

FOR SUBDIVISIONS
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 (Clearing and Grubbing), Delivery of Construction Materials and Construction of Roads and Drainage systems, Housing Units/ Commercial Area/ Institutional Area, Water Supply System		
Potential siltation of nearby bodies of water due to soil erosion	<ul style="list-style-type: none"> • Provision of sediment/silt control measures such as sediment/silt traps, slope stabilization, etc. • Stockpile areas shall be positioned away from drainage and runoff routes • Temporary silt traps/ponds shall be set-up around soil piles and drainage canal shall be provided to divert runoff water from soil piles and for possible siltation of the existing drainage routes, adjacent agricultural areas and nearby water body. Preservation of natural drainage shall be undertaken and shall not be condemned or if disturbed shall be automatically replaced by constructing or incorporating it in the design of the drainage facility of the subdivision; 	100% compliance with RA 9275
Degradation of 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)</i></p>	100% conformance to DENR standards and compliance with RA 9275

	<p><i>Amending Administrative Order 111 Series of 1991)</i></p> <p>Siphoning and collection of sewage from portalets shall be done twice a week.</p> <ul style="list-style-type: none"> • Provision of hygienic septic tank or wastewater collection system for workers • Hauling of wastewater from portalets by third party service provider shall be covered by a license/permit from LGU and with valid Discharge Permit for wastewater treatment facility 	
Generation of dust from site preparation/construction site or from transport of construction/excavated materials by delivery trucks	<ul style="list-style-type: none"> • Maintain wet access roads by water sprinkling along haul roads and active construction areas at least twice a day at a rate of 5 liters per square meter unpaved road especially during dry season • Set project vehicle speed limit to 30kph • Trucks used for transporting construction materials should be fully covered, and shall be thoroughly washed before leaving from the project site to avoid the transfer of mud/dirt in the road 	<p>100% no dust generation</p> <p>100% compliance with RA 8749</p>
Noise pollution from delivery trucks	Use of mufflers and exhaust silencers	100% Noise within standard (NPCC MC 002 Series of 1980)
Generation of noise from heavy equipment	<ul style="list-style-type: none"> • Use of mufflers and exhaust silencers 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 • Limit operation of noise-generating equipment/construction activities during peak hours 	100% Noise within standards (NPCC MC 002 Series of 1980)

Generation of spoils such as excess fill materials from grading and excavation activities	<ul style="list-style-type: none"> • Use of spoils as fill materials in lower areas within the project premises • Unused spoils shall be hauled by third party hauler with approved permit/clearance from LGU 	100% of excess spoils collected/hailed
Generation of construction debris and other solid wastes	<ul style="list-style-type: none"> • Segregation of wastes and provision of temporary waste storage facility/area in compliance with RA 9003 before disposal and hauling by 3rd party accredited/recognized by LGU 	100% compliance with RA 9003
<p>Generation of used oil, paint, batteries, and other hazardous materials</p> <p>Contamination of soil and groundwater due to hazardous wastes (HW) generation, leakage of oil & grease from vehicles and heavy equipment operation</p>	<ul style="list-style-type: none"> • Proper segregation and containment of HW in safe, secured & well-ventilated storage areas with proper labelling/placards in accordance with prescribed labels/symbols per HW material classification under DENR AO 2004-36 • Collection of hazardous wastes by DENR-accredited 3rd party service provider • Preventive maintenance of vehicles and heavy equipment with proper handling of fuels, oils & lubricants to prevent oil spills 	100% compliance with RA 6969

B. Operational Phase

B.1 Operation of commercial area, institutional area and occupied housing units

Generation of domestic wastewater	<p>Provision of adequate Wastewater Treatment Facility (Sewage Treatment Plant) to treat the collected wastewater, whichever is applicable:</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</p>	<p>100% conformance to effluent standards</p> <p>100% conformance to DENR standards and compliance with RA 9275</p>
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	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	
Degradation of air quality due to use of generator set <i>(if any)</i>	<ul style="list-style-type: none"> Regular maintenance of pollution control equipment 	100% compliance with RA 8749
Generation of domestic wastes	<ul style="list-style-type: none"> Construction of centralized Material Recovery Facility (MRF) provided with properly-labelled waste receptacles Hauling of domestic solid waste by LGU or third party hauler with permit/clearance from LGU for proper disposal 	100% compliance with RA 9003
Generation of hazardous wastes	<ul style="list-style-type: none"> Proper segregation and containment of HW in safe, secured & well-ventilated storage areas with proper labelling/placards in accordance with prescribed labels/symbols Collection of hazardous wastes by DENR-accredited 3rd party service provider 	100% compliance with 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 681): <ul style="list-style-type: none"> <input checked="" type="checkbox"/> BOD <input checked="" type="checkbox"/> Fecal Coliform <input checked="" type="checkbox"/> Ammonia <input checked="" type="checkbox"/> Nitrate <input checked="" type="checkbox"/> Phosphate <input checked="" type="checkbox"/> Oil and Grease <input checked="" type="checkbox"/> Surfactants 	100% compliance with DENR effluent standards (RA 9275); (i.e.DAO 2016-08 and DAO 2021-19)