

FOR FOOD INDUSTRY PROJECTS
ENVIRONMENTAL MANAGEMENT PLAN

POTENTIAL IMPACT PER PROJECT ACTIVITY PER PROJECT PHASE	MITIGATING MEASURES	RATING/ PERFORMANCE OF MITIGATING MEASURES
A. Construction Phase		
Site Development, including excavation and Construction of Manufacturing Facilities		
Degradation of surface water and groundwater quality due to contamination from domestic wastewater	<p>Provision of (<u>indicate number</u>) portalets for construction workers</p> <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> <p>Provision of temporary septic tank or wastewater collection system for workers</p> <p>Hauling of wastewater from portalets/septic tank by third party shall be covered by a licensed/permit from LGU</p>	100% no discharge of untreated domestic wastewater to nearby bodies of water and underground
Potential siltation of nearby drainage system/ water bodies due to soil erosion	<p>Provision of drainage systems to minimize and control infiltration of sediments to the nearby water bodies</p> <p>Provision of an easement from water bodies at least three (3) meters in urban areas, twenty (20) meters in agricultural areas, and forty (40) meters in forest areas in compliance to the Water Code of the Philippines. Transfer to condition</p> <p>Spoils shall be stockpiled on flat areas and away from the adjacent access roads, drainage routes and nearby water body</p>	100% compliance to water quality guidelines on TSS and Color

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	Trucks should be thoroughly washed before leaving the project site to avoid the transfer of mud/dirt in the road	
Generation of dust from site preparation	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 adequately always covered with tarpaulin canvass or jute sacks	100% compliance with RA 8749
Generation of noise due to operation of construction	Equip mufflers and silencers to heavy equipment facilities for construction	100% Noise within standard (NPCC MC 002 Series of 1980)
Generation of spoils such as excess fill materials from grading and excavation activities	Excess spoils to be hauled by third party hauler for proper disposal	100% of excess spoils collected/hailed
Generation of hazardous waste	Collection and treatment of hazardous wastes by DENR accredited third-party provider	
B. Operational Phase		
Pollution of surface water from untreated process wastewater	Provision of adequate Wastewater Treatment Facility with the following treatment: <input type="checkbox"/> Primary (e.g. sedimentation pond, aeration basin, skimmer etc.) <input type="checkbox"/> Secondary (e.g. coagulation and flocculation tanks, activated sludge) <input type="checkbox"/> Tertiary (e.g. treatment, ozonation, chlorination, etc.) (optional) The WTF shall be provided with a flow meter and appropriate and accessible sampling stations Zero Discharge maybe be adopted or re-use of the treated wastewater for flushing toilets and plants watering	100% conformance to DENR effluent standards (RA 9275) and prohibitions of DAO 2016-08

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	Provision of a facility for Online transmission of effluent data to EMB RO (if necessary)	
Generation of domestic wastewater	<p>Provision of sewage treatment plant with capacity based on the total personnel/workers in the plant</p> <ul style="list-style-type: none"> <input type="checkbox"/> 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) <input type="checkbox"/> Wastewater treatment facility (for more than 212 occupants – DILG MC 2019-62) <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>	100% conformance to DENR effluent standards (RA 9275) and prohibitions of DAO 2016-08
Potential flooding due to heavy rains	<p>Use appropriate design for project facilities including appropriate drainage mechanism considering the existing local drainage system</p> <p>Regularly remove debris and other materials that may obstruct water flow</p>	100% compliance to water quality guidelines on TSS and Color
Generation of noise from delivery trucks	<p>Use of mufflers, silencer, and exhaust pipe</p> <p>Implement appropriate operating hours and vehicle traffic</p>	100% noise within standard
Generation of gas emissions from point sources	<p>Use any of the following:</p> <p>Biomass:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Water Scrubber <p>Bunker</p> <ul style="list-style-type: none"> <input type="checkbox"/> Cyclone and Water Scrubber 	100% compliance with DENR emission standards (RA 8749)

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c. Generation of obnoxious/unpleasant odor (FOR SLAUGHTERHOUSE/ DRESSING PLANT)	<p>Implementation of good housekeeping and sanitation inside the facility shall be maintained at all times.</p> <p>Provision of mortality pit for dead livestock disposal in a safe and sanitary condition.</p> <p>Strictly enforce good housekeeping practices</p> <p>Use environment-friendly deodorizer or odor masking substances</p> <p>Use sprays with natural/microbial disinfectants</p>	
Generation of solid wastes (e.g. food packaging scraps/rejects, expired raw materials/ product rejects/ products returned by customers) and domestic solid waste	<p>Provision of Materials Recovery Facility (MRF)</p> <p>Segregation of wastes with proper labelling, and wastes materials manifest indicating the volume of waste and date of collection/ segregation</p> <p>Hauling of solid 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)</p> <p>Compost materials (if any) shall be made available to the community for distribution through its Corporate Social Responsibility (CSR)</p>	100% compliant to RA 9003
Generation of offal, feathers and waste from processing (for dressing plant)	<p>Provision of Rendering Plant duly equipped with appropriate pollution control installation for odor, if applicable</p> <p>Proper storage and regular hauling of waste by a third-party contractor</p>	100% compliance with RA 8749 and no complaint
Generation of hazardous waste(eg. used oil from motorpool, mfg plant,	Provision of storage facility/area compliant to the provision of DAO 2013-22	100% compliant to RA 6969

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oil/grease from skimmer/grease/trap, busted fluorescent bulb, used batteries etc.)	Collection and treatment of hazardous wastes by DENR accredited third-party provider	
Toxic chemicals spillage and contamination	Usage and storage shall be in accordance to the Material Safety Data Sheet (MSDS).	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: <ul style="list-style-type: none"> ☑ Temperature ☑ pH ☑ BOD ☑ Total Suspended Solids 	100% compliance with DENR effluent standards (RA 9275); (i.e.DAO 2016-08 and DAO 2021-19)