

**FOR AGRICULTURAL PLANTATION PROJECTS**  
**ENVIRONMENTAL MANAGEMENT PLAN**

POTENTIAL IMPACT PER PROJECT ACTIVITY PER PROJECT PHASE	MITIGATING MEASURES	RATING/ PERFORMANCE OF MITIGATING MEASURES
<b>A. Construction Phase</b>		
A.1 Site Development (Site Clearing, Road Network Development, Construction of Admin Building and Nursery, and other Facilities)		
Degradation of surface water quality due to contamination from domestic wastewater	<ul style="list-style-type: none"> <li>Provide (indicate number) of portalets for construction workers</li> </ul> <p><i>Note: at least one (1) portalet for 60 workers where the number of male workers exceeds 500 (as per IRR-Industrial Hygiene, PD 856 Amending Administrative Order 111 Series of 1991)</i></p> <p><i>Note: at least one (1) portalet for 25 workers where the number of male workers exceeds 100 (as per IRR-Industrial Hygiene, PD 856 Amending Administrative Order 111 Series of 1991)</i></p> <ul style="list-style-type: none"> <li>Provision of temporary septic tank or wastewater collection system for workers</li> </ul> <p>Hauling of wastewater from portalets/septic tank by third party shall be covered by a licensed/permit from LGU and with valid Discharge Permit for the wastewater treatment facility</p>	100% compliance with RA 9275
Potential siltation of nearby drainage system/ water bodies due to soil erosion	<ul style="list-style-type: none"> <li>Provision of drainage systems to minimize and control infiltration of sediments to the nearby water bodies</li> <li>Planting of Bamboos or applicable tree species along nearest riverbank, disturbed areas, or in steep slopes to prevent soil erosion</li> </ul>	100% compliance with RA 9275
Generation of dust from site preparation	<ul style="list-style-type: none"> <li>Maintain a misty access road surface within project site by sprinkling of water at least (2x) twice a day during dry season</li> <li>Vehicles transporting aggregates/ construction materials should be adequately covered with tarpaulin canvass or jute sacks at all times</li> </ul>	100% compliance with RA 8749

Noise pollution and air pollutants from delivery trucks/ generator set	<ul style="list-style-type: none"> <li>• Use of mufflers, silencer and exhaust pipes</li> </ul>	100% Noise within standard (NPCC MC 002 Series of 1980)  100% compliance with RA 8749
Generation of noise due to operation of construction	<ul style="list-style-type: none"> <li>• Use of mufflers, silencer, and exhaust pipes for construction equipment</li> <li>• Provision of appropriate noise mitigating measures (such as construction of fences, enclosure of stationary work areas and equipment, maintenance of equipment, etc.) whenever applicable</li> </ul>	100% abatement of noise during construction  100% within Noise Standards
Generation of spoils such as excess fill materials from grading and excavation activities	<ul style="list-style-type: none"> <li>• Excess spoils to be hauled by third party hauler for proper disposal</li> <li>• Trucks should be thoroughly washed before leaving the project site to avoid the transfer of mud/dirt in the road</li> <li>• Spoils shall be stockpiled on flat areas and away from the adjacent access roads, drainage routes and nearby water body</li> </ul>	100% of excess spoils collected/hailed
Generation of construction debris	<ul style="list-style-type: none"> <li>• Proper collection of construction debris in compliance to RA 9003</li> <li>• Collection of construction debris by third party hauler with valid permit/clearance from LGU</li> </ul>	100% collected/hailed construction debris
Generation of used oil, paint, batteries, and other hazardous materials	<ul style="list-style-type: none"> <li>• Provision of storage for hazardous wastes with proper labelling</li> <li>• Collection of hazardous wastes by DENR accredited 3rd party hauler and treater</li> </ul>	100% compliance to RA 6969
<b>B. Operational Phase</b>		
<b>B.1 Processing, Delivery and transfer of raw materials and finished goods, Administrative Operation and other Facilities</b>		
Generation of domestic wastewater	<ul style="list-style-type: none"> <li>• Provision of sewage treatment plant with capacity based on the total personnel/workers in the plant <ul style="list-style-type: none"> <li>□ Hygienic septic tank (for 212 occupants or less – DILG MC 2019-62) with regular desludging by third party contractor (the contractor must have a valid discharge permit of its treatment facility)</li> </ul> </li> </ul>	100% compliance with RA 9275

	<p>□ Wastewater treatment facility (for more than 212 occupants – DILG MC 2019-62)</p> <p>Note: For 98L per person per day water consumption; 80% will become wastewater – hence for 300 persons; at least 23.52 cubic meter per day WTF capacity shall be installed and operated</p>	
Generation of Process Wastewater from Packaging Process	<ul style="list-style-type: none"> <li>• Provision of series of settling ponds</li> <li>• Regular monitoring of effluent for required parameters under existing guidelines and submission of results quarterly included in their SMR</li> </ul>	100% compliance with RA 9275
Potential flooding due to heavy rains	<ul style="list-style-type: none"> <li>• Ensure proper drainage system</li> </ul>	100% no flooding incidence
Generation of noise and air pollutants from delivery trucks/ generator set	Use of mufflers, silencer, and exhaust pipes	<p>100% noise within standard - (NPCC MC 002 Series of 1980)</p> <p>100% compliance with RA 8749</p>
Generation of solid wastes	<ul style="list-style-type: none"> <li>• Provision of Materials Recovery Facility (MRF)</li> <li>• Segregation of wastes with proper labelling, and wastes materials manifest indicating the volume of waste and date of collection/segregation</li> <li>• Hauling of non-hazardous wastes/domestic wastes by third party contractor with permit/clearance from LGU for proper disposal of wastes (ie. for composting/conversion to fertilizers or as fuel in Waste to Energy Power Project)</li> </ul> <p>Compost materials (if any) shall be made available to community for distribution through its Corporate Social Responsibility (CSR)</p>	100% compliant to RA 9003
Generation of hazardous materials	<ul style="list-style-type: none"> <li>• Provision of storage facility/area and collected by hazardous wastes DENR accredited third party hauler and treater</li> <li>• Provision of PPE for proper handling</li> </ul>	100% compliant to RA 6969

Generation of pollution from the use of Toxic Chemicals	<ul style="list-style-type: none"> <li>• Proper handling, storage and use</li> <li>• All chemicals and fertilizers used must be registered and approved for use</li> <li>• Use of organic fertilizers (i.e., chicken dung)</li> </ul>	100% compliant to RA 6969
Generation of effluents due to wastewater generation	<ul style="list-style-type: none"> <li>• Monitoring of the following significant effluent quality parameters: <ul style="list-style-type: none"> <li>☑ pH</li> <li>☑ COD</li> <li>☑ Total Suspended Solids</li> </ul> </li> </ul>	100% compliance with DENR effluent standards (RA 9275); (i.e.DAO 2016-08 and DAO 2021-19)