

FOR AQUACULTURE PROJECTS
ENVIRONMENTAL MANAGEMENT PLAN

POTENTIAL IMPACT PER PROJECT ACTIVITY PER PROJECT PHASE	MITIGATING MEASURES	RATING/ PERFORMANCE OF MITIGATING MEASURES
A. Construction Phase		
A.1 Site Development including Excavation and Construction of Ponds and Other Support Facilities (feedmill storage area, admin building etc.).		
Degradation of surface water quality due to contamination from domestic wastewater	<ul style="list-style-type: none"> Provision of (<u>indicate number</u>) portalets for construction workers <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"> Provision of temporary septic tank or wastewater collection system for workers 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 	100% compliance with RA 8749
Potential siltation of nearby drainage system/ water bodies due to soil erosion	<ul style="list-style-type: none"> Provision of drainage systems to minimize and control infiltration of sediments to the nearby water bodies Planting of Bamboos or applicable tree species along nearest riverbank, disturbed areas, or in steep slopes to prevent soil erosion 	100% compliance with RA 9275
Generation of dust from site preparation	<ul style="list-style-type: none"> Maintain a misty access road surface within project site by sprinkling of water at least (2x) twice a day during dry season Vehicles transporting aggregates/ construction materials should be 	100% compliance with RA 8749

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

	<p>contractor must have a valid discharge permit of its treatment facility)</p> <p><input type="checkbox"/> 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>	
Potential flooding due to heavy rains	<ul style="list-style-type: none"> • Ensure proper drainage system 	100% no flooding incidence
Generation of noise and air pollutants from delivery trucks/generator set	<ul style="list-style-type: none"> • Use of mufflers, silencer, and exhaust pipes • Regular maintenance of the generator sets 	<p>100% noise within standard - (NPCC MC 002 Series of 1980)</p> <p>100% compliance with RA 8749</p>
Generation of obnoxious odor from mortalities, fish wastes, and decomposing biofouling equipment such as cages and racks	<ul style="list-style-type: none"> • Collection, storage, and disposal of aquaculture mortalities and wastes • Cleaning of culture equipment based on the Code of Practice for Aquaculture as provided by BFAR 	100% no generation of odor from aquaculture wastes and equipment
Generation of solid wastes	<ul style="list-style-type: none"> • Provison of Materials Recovery Facility (MRF) • Segregation of wastes with proper labelling, and wastes materials manifest indicating the volume of waste and date of collection/segregation • 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) • Compost materials (if any) shall be made available to community for distribution through its Corporate Social Responsibility (CSR) 	100% compliant to RA 9003

Generation of hazardous materials	<ul style="list-style-type: none"> • Provision of storage facility/area and collected by hazardous wastes DENR accredited third party hauler and treater • Provision of PPE for proper handling 	100% compliant to RA 6969
Generation of pollution from the use of Toxic Chemicals	<ul style="list-style-type: none"> • Proper handling, storage and use 	100% compliant to RA 6969
Generation of effluents due to wastewater generation	<ul style="list-style-type: none"> • Monitoring of the following significant effluent quality parameters (based on PSIC Code 032): <ul style="list-style-type: none"> ☑ BOD ☑ Total Suspended Solids ☑ Ammonia ☑ Nitrate ☑ Phosphate ☑ Sulfate 	100% compliance with DENR effluent standards (RA 9275); (i.e.DAO 2016-08 and DAO 2021-19)