FOR MINOR DAM 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/Site Clearing					
Generation of spoils	 Spoil materials shall be hauled by third party hauler 	100% no spoil materials will be left unattended			
Dust emission from site preparation activities	 Sprinkling of water at least once a day along the access road and project area Impose speed limits in the construction area 	100% no dust generation			
Potential siltation of nearby bodies of water due to surface water run-off	Provision of engineering and/or environmental measures to control the rate of erosion and siltation	100% prevention of siltation that might be brought by the site development			
A.2 Blasting activity for the removal of obstruction in the project site and in the development of the dam foundaction (if applicable)					
Ground shaking and potential accidents due to flyrocks	Blasting activities should be done during daytime only. Controlled blasting operation shall be implemented to minimize ground vibration, air blast and potentially dangerous flyrocks. Sirens shall be sounded before and after blasting to announce start and end of blasting	100% noise within standard			
Generation of spoils/blasted materials	Materials generated shall be collected by DENR accredited third party hauler	100% no spoil materials will be left unattended			
A.3 Construction of Dam (Excavation for dam foundation, Filling of concrete, etc.) and construction of support facilities such as Office buildings, access roads, motorpool, etc.					
Generation of solid wastes	 Provision and maintenance of Materials Recovery Facility Implement recovery re-use and recycling of waste materials Provide receptacles / bins for solid wastes Composting of Organic Wastes 	100% compliance with RA 9003			

Degradation of surface water quality due to contamination from domestic wastewater Increased siltation due to project activities	 Provision of portalets for construction workers 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) 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) Provision of temporary septic tank or wastewater collection system for workers Collection of wastewater from portalets/septic tanks by third party shall be covered by a licensed/permit from LGU and with valid Discharge Permit for the wastewater treatment facility Set up silt trap/settling ponds to minimize downstream siltation Provision of barriers (such as aggregates, rocks) to minimize siltation during the cofferdam construction Provision of appropriate soil erosion control and slope protection measures (e.g. contour farming, hedgerow planting, etc.) considering the natural hazards and climate projections in the area Stabilization of embankment with grasses or other soil cover 	100% no discharge of domestic wastewater to nearby bodies of water 100% compliance with RA 9275
Water contamination due to oil and grease leak from heavy equipment operation	 Regular inspection and proper maintenance of heavy equipment Fuel and oil storage areas to be located (twenty) 20 meters away from any watercourses 	100% compliance with RA 9275
Generation of hazardous wastes such as used oil, used batteries, contaminated rags, etc.	 Provision of a Hazardous Waste Storage Area with proper labeling, segregation, and storage of wastes Transport, treatment, and disposal of hazardous wastes by DENR-accredited third-party contractors 	100% compliance with RA 6969

Noise pollution due to	• Use of mufflers and exhaust silencers	100% compliance			
operation of heavy	• All workers must be equipped with	to NPCC MC 02			
equipment	PPEs	Series of 1980			
B. Operation Phase	B. Operation Phase				
Operation and Maintenance of the Dam and Support Facilities					
Generation of solid	• Provision and maintenance of	100% compliance			
wastes	Materials Recovery Facility	with RA 9003			
	• Implement recovery re-use and				
	recycling of waste materials				
	 Provide receptacles / bins for solid 				
	wastes				
	Composting of Organic Wastes				
Degradation of surface	Operation and maintenance of septic	100% no			
water quality due to	tank or wastewater collection system	discharge of			
contamination from	tank of wastewater concention system	domestic			
domestic wastewater		wastewater to			
domestic wastewater					
		nearby bodies of			
Naiss and Institute days to	II C	water			
Noise pollution due to	Use of mufflers and exhaust silencers	100% Noise			
operation of heavy	• All workers must be equipped with	within standard			
equipment during silt	PPEs				
removal		1000/			
Generation of effluents	 Monitoring of the following significant 	100% compliance			
due to wastewater	effluent quality parameters:	with DENR			
generation		effluent			
	☑ Total Suspended Solids	standards (RA			
		9275); (i.e.DAO			
		2016-08 and			
		DAO 2021-19)			