/> AA	<input type="checkbox"/> SA																															
<input type="checkbox"/> A	<input type="checkbox"/> SB																															
<input type="checkbox"/> B	<input type="checkbox"/> SC																															
<input type="checkbox"/> C	<input type="checkbox"/> SD																															
<input type="checkbox"/> D																																
Parameter	Frequency																															
<input type="checkbox"/> pH	<input type="checkbox"/> Annual <input type="checkbox"/> Semi-annual <input type="checkbox"/> Quarterly																															
<input type="checkbox"/> TSS concentration	<input type="checkbox"/> Annual <input type="checkbox"/> Semi-annual <input type="checkbox"/> Quarterly																															
<input type="checkbox"/> BOD	<input type="checkbox"/> Annual <input type="checkbox"/> Semi-annual <input type="checkbox"/> Quarterly																															
<input type="checkbox"/> Color	<input type="checkbox"/> Annual <input type="checkbox"/> Semi-annual <input type="checkbox"/> Quarterly																															
<input type="checkbox"/> Nitrates	<input type="checkbox"/> Annual <input type="checkbox"/> Semi-annual <input type="checkbox"/> Quarterly																															
<input type="checkbox"/> Phosphates	<input type="checkbox"/> Annual <input type="checkbox"/> Semi-annual <input type="checkbox"/> Quarterly																															
<input type="checkbox"/> Pesticides/herbicide	<input type="checkbox"/> Annual <input type="checkbox"/> Semi-annual																															

	<div><input type="checkbox"/> Agricultural</div> <div><input type="checkbox"/> Others, specify:</div> <div>Distance of project area to the nearest well used:</div> <div><input type="checkbox"/> 0 to less than 0.5 km</div> <div><input type="checkbox"/> 0.5 to 1 km</div> <div><input type="checkbox"/> More than 1 km</div> <div>Use of the nearest well:</div> <div><input type="checkbox"/> Drinking/Domestic</div> <div><input type="checkbox"/> Industrial</div> <div><input type="checkbox"/> Agricultural</div>		<div><input type="checkbox"/> Quarterly</div>	
--	--	--	---	--

<input type="checkbox"/> Competition in water use <input type="checkbox"/> Depletion of water resources	<p>Size of population using the source/s of water for the project :</p> <p><input type="checkbox"/> ≤ 1,000 persons</p> <p><input type="checkbox"/> >1,000 and ≤ 5,000persons</p> <p><input type="checkbox"/> >5,000person</p> <p>Current Use of water source :</p> <p><input type="checkbox"/> Fishery</p> <p><input type="checkbox"/> Tourist Zone / Park</p> <p><input type="checkbox"/> Recreational</p> <p><input type="checkbox"/> Industrial</p> <p><input type="checkbox"/> Agricultural</p> <p>Available/nearest alternative water source.</p> <p><input type="checkbox"/> Deepwell</p> <p><input type="checkbox"/> Water district/LGU</p> <p><input type="checkbox"/> Others, specify</p>	<input type="checkbox"/> Implement rainwater harvesting and similar measures as an alternative source of water <input type="checkbox"/> Observe water conservation measures; <input type="checkbox"/> Obtain Water Permit from NWRB <input type="checkbox"/> Improve efficiency of water supply and distribution system <input type="checkbox"/> Use drought resistant species which require less water input and hence have less impact on water tables <input type="checkbox"/> Modify irrigation techniques, including amount, timing or technology <input type="checkbox"/> Improve water management to prevent water logging, erosion and leaching <input type="checkbox"/> Modify crop calendars and/or implement seasonal climate forecasting (e.g., timing or location of cropping activities) <input type="checkbox"/> Others, specify	<input checked="" type="checkbox"/> Regularly monitor presence/absence of complaints <input checked="" type="checkbox"/> Regular coordination with concerned agencies <input checked="" type="checkbox"/> Regularly monitor occurrences of water shortages <input type="checkbox"/> Others, specify	
--	---	---	--	--

<input type="checkbox"/> Increased occurrence of flooding	Is the project site located in an area identified by MGB/PAGASA as flood prone? <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Use appropriate design for project facilities <input type="checkbox"/> Implement appropriate drainage system <input type="checkbox"/> Regularly remove debris and other materials that may obstruct water flow <input type="checkbox"/> Use appropriate technology (e.g. raised hand-pumps) to protect drinking water from flood contamination <input type="checkbox"/> Others, specify	<input checked="" type="checkbox"/> Regularly monitor presence/absence of complaints <input checked="" type="checkbox"/> Regular coordination with concerned agencies <input checked="" type="checkbox"/> Regularly monitor increased frequency of flooding <input type="checkbox"/> Others, specify					
AIR / NOISE								
<input type="checkbox"/> Nuisance due to generation of obnoxious/unpleasant odor <input checked="" type="checkbox"/> Impact on air quality	Distance to nearest community: <input type="checkbox"/> 0 to less than 0.5 km <input type="checkbox"/> 0.5 to 1 km <input type="checkbox"/> More than 1 km Is the wind direction blowing towards the nearest community most of the year? <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Regular housekeeping <input type="checkbox"/> Provide adequate buffer and/or planting of trees <input type="checkbox"/> Others, specify	<input checked="" type="checkbox"/> Regularly monitor presence/absence of complaints <input type="checkbox"/> Regular monitoring of ambient air for the following: <table border="1" data-bbox="1321 1145 1727 1334"> <thead> <tr> <th>Parameter</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> TSP</td> <td> <input type="checkbox"/> Annual <input type="checkbox"/> Semi-annual <input type="checkbox"/> Quarterly <input type="checkbox"/> Monthly </td> </tr> </tbody> </table>	Parameter	Frequency	<input type="checkbox"/> TSP	<input type="checkbox"/> Annual <input type="checkbox"/> Semi-annual <input type="checkbox"/> Quarterly <input type="checkbox"/> Monthly	
Parameter	Frequency							
<input type="checkbox"/> TSP	<input type="checkbox"/> Annual <input type="checkbox"/> Semi-annual <input type="checkbox"/> Quarterly <input type="checkbox"/> Monthly							

			<input type="checkbox"/> NO ₂ <input type="checkbox"/> Annual <input type="checkbox"/> Semi-annual <input type="checkbox"/> Quarterly <input type="checkbox"/> Monthly	
			<input type="checkbox"/> SO ₂ <input type="checkbox"/> Annual <input type="checkbox"/> Semi-annual <input type="checkbox"/> Quarterly <input type="checkbox"/> Monthly	
<input type="checkbox"/> Nuisance due to noise generation	Distance to nearest community: <input type="checkbox"/> 0 to less than 0.5 km <input type="checkbox"/> 0.5 to 1 km <input type="checkbox"/> More than 1 km	<input type="checkbox"/> Properly operate and maintain all noise sources (e.g. vehicles, boiler, generator, etc) <input type="checkbox"/> Install the appropriate noise control device/s (e.g., mufflers, silencer, sound barriers, etc.) <input type="checkbox"/> Implement appropriate operating hours <input type="checkbox"/> Provide adequate buffer and/or planting of trees <input type="checkbox"/> Others, specify	<input checked="" type="checkbox"/> Regularly monitor presence/absence of complaints <input type="checkbox"/> Regular monitoring of buffer zones	
PEOPLE				

	<p>Available services within/near the host barangay:</p> <p><input type="checkbox"/> Schools (e.g. elementary, high school, college)</p> <p><input type="checkbox"/> Health facilities (e.g., clinics, hospitals, etc.)</p> <p><input type="checkbox"/> Peace and order (e.g., police outpost, brgy. Tanod, etc.)</p> <p><input type="checkbox"/> Recreation and sports facilities</p> <p><input type="checkbox"/> Others, specify</p>			
<p><input type="checkbox"/> Impacts on community health and safety</p> <p>Safety Risks</p> <p><input type="checkbox"/> Fire</p> <p><input type="checkbox"/> Explosion</p> <p><input type="checkbox"/> Release of toxic materials</p>	<p>Source of risks</p> <p><input type="checkbox"/> Explosives, please specify</p> <p><input type="checkbox"/> Flammable substances, please specify</p>	<p><input checked="" type="checkbox"/> Regular coordination with LGU</p> <p><input type="checkbox"/> Provide appropriate warning signs, lighting and barricades, whenever practicable</p> <p><input checked="" type="checkbox"/> Observe proper housekeeping</p> <p><input type="checkbox"/> Provide on-site medical services for any emergency.</p> <p><input type="checkbox"/> Participate in public awareness programs on health and safety</p>	<p><input checked="" type="checkbox"/> Regularly monitor presence/absence of complaints</p> <p><input type="checkbox"/> Regular monitoring of buffer zones</p> <p><input checked="" type="checkbox"/> Regular coordination with LGU</p> <p><input checked="" type="checkbox"/> Regular submission of reports to concerned agency</p> <p><input type="checkbox"/> Others, specify</p>	

	<input type="checkbox"/> Toxic substances, please specify	<input type="checkbox"/> Implement appropriate safety programs for both community and workers <input checked="" type="checkbox"/> Strictly comply with fire, safety and similar regulatory requirements <input type="checkbox"/> Strictly comply with requirements of RA 6969 <input type="checkbox"/> Others, specify		
--	--	--	--	--