

CORN AND RICE MILL PROJECTS

II. ENVIRONMENTAL IMPACT MANAGEMENT AND MONITORING 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 type="checkbox"/> Others, specify	<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	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 type="checkbox"/> Others, specify	

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Initial Environmental Examination (IEE) Checklist Report for Corn and Rice Mill Projects

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		<input checked="" type="checkbox"/> Cost of preventive/mitigating as well as monitoring integrated in the construction /operation cost		
<input 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 the following 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	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 type="checkbox"/> Comply with conditions of DENR/LGU SLUP, Tree Cutting Permit, ROW, PCA Permit <input type="checkbox"/> Limit land clearing as much as possible <input type="checkbox"/> Provide temporary fencing for vegetation that will be retained <input type="checkbox"/> Promote restoration of damaged or destroyed vegetation where	<input checked="" type="checkbox"/> Annual inspection of area replanted/ re-vegetated <input type="checkbox"/> Others, specify	

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		<input checked="" type="checkbox"/> Cost of preventive/mitigating as well as monitoring integrated in the construction /operation cost		
		possible (e.g., tree planting); <input type="checkbox"/> Provide adequate buffer zone <input type="checkbox"/> Others, specify		
<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/PAG-ASA/PHIVOLCS as hazard prone? <input type="checkbox"/> Yes <input type="checkbox"/> No	Considering the natural hazards and climate change projections in the area: <input type="checkbox"/> Employ appropriate soil erosion control and slope protection measures <input type="checkbox"/> Designate a Spoils Storage Area, with topsoil set aside for later use and allow maximum re-use of spoils <input type="checkbox"/> Construct during dry season <input type="checkbox"/> Employ 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	
Building of structure and improper solid waste disposal leading to: <input type="checkbox"/> Impairment of visual aesthetics	Solid Waste Management Scheme in the area: <input type="checkbox"/> SLF <input type="checkbox"/> MRF	<input checked="" type="checkbox"/> Implement recovery re-use and recycling of waste materials <input checked="" type="checkbox"/> Provide receptacles / bins for solid wastes	<input type="checkbox"/> Daily inspection of waste handling including segregation in waste/recycling bins <input type="checkbox"/> Weekly inspection of waste	

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		<input checked="" type="checkbox"/> Cost of preventive/mitigating as well as monitoring integrated in the construction /operation cost						
<input type="checkbox"/> Devaluation of land values	<input type="checkbox"/> Composting <input type="checkbox"/> Regular Collection of Solid Wastes Presence of visually significant landforms/landscape/structures? <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Composting of Organic Wastes <input type="checkbox"/> Coordinate with the municipal / city waste collectors <input type="checkbox"/> Implement landscaping and other beautification measures <input type="checkbox"/> Provide adequate buffer <input type="checkbox"/> Compensate adjacent property owners <input type="checkbox"/> Others, specify	accumulation and disposal <input type="checkbox"/> Regular inspection of landscaping and other beautification activities <input type="checkbox"/> Regular monitoring of buffer zones <input type="checkbox"/> Regular monitoring for presence/absence of complaints from adjacent property owners <input type="checkbox"/> Others, specify					
WATER								
<input type="checkbox"/> Increased siltation due to project activities <input type="checkbox"/> Water quality degradation <input type="checkbox"/> Others, specify	Specify nearest water body: Distance to nearest water body: <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 Classification of nearest water body:	<input checked="" type="checkbox"/> Set up proper and adequate sanitary facilities <input checked="" type="checkbox"/> Ensure strict observance of proper waste handling and disposal and proper sanitation including by the contractor and its workers (if any) <input checked="" type="checkbox"/> Provide wastewater treatment facility (e.g., septic tank, oil and water separator, etc.) <input type="checkbox"/> Set up silt trap/settling ponds to minimize downstream siltation <input type="checkbox"/> Provide three-chambered septic tank for domestic sewage <input type="checkbox"/> Provide ring canals around fuelling	Regular (ocular) inspection of: <input type="checkbox"/> Drainage/canal systems <input type="checkbox"/> Wastewater treatment facility (i.e., grease trap, septic tank, etc.) <input type="checkbox"/> Water body Regular monitoring ambient water for the following: <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 <input type="checkbox"/> Monthly </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"/> Monthly	
Parameter	Frequency							
<input type="checkbox"/> pH	<input type="checkbox"/> Annual <input type="checkbox"/> Semi-annual <input type="checkbox"/> Quarterly <input type="checkbox"/> Monthly							

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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		
	<div> <input type="checkbox"/> Freshwater <input type="checkbox"/> Marine/ coastal water </div> <div> <input type="checkbox"/> AA <input type="checkbox"/> SA </div> <div> <input type="checkbox"/> A <input type="checkbox"/> SB </div> <div> <input type="checkbox"/> B <input type="checkbox"/> SC </div> <div> <input type="checkbox"/> C <input type="checkbox"/> SD </div> <div> <input type="checkbox"/> D </div> <p>Current Water Use:</p> <p> <input type="checkbox"/> Fishery <input type="checkbox"/> Tourist Zone / Park <input type="checkbox"/> Recreational <input type="checkbox"/> Industrial <input type="checkbox"/> Agricultural <input type="checkbox"/> Others, specify: </p> <p>Distance of project area to the nearest well used:</p> <p> <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 </p> <p>Use of nearest well:</p>	<p>tanks/ motor pool/ maintenance areas</p> <p><input type="checkbox"/> Others, specify</p>	<div> <input type="checkbox"/> TSS concentration <div> <input type="checkbox"/> Annual <input type="checkbox"/> Semi-annual <input type="checkbox"/> Quarterly <input type="checkbox"/> Monthly </div> </div> <div> <input type="checkbox"/> BOD <div> <input type="checkbox"/> Annual <input type="checkbox"/> Semi-annual <input type="checkbox"/> Quarterly <input type="checkbox"/> Monthly </div> </div> <div> <input type="checkbox"/> Color <div> <input type="checkbox"/> Annual <input type="checkbox"/> Semi-annual <input type="checkbox"/> Quarterly <input type="checkbox"/> Monthly </div> </div>	

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		<input checked="" type="checkbox"/> Cost of preventive/mitigating as well as monitoring integrated in the construction /operation cost		
	<input type="checkbox"/> Drinking/Domestic <input type="checkbox"/> Industrial <input type="checkbox"/> Agricultural <input type="checkbox"/> Others, specify			
<input type="checkbox"/> Competition in water use <input type="checkbox"/> Depletion of water resources	Size of population using the source/s of water for the project: <input type="checkbox"/> ≤ 1,000 persons <input type="checkbox"/> >1,000 and ≤ 5,000 persons <input type="checkbox"/> >5,000 persons Available/nearest water source. <input type="checkbox"/> Deep well <input type="checkbox"/> Water district/LGU <input type="checkbox"/> Surface water <input type="checkbox"/> Others, specify	<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"/> Carefully select project site to avoid disruption of traditional water uses <input type="checkbox"/> Obtain Water Permit from NWRB <input type="checkbox"/> Improve efficiency of water supply and distribution system <input type="checkbox"/> Others, specify	<input checked="" type="checkbox"/> Regular monitoring for presence/absence of complaints <input checked="" type="checkbox"/> Regular coordination with concerned agencies <input checked="" type="checkbox"/> Regular monitoring for 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/PAG-ASA as flood prone? <input type="checkbox"/> Yes	<input type="checkbox"/> Use appropriate design for project facilities <input type="checkbox"/> Implement appropriate drainage system	<input checked="" type="checkbox"/> Regular monitoring for presence/absence of complaints <input checked="" type="checkbox"/> Regular coordination with concerned agencies	

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		<input checked="" type="checkbox"/> Cost of preventive/mitigating as well as monitoring integrated in the construction /operation cost		
	<input type="checkbox"/> No	<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"/> Regular monitor of increased frequency of flooding <input type="checkbox"/> Others, specify	
AIR / NOISE				
<input type="checkbox"/> Air quality degradation	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"/> Properly operate and maintain all emission sources (e.g. vehicles, pumps, generator, etc.) <input checked="" type="checkbox"/> Install appropriate air pollution control device/s <input type="checkbox"/> Control vehicle speed to lessen suspension of road dust <input type="checkbox"/> Others, specify	<input checked="" type="checkbox"/> Regular monitoring for presence/absence of complaints Regular (ocular) inspection of: <input type="checkbox"/> Absence of white or black smoke from vehicles, heavy equipment and generator <input type="checkbox"/> Absence of fugitive dust emission from milling operation <input type="checkbox"/> Presence of truck cover during deliveries Regular monitoring of ambient for the following:	
<input type="checkbox"/> Nuisance due to generation of obnoxious/unpleasant		<input type="checkbox"/> Regular clean-up and good housekeeping practices		

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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						
odor		<input type="checkbox"/> Use of environment-friendly deodorizer or odor masking substances <input type="checkbox"/> Provide adequate buffer and/or planting of trees <input type="checkbox"/> Others, specify	<table border="1"> <thead> <tr> <th>Parameter</th><th>Frequency</th></tr> </thead> <tbody> <tr> <td><input checked="" type="checkbox"/> TSP</td><td> <input type="checkbox"/> Annual <input type="checkbox"/> Semi-annual <input type="checkbox"/> Quarterly </td></tr> </tbody> </table>	Parameter	Frequency	<input checked="" type="checkbox"/> TSP	<input type="checkbox"/> Annual <input type="checkbox"/> Semi-annual <input type="checkbox"/> Quarterly	
Parameter	Frequency							
<input checked="" type="checkbox"/> TSP	<input type="checkbox"/> Annual <input type="checkbox"/> Semi-annual <input type="checkbox"/> Quarterly							
<input checked="" 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, pumps, 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 checked="" type="checkbox"/> Provide adequate buffer and/or planting of trees <input checked="" type="checkbox"/> Others, specify	<input type="checkbox"/> Regular monitoring for presence/absence of complaints <input type="checkbox"/> Regular monitoring of buffer zones <input type="checkbox"/> Quarterly monitoring of noise level <input type="checkbox"/> Others, specify					
PEOPLE								

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<input type="checkbox"/> Displacement of residents including indigenous people in the project site and within its vicinity <input type="checkbox"/> Enhanced employment and/or livelihood opportunities <input type="checkbox"/> Reduced employment and/or livelihood opportunities <input type="checkbox"/> Increased revenues for LGU <input type="checkbox"/> Disruption/Competition in delivery of public services (e.g., education, peace and order, etc.) <input type="checkbox"/> Enhanced delivery of public services (e.g., education, peace and order, etc.) <input type="checkbox"/> Increase in traffic volume and worsening of traffic flow	<p>Size of population of host barangay/s:</p> <input type="checkbox"/> ≤ 1,000 persons <input type="checkbox"/> >1,000 and ≤ 5,000persons <input type="checkbox"/> >5,000person <input type="checkbox"/> Indigenous People Size: <p>Classification of host barangay:</p> <input type="checkbox"/> Urban <input type="checkbox"/> Rural <p>Employment/Livelihood Opportunity Rate in the host Municipality:</p> <input type="checkbox"/> High <input type="checkbox"/> Low Description: <p>Available services within/near the host barangay:</p> <input type="checkbox"/> Schools (e.g. elementary, high school, college) <input type="checkbox"/> Health facilities (e.g., clinics, hospitals, etc.) <input type="checkbox"/> Peace and order (e.g., police outpost, Brgy. Tanod, etc.) <input type="checkbox"/> Recreation and sports facilities	<input type="checkbox"/> Provide relocation/disturbance compensation packages <input checked="" type="checkbox"/> Prioritize local residents for employment <input checked="" type="checkbox"/> Promptly pay local taxes and other financial obligations <input checked="" type="checkbox"/> Regular coordination with LGU <input type="checkbox"/> Conduct prior consultation and coordination to minimize disruption of daily domestic activities. <input type="checkbox"/> Ensure participation of IPs in consultations and dialogues and consider IP rights and cultural practices in the provision of relocation/disturbance compensation packages <input type="checkbox"/> Provide appropriate traffic/warning signs, lighting, etc. <input type="checkbox"/> Others, specify	<input checked="" type="checkbox"/> Regular monitoring for presence/absence of complaints <input checked="" type="checkbox"/> Regular coordination with LGU <input type="checkbox"/> Others, specify	
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	<input type="checkbox"/> Others, specify			
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