

Environmental Impact Statement (EIS) Executive Summary for the Public

A. DESCRIPTION OF THE PROJECT

INFORMATION ABOUT THE PROJECT

Name of the Project : CEMENT FINISHING PLANT PROJECT

Location of the Project: Barangay Lower Irasan, Municipality of Manuel A. Roxas, Province of Zamboanga Del Norte

Type of the Project : Cement Grinding and Mixing Project

PROJECT COMPONENTS:

The project has granted an Environmental Compliance Certificate (ECC) for the 50,000 Metric Tons per year on June 7, 2016. Since there is a potential demand for the cement materials for the increase in the production capacity to 1,200,000 Metric Tons per year.

The application of the ECC covers the 1,200,000 Metric Tons per Year includes the following components:

Facilities	Covered by existing ECC			Proposed Expansion		
	No. of units	Area (sq.m)/ Capacity	Specification/ Description/ Remarks	No. of units	Area (sqm)/ Capacity	Specification/ Description/Remarks
MAJOR COMPONENTS						
Horizontal Ball Mill	1	40 MT/hr	Equipment for clinker grinding	3	240 MT/hr	One (1) with 40MT/hr capacity and two (2) units with 100 MT/hr capacity each
Raw Material Storage Facility	1	1,500 sq.m	Includes storage of gypsum, pozzolana and clinker	2	4,500 sq.m	1,500 sq.m for gypsum and pozzolana; 3,000 sq.m for clinker
Cement Silo	4	1,000 tons/silo	Total of 4,000 tons capacity	10	1,000 tons/silo	Total of 10,000 tons capacity
Dust Collector	1	0.5 MT/hr	Filter bag type with about 95% efficiency	3	Up to 1 MT/hr	Same filter bag type
Cement bagging machine	1	50 MT/hr		3	50 MT/hr	Additional machine due to increase in production
Generator Set	1	750 KV		1	750 KV	Standby- In case of power interruption
SUPPORT FACILITIES AND UTILITIES						
Admin Support (Canteen,			One (1) Admin office Bldg., one (1)			One (1) Admin office Bldg., one (1)

Office, Clinic, quarters etc.)	1		canteen, one (1) clinic, twenty-four (24) parking slots, workers barracks, security outpost etc.	1		canteen, one (1) clinic, twenty-four (24) parking slots, workers barracks, security outpost etc.
Water Supply	-	6.5 cu.m/day	Local Water supply	-	12.5 cu.m/day	Local Water supply
Drainage System	-	-	Engineered surface water drainage and management system			Engineered surface water drainage and management system
POLLUTION CONTROL FACILITIES						
Cooling Tower	1	3 cu.m/hr	Close loop system	1	6 cu.m/hr	Close loop system
Solid Waste Management Facility	1	9 sq.m		1	15 sq.m	Primarily intended for domestic solid waste
Toxic and Hazardous Waste Facility	1	9 sq.m		1	15 sq.m	Intended for hazardous waste only
Settling Pond	1	50 cum		1	50 cum	For wastewater treatment and reuse

SIZE OF THE PROJECT

The project is located in a private and titled property with a total land area of 5.2727 hectares and with a total production capacity of 1,200,000 Metric Tons per year.

ALTERNATIVE PROCESS/TECHNOLOGY

The project is an expansion of the production and is no longer considered new application for grinding of pre-cooked cement (clinker), limestone and gypsum products. The process does not involved heating or direct cooking from raw materials such as limestone, etc, thus minimizing the quarry activity. No changes in the process technology and operation is involved.

The preparation of the environmental management and its implementation during construction and operation phase shall be strictly implemented by the company in order to minimize the possible impact to the environment. The following impact management plan is being prepared in all phases of the project:

Key Impact	Proposed Mitigation	Residual Effects
DURING CONSTRUCTION		
THE LAND		
LAND USE COMPATIBILITY	Compatible with land use plan. No mitigation recommended.	No Identified
LOSS OF TERRESTRIAL HABITAT	Implement and introduce planting of local species to attract birds. Landscaping of open areas to restore the plants and vegetation in the area.	Continuous loss of plants and will not promote habitat

DURING OPERATION		
THE WATER		
HYDROLOGIC HAZARD (TSUNAMI, STORM SURGE AND FLOODING)	<p>With the present topography, the depressed areas needs to be elevated or back-filled by about 0.50m and as much as 1.0m with adequate or appropriate drainage facilities such as retaining walls, riprap/gabion or sheet piling along the river bank as seen to be adequate engineering measure to prevent inundation of the site and enhance smooth and speedy out-flow of flood water to near river.</p> <p>An adequate storm drainage and storm wall facility should be provided to prevent local inundation during the rainy season. The drainage system must be able to accommodate and convey the volume of antecedent rainfall (or the amount of rainfall falling within the project area) and the domestic wastewater especially during periods of high rainfall condition.</p> <p>A detailed Early Warning System (EWS) that includes appropriate ways of warning dissemination, proper evacuation routes to safe areas, and plans for evacuation of specific vulnerable parts. Regular exercises of evacuation should be included in the EWS.</p>	<p>Flooding will still experience Damage to property and machines</p>
WATER QUALITY (SURFACE AND MARINE)	<p>Observed legal easement along Tanalan creek and improvement along the sides of the creek shall be done to prevent scouring or side erosion. Conduct quarterly surface water monitoring to determine the quality of the water.</p> <p>Observed salvage zone and easement along the shoreline. Conduct quarterly marine water monitoring to determine the quality of the water.</p> <p>Construction of settling pond for treatment of wastewater and possible reuse.</p> <p>Construct three-chamber septic tank for treatment of domestic wastewater.</p>	<p>Continuous contamination of Surface and marine water</p>
THE AIR		
AIR QUALITY	<p>Regular maintenance of the built-in air pollution control device (dust collector) in the machine. Conduct stack sampling every year. The use of diesel for the grinding machine is expected to emit PM, NOx, CO and SOx.</p> <p>Conduct ambient air quality to the stations identified in Chapter 2 to check the quality of air within the surrounding area.</p>	<p>Continuous emission of PM, NOx, CO and Sox.</p>
CONTRIBUTION TO CLIMATE CHANGE AND GREENHOUSE GAS EMISSION	<p>Fuel switching such as using renewable fuels such as low carbon biofuels and regular vehicle maintenance.</p> <p>Use alternative power source such as solar power and other energy saving lights such as LEDS, etc.</p> <p>Implement tree planting activity.</p>	<p>Contribute to Climate change and continuous gas emission. Increase in power cost.</p>

THE PEOPLE		
SOCIAL DEVELOPMENT PROGRAM EMPLOYMENT	The project will provide employment to local communities Will provide opportunity to earn such as vending, selling and other services Will provide assistance in terms of fishing materials to the local fishermen.	Positive effect to the community

RESOURCE MATERIALS

I. Water Source

The water source for the project is supplied by Roxas Water District for the domestic use and for the cooling machine. Source for the cleaning and maintenance and dust control shall be from the settling pond.

II. Power Source

The power source for the project is supplied by Zamboanga Del Norte Electric Cooperative

In case of power interruption, the project shall be using a 750 KVA standby genset as power source. The generator shall be using a diesel fuel.

RESOURCE ALTERNATIVES

Basically the project adopts the latest technology of compact machine to grind and mix the pre-cooked cement or clinker to produce a cement finishing materials. The technology eliminates emission of smoke or fumes during the process of cooking or heating in a conventional method of producing cement products. Machines shall be purchased outsourced and will only be assembled at the site. Dust is expected during the grinding process but will be mitigated thru its built-in dust collection system. Since the technology involves dry process, water pollution is very minimal, and shall be mitigated thru its proposed retention pond. The area has an existing water line served by Local Water District and will no longer extract water from underground. Since the project process helps prevents the quarry or major land disturbance, land contamination is unlikely to occur.

B. LOCATION OF THE PROJECT

The project is located in Barangay Lower Irasan, Municipality of Manuel A. Roxas, Lalawigan ng Zamboanga Del Norte.

COMPARISON OF ENVIRONMENTAL IMPACTS DUE TO EXPANSION OF CAPACITY

Alternative	Comparison of Environmental Impacts			
	Land	Water	Air	People
Siting	Hazard prone area such as ground shaking and ground rupture	Hazard prone area such as liquefaction, tsunami, and storm surge and flooding	No significant impact	Safety of People/workers due to hazard prone area
Development Design	No significant impact	No significant impact	No significant impact	No significant impact
Process/	No significant	No significant	Dust Pollution	No significant

Technology Option	impact	impact	during grinding and mixing of clinker, gypsum and limestone	impact
Resource Utilization	Other local raw materials such as limestone and gypsum	Competition of water sources	Emission of PM and NO due to use of standby genset during power interruption	No significant impact

C. PROJECT PROPONENT

Name of the Company : PETRA CEMENT, INC.
Office Address : BARRIO LOWER IRASAN, MANUEL A. ROXAS, LALAWIGAN NG ZAMBOANGA DEL NORTE
Authorized Representative : ENGR. GIL CRUZ – VICE PRESIDENT

D. PROJECT IMPLEMENTATION TIMETABLE

	YEAR	START	FINISH
Secure all permit	2018	DENR-EMB – ECC of the expansion capacity-on-going LGU-with Business Permit	End of 2018
Construction Phase	2018	On-going, land development completed, with existing barracks	End of 2018
Operation Phase	2019	First quarter of 2019	Long term

E. APEKTADONG LUGAR

The scope of the study area covered the property area and its primary and secondary impact area. Certain impact that needs to be considered and address such as domestic waste generation, traffic, air pollution and solid wastes derived during the operation phase of the project. The primary impact identified is within the 200-meter perimeter from the edge of the property area and is considered insignificant considering that the project is beside or property bounded by Seaoil on the West for its possible water pollution due to oil spill and leakage, Asphalt Plant and Coconut Oil Mill on the East for possible air pollution due to its emission, but is however considered significant on the North which is the Sulu Sea for possible waste disposal and on the south for possible mud and along the National Highway. The secondary impact area is identified at 1-km from the primary impact area which is considered insignificant impact on air pollution but will give positive impact in terms of livelihood, employment, taxes considering that the community populated area and the government service facilities are located 2-km from the project site.

The secondary impact area is identified as 1km radius from the project site. The secondary impact area is expected to have a socio-economic benefit of the project to the community.

F. IDENTIFIED TAKEHOLDER

There was a Public Consultation/Scoping and a General Assembly conducted for the project. Initial presentation was conducted at the LGU (Municipal and Barangay) where the project is located including the interested parties and stakeholders in the community.

G. OTHER ADDITIONAL INFORMATION

Consultant Preparer	: CENSE TECHNICAL CONSULTANCY SERVICES
Office Address	: 301 B No. 375 MJ Building, Quirino Highway, Quezon City
Representative	: ENGR. VENICE MONTEMAYOR – EIS TEAM HEAD