EPRMP SUMMARY FOR THE PUBLIC (English)

Proposed Cement Plant and Quarry Expansion Project

Calatagan, Batangas

Submitted by:

Advantage Concrete Industries Corporation

(formerly Asturias Industries Inc.)

Submitted to:

Environmental Management Bureau – Central Office

1.0 PROJECT DESCRIPTION

Project Name	Cement Plant and Quarry Operation Expansion Project		
Project Location	**Barangay**	Barangay Baha Barangay Talibayog Barangay Hukay Barangay Carlosa Barangay Encarnacion	
	Municipality	Calatagan	
Type of Project	Mining and Cement Plant Project		
Existing ECC	ECC-CO-1903-0010 granted on July 2, 2019 by EMB-Central Office		
Project Size	**Existing (as per ECC CO-1903-0010)**	**Proposed Additional**	**Total**
	Cement Plant Operation		
	3.0 MMTPY Clinker Production/ 5.0 MMTPY Cement Production	8.5 MMTPY Clinker Production/ 14.2 MMTPY Cement Production	**11.5 MMTPY Clinker Production/ 19.2 MMTPY Cement Production**
	Quarry Operation		
	4.8 MMTPY limestone	14.4 MMTPY limestone	**19.2 MMTPY limestone**
	0.88 MMTPY shale	2.72 MMTPY shale/pozzolan	**3.6 MMTPY shale/pozzolan**
Project Area	**Existing (as per ECC CO-1903-0010)**	**Proposed Additional**	**Total**
	Cement Plant Operation		
	22 hectares	98 hectares	**120 hectares**
	Quarry Areas		
	250 hectares	324 hectares	**574 hectares**

Summary of Major Project Components

Cement Plant Components	Existing Number of Units/ Description/ Specifications/ Capacity	Proposed Number of Units/ Description/ Specifications/ Capacity	Total Number of Units/ Description/ Specifications/ Capacity
Cement Plant Line	2 lines 1.5 MMTPY per line	2 lines (existing) 2.88 MMTPY per line 2 lines (additional) 2.88 MMTPY per line	4 lines 2.88 MMPTY per line
Limestone crushing system	2 x 1500 tph	Increase capacity of each unit from 1,500 tph to 2,000 tph	2 x 2,000 tph
Clay crusher	2 x 400 tph	Increase capacity of each unit from 400 tph to 1,000 tph	2 x 1,000 tph
Limestone Storage	200,000 MT		
Additive Storage	200,000 MT		
Coal Storage	250,000 MT		
Clinker storage	37,000 tons 150,000 tons		
Feed bins for raw grinding	4x 700 MT limestone 4 x 300 MT shale 4 x 350 MT silica 4 x 100 MT pyrite		

Raw mill	2 x 400 tph		4 x 500 tph
Homogenizing silo	2 x 15,000 MT	2 x 20,000 MT (additional) 2 x 20,000 MT (increase existing capacity)	4 x 20,000 MT
Kiln system	2 x 5,000-TPD clinker	2 x 9,000-TPD clinker (additional) 2 x 9,000-TPD clinker (increase existing capacity)	4 x 9,000-TPD clinker
Clinker silo	2 units with capacity of 25,000 MT each and 800 MT for the off-spec clinker storage		25,000 tons
Coal Mill			3 x 100 tph
Feed bins for cement grinding	2 x 400 tons Clinker 2 x 250 tons limestone 2 x 250 tons pozzolan 2 x 200 tons gypsum 2 x 200 tons fly ash	2 x 400 tons Clinker 2 x 250 tons limestone 2 x 250 tons pozzolan 2 x 200 tons gypsum 2 x 200 tons fly ash	4 x 400 tons Clinker 4 x 250 tons pozzolan 4 x 250 tons gypsum 4 x 200 tons fly ash
Cement mill	2 x 300 tph	2 x 500 tph (additional) 2 x 500 tph (increase existing capacity)	4x 500-tph
Cement silo	4 x 15,000 MT	None	4 x 15,000-MT
Roto packer	4 x 100 tph	4 x 120 tph (additional) 4 x 120 tph (increase existing capacity)	8 x 120 tph
Bulk loading facility	2 loading bays	None	2 x 15,000-MT
Co-generation facility with Waste Heat Recovery	150 MW		

Air Pollution Control Facilities

Air Pollution Control Facility	Location	Total Capacity
Bag Filters	Limestone Crusher	135,000.00 m^3/hr
	Additive Crusher	55,000.00 m^3/hr
	Raw Mill	615,000.00 m^3/hr
	Coal Mill	195,000.00 m^3/hr
	Pre-heater	30,400.00 m^3/hr
	Clinker Cooler	605,000.00 m^3/hr
	Clinker Silo	82,000.00 m^3/hr
	Cement grinding	863,450.00 m^3/hr
	Bulk Silo	30,000.00 m^3/hr
	Packhouse	217,300.00 m^3/hr

Water Pollution Control	Siltation Pond	4,356 m^3
	Sewage Treatment Plant	50 m^3/day

Support facilities	• Warehouses • Medical clinic • Fire station • Access roads • Power substation • Plant nursery • Explosive magazine • Guest House • Pier Facility • Rainwater harvesting tank	• Administration building • Parking and truck marshalling areas • Water treatment facility • Water pumps and pipelines facilities • Staff and bunk houses • Motor pool and equipment maintenance facility	• Truck Marshalling Area • Solid and hazardous waste management facilities • Central Control Room (CCR)/Laboratory Building • Shops Area (Electrical, Machine, and Fabrication)

Project Cost	**Php 12,000,000,000**	
Project Schedule	**Cement Plant**	**Target Commercial Production**

	Line 1	March 2024
	Line 2	March 2025
	Line 3	March 2026
	Line 4	March 2027

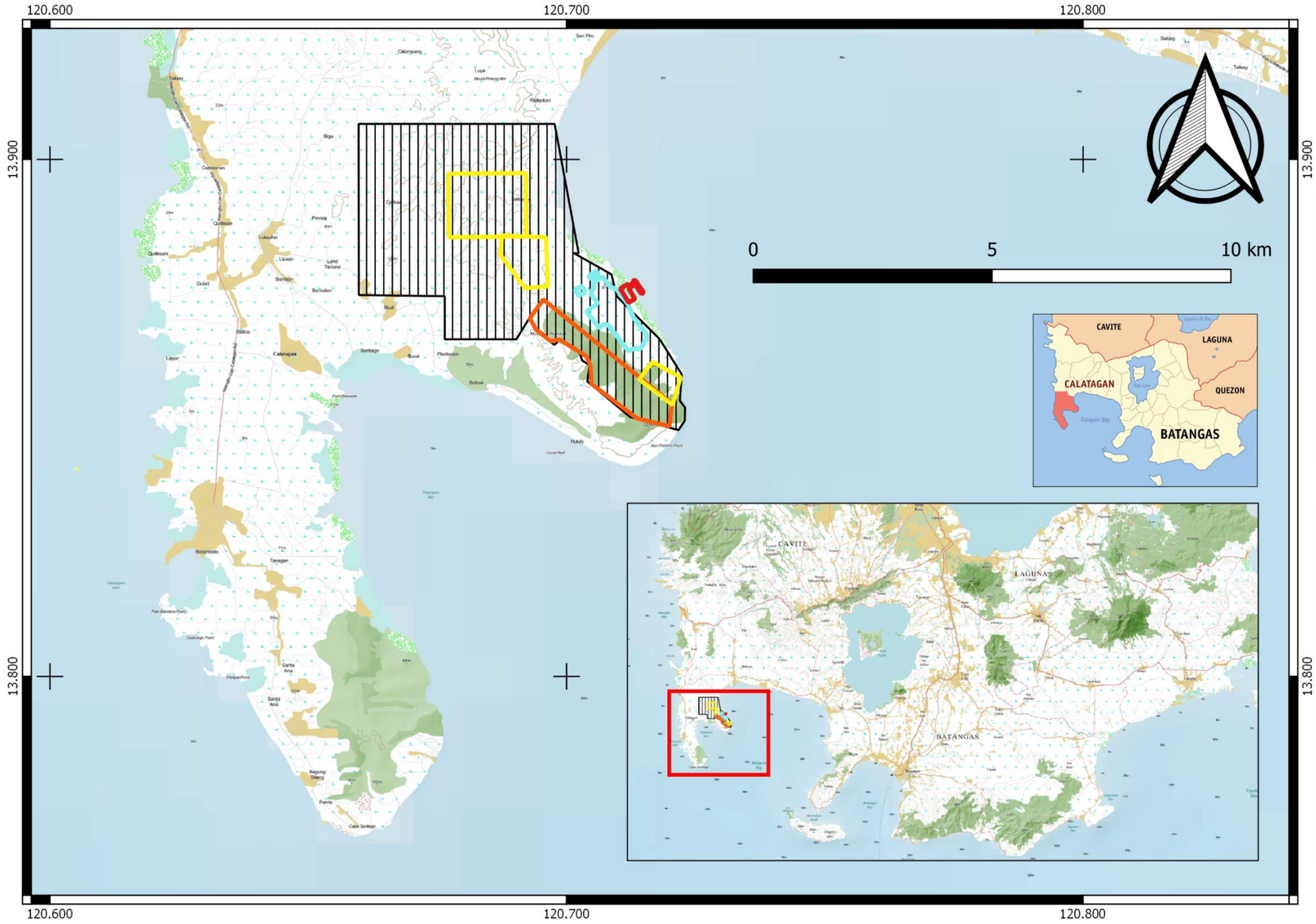
2.0 PROPOSED LOCATION

The cement plant complex, including the proposed expansion area, is located in Barangay Baha, Municipality of Calatagan, Batangas. It is within the 464.08-hectare Industrial Park of ACIC. The area requirement for the cement plant complex will increase from 22 hectares to 120 hectares.

The quarry areas that will be used by ACIC are within MPSA No. 071-97-IV in Calatagan, Batangas. The limestone quarry area is within barangays Baha, Encarnacion and Hukay while the shale/pozzolan quarry areas are within barangays Baha, Talibayog, Carlosa, and Encarnacion. The total quarry area will also be increased from 250 hectares to 574 hectares.

The general location map is shown in **Figure 2-1**.

Figure 2-1: General Location Map of the Proposed Project Site



Legend

- MPSA No. 071-97-IV
- Cement Plant
- Pier
- Shale Quarry
- Limestone Quarry

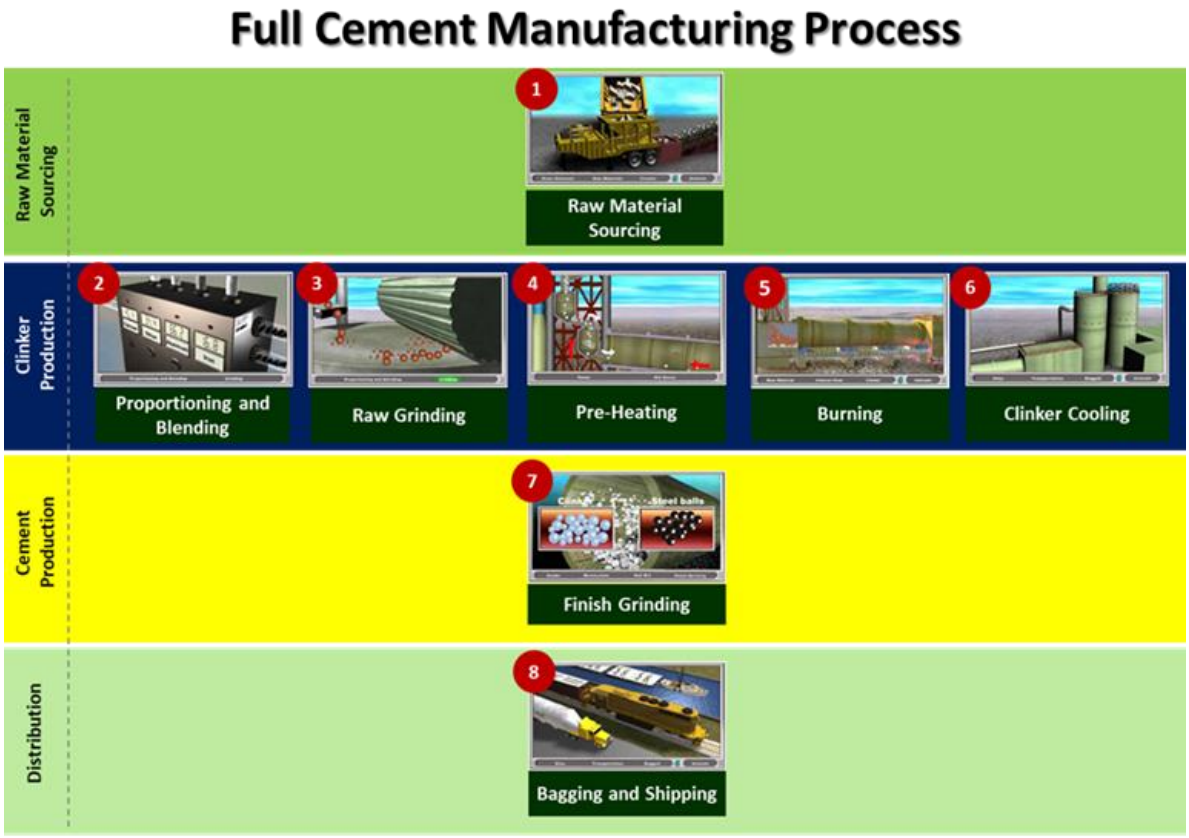
MAP INFORMATION:
Map Scale: 1: 80,000
Map Source/s: ACIC
Base Map: NAMRIA
Geographic Coordinate System: EPSG:4326
Datum: WGS 1984
Mapping Software: QGIS 3.16
Prepared by: LCI Envi Corporation

NOTE: This map has been prepared for the Environmental Impact Assessment (EIA) of Advantage Concrete Industries Corporation's Cement Plant and Quarry Expansion Project. The boundaries reflected herewith are not authoritative.

FIGURE TITLE:
GENERAL LOCATION MAP OF THE PROPOSED PROJECT

PROJECT PROPONENT:	PROJECT TITLE & LOCATION:	REPORT PREPARER:
ADVANTAGE CONCRETE INDUSTRIES CORPORATION	**CEMENT PLANT AND QUARRY EXPANSION PROJECT** Calatagan, Batangas	**LCI ENVI CORPORATION**

3.0 PROCESS/TECHNOLOGY



4.0 RESOURCE UTILIZATION

4.1 WATER SUPPLY AND DEMAND

During the operation of the cement plant, the domestic water requirement is estimated to be 360 m^3/day. This will be used for cleaning, toilet flushing, landscaping and other domestic uses. This will be sourced from deep wells.

The operation of the four cement plant production lines is estimated to consume about 4,400 cubic meters per day of water. Water for the operation of the cement production lines will be supplied by a bulk water supplier.

For the quarry operation, about 120 m^3 per day of water is needed for the constant watering of the quarry road to lessen the dust emissions. This will also be supplied by the bulk water supplier. ACIC may also consider using the effluent from the siltation ponds for the watering of the quarry areas.

Rainwater harvesting facilities will also be constructed within the cement plan as an additional source of water.

4.2 POWER SUPPLY AND DEMAND

The estimated power requirement of the proposed cement plant is about ~140 MW or 35 MW per line. The proponent is considering the following as power source during the operation.

- Batangas Electric Cooperative (BATELCO)
- A co-generation facility with waste heat recovery system will be installed and operated by the proponent that will have a capacity of ~150 MW.

4.3 ALTERNATIVE FUEL

The proponent is committed to improve the cement production in its project by seeking energy efficient processes and sustainable alternative energy sources. They are considering the use of alternative fuels. Possible alternative fuels that can be used for the proposed cement plant include industrial wastes such as: used tires, rubber, paper waste, waste oils, waste wood and paper sludge.

4.4 RAW MATERIALS

The amount of raw materials that the cement plant will be utilizing to produce 11.5 MMTPY of clinker and the additives to produce a maximum cement capacity of up to 19.5 MMTPY are presented in the table below.

Minerals	Mineral Requirement (MMTPY)
Limestone	16.67
Silica	0.84
Shale	2.21
Pozzolan	0.43
Gypsum	0.58
Fly Ash	0.72

5.0 PROJECTED TIMEFRAME

Cement Plant	Target Commercial Production
Line 1	March 2024
Line 2	March 2025
Line 3	March 2026
Line 4	March 2027

6.0 SUMMARY OF MAJOR IMPACTS AND RESIDUAL EFFECTS AFTER MITIGATION

Project Activities	ENVT'L COMPONENT LIKELY TO BE AFFECTED	POTENTIAL IMPACT	OPTIONS FOR PREVENTION OR MITIGATION OR ENHANCEMENT	TARGET EFFICIENCY/PERFORMANCE OF PROPOSED MEASURE
Pre-Construction				
Acquisition of applicable permits and licenses	The People	Disclosure of project components and activities	• Submission of complete requirements for processing of all permits	100% compliance to all applicable required permits and clearances.
Local sourcing of labor	The People	Employment opportunities	• Priority hiring within the host barangays • Local labor requirement to be announced and posted in barangay hall and public areas.	100% compliance with local policy on hiring of workers.
Construction				
Construction of cement plant including other support facilities	The Land	Removal of vegetation as part of the site development	• The removal of vegetation should be limited within the project site. • Secure tree cutting permit from FMB	100% compliance to TCP conditions
	The Land, Water, People	Improper management of construction wastes and other solid wastes that may cause soil contamination, water pollution and may pose health risks to the workers and nearby community.	• Implementation of the solid waste management program by the contractor • Regular transport of construction debris and other solid waste by DENR-accredited haulers.	100% compliance to RA 9003
	The Land, Water, People	Improper management of hazardous wastes that may cause soil contamination, water pollution and may pose health risks to the workers and nearby community.	• Hazardous wastes will be managed in accordance to the requirements of RA 6969 • Provision of on-site temporary storage area within the project site	100% compliance to RA 6969

Project Activities	ENVT'L COMPONENT LIKELY TO BE AFFECTED	POTENTIAL IMPACT	OPTIONS FOR PREVENTION OR MITIGATION OR ENHANCEMENT	TARGET EFFICIENCY/PERFORMANCE OF PROPOSED MEASURE
			• The proper treatment and disposal of the hazardous wastes should be done by a DENR-accredited waste transporter and/or TSD facility.	
	The Water	Clogging of drainage due to surface runoff, siltation or increased sediments	• Establishment of sediment traps, erosion barriers, and silt curtains within the project site • Regular removal of silt and sediments	TSS concentration of the effluent of siltation ponds is compliant to GES
	The Air, People	Dust emissions due to earth-moving activities which may increase ambient TSP within the project site and may pose health hazards to the workers and nearby community	• Regular watering of construction site • Apply canvas cover on construction materials to avoid long exposure to strong winds • Proper PPEs to workers	TSP in ambient air is within DAO 2000-81
Construction of pier facility	Terrestrial ecology	Removal of mangrove species	• Earth balling of mangrove species • Secure earth balling permit from DENR • Limit earth balling of mangrove species within proposed project site only	
	The Water	Coastal water contamination due to accidental oil spills/leaks	• All maintenance activities shall be conducted in designated area with concrete flooring • Proper maintenance of the drainage system within the maintenance area	

Project Activities	ENVT'L COMPONENT LIKELY TO BE AFFECTED	POTENTIAL IMPACT	OPTIONS FOR PREVENTION OR MITIGATION OR ENHANCEMENT	TARGET EFFICIENCY/PERFORMANCE OF PROPOSED MEASURE
			• Implement oil spill management procedures • Use sawdust, rice hulls or coir dusts to absorb the oil spill	
	The Water	Increase in turbidity in Balayan Bay due to surface run-off from construction activities	• Establishment of sediment traps, erosion barriers, and silt curtains within the project site • Regular removal of silt and sediments	
	Marine ecology	Threat to existing marine ecology in Balayan Bay due to siltation from construction activities	• Establishment of sediment traps, erosion barriers, and silt curtains within the project site • Regular removal of silt and sediments	
Use of heavy equipment, during construction works	The Land	Generation of ground vibration	• Apply non-vibration techniques during construction, if possible • Notify nearby residents about use of heavy equipment • For hauling trucks, comply with road weight limit standards to avoid ground vibration	-
	The Land/The Water	Coastal and groundwater contamination due to accidental oil spills/leaks	• All maintenance activities shall be conducted in designated area with concrete flooring • Proper maintenance of the drainage system within the maintenance area	-

Project Activities	ENVT'L COMPONENT LIKELY TO BE AFFECTED	POTENTIAL IMPACT	OPTIONS FOR PREVENTION OR MITIGATION OR ENHANCEMENT	TARGET EFFICIENCY/PERFORMANCE OF PROPOSED MEASURE
			• Implement oil spill management procedures • Use sawdust, rice hulls or coir dusts to absorb the oil spill	
	The Air	Generation of Air Emissions and Noise	• Regular maintenance of heavy equipment • Perform noisy activities during daytime • Establish and maintain green zone to serve as natural noise barrier.	Ambient noise in the project site is within applicable national standards
	The People	Traffic congestion due to influx of delivery trucks	• Coordination with the host municipal and barangay LGUs • Provide early warning devices/road signs • Implement Traffic Management Plan	-
	The People	Road damages due to influx of delivery trucks	• Coordination with the host municipal and barangay LGUs • Follow weight limit of the highway	-
	The People	Road accidents due to influx of delivery trucks	• Follow speed limits • Provide proper training to drivers	-
Influx of workers	The Land, Water, People	Improper management of solid wastes that may cause soil contamination, water pollution and may pose health risks to the workers and nearby community.	• Implementation of a solid waste management plan consistent with RA 9003 • Hauling of solid wastes by accredited haulers	100% compliance to RA 9003

Project Activities	ENVT'L COMPONENT LIKELY TO BE AFFECTED	POTENTIAL IMPACT	OPTIONS FOR PREVENTION OR MITIGATION OR ENHANCEMENT	TARGET EFFICIENCY/PERFORMANCE OF PROPOSED MEASURE
	The Water	Surface water and/or groundwater contamination due to discharge of untreated wastewater	• Provision of temporary sanitation facilities for construction workers (e.g., toilets, showers, etc.) • Regular maintenance of temporary sanitation facilities	1 toilet for every 25 male workers and 1 toilet for every 10 female worker
	The People	Threat to occupational health and safety and transmission of communicable diseases from workers and locals	• Provision of proper training on construction safety • Provision of PPE • Proper supervision by trained professionals during construction activities • Conduct regular medical checkup of the workers • Coordination with Municipal Health Officer (MHO) and barangay health units to address health-related needs of the community • Follow national and local guidelines on mitigating COVID-19 threat • Coordination with barangay officials to ensure peace and order among workers and community members	-
	The People	Employment opportunities	• Priority in hiring should be given to qualified residents of host communities	-
Operation				

Project Activities	ENVT'L COMPONENT LIKELY TO BE AFFECTED	POTENTIAL IMPACT	OPTIONS FOR PREVENTION OR MITIGATION OR ENHANCEMENT	TARGET EFFICIENCY/PERFORMANCE OF PROPOSED MEASURE
Quarrying Operation	The People	Increased occupational health and safety risks because of explosives use Damages on nearby infrastructures due to ground vibration from blasting activities	• Provide proper storage of magazines • Provide extensive training for selected personnel in handling and operating explosives • Issuance of alarms and warning devices prior to and during blasting operations • Control blasting intensity to keep vibration within the safety limit	No accidents due to explosive use No complaints from nearby community on damages due to blasting activities
	The Land	Modification of existing terrain or drainage pattern in the quarry areas	• Maintain the bench slope to 70% for limestone • Implement reforestation of mined-out areas through progressive rehabilitation	-
	The Land, People	Possible landslide or erosion due to quarry which may pose safety risks to the workers and nearby community	• Maintain the bench slope to 70% for limestone • Implementation of soil conservation measures • Maintenance and monitoring of slopes • Implementation of well-planned final landform design during progressive rehabilitation • Implement slope stability measures	-

Project Activities	ENVT'L COMPONENT LIKELY TO BE AFFECTED	POTENTIAL IMPACT	OPTIONS FOR PREVENTION OR MITIGATION OR ENHANCEMENT	TARGET EFFICIENCY/PERFORMANCE OF PROPOSED MEASURE
	The Land, Water	Removal of topsoil in the quarry areas. Improper management of topsoil/overburden may cause siltation of the nearby rivers due to surface run-off	• Implement topsoil management plan that is compliant to DAO 2018-19 • Provision of topsoil storage facility • Immediate backfilling of topsoil during progressive rehabilitation	-
	The Land	Loss of vegetation which cause loss of habitat for the existing fauna species in the quarry areas	• Implement management plans and protection/conservation strategies in the quarry areas • Avoidance of unnecessary tree cutting. Perform earth-balling for trees when necessary • Operate and maintain plant nurseries. • Retain and manage viable habitat units within and surrounding the project's development block areas • Implementation of Mining Forest Program and National Greening Program activities • Conduct trainings, seminars and field demonstrations on company personnel on how to identify, care, propagate these threatened native tree species • Implementation of approved Environmental Protection and Enhancement Program	-

Project Activities	ENVT'L COMPONENT LIKELY TO BE AFFECTED	POTENTIAL IMPACT	OPTIONS FOR PREVENTION OR MITIGATION OR ENHANCEMENT	TARGET EFFICIENCY/PERFORMANCE OF PROPOSED MEASURE
			• Conduct reforestation of mined-out areas through progressive rehabilitation • Develop and maintain buffer zones around the quarry areas.	
	The Ai	Dust generation during quarrying and transport of limestone	• Watering of quarry site and road. • Provision of covers of the trucks. • Develop and maintain buffer zones around the quarry areas to act as natural barriers	TSP of ambient air is within DAO 2000-18
	The Air	Noise generation during blasting	• Quarry operations limited during daytime • Develop and maintain buffer zones around the quarry areas to act as natural barriers	Ambient noise is within the applicable national standards
	The Water	Possible siltation of nearby coastal water and clogging of drainage due to surface runoff from quarry areas	• Operate and maintain sedimentation ponds to capture surface run-off and allow settling of particulates prior to discharge • Design and maintenance of road gradient • Construct and maintain drainage canals along haul roads, along bench toe and canals leading to the sedimentation ponds • Develop and maintain buffer zones around the quarry areas	Results of ambient water monitoring is within DAO 2016-08 and 2021-19 Effluent from the sedimentation ponds is within DAO 2016-08 and 2021-19

Project Activities	ENVT'L COMPONENT LIKELY TO BE AFFECTED	POTENTIAL IMPACT	OPTIONS FOR PREVENTION OR MITIGATION OR ENHANCEMENT	TARGET EFFICIENCY/PERFORMANCE OF PROPOSED MEASURE
			• Implementation of Mining Forest Program • Implementation of National Greening Program activities	
Operation of cement plant facility	The Air	Dust generation during cement processing and packing	• Regular ambient air monitoring • Operate and maintain bag filters • Daily road watering to avoid fugitive emissions from area sources • Assign sweepers to regularly remove dust in areas such as roads, parking areas, and other paved areas. • Implement speed limit in the vicinity of the plant site to avoid re-suspension of dust. • Raw material and product storage areas are enclosed • Raw material conveyor from pier to plant site is enclosed. • Use of pneumatic conveyors for fly-ash transfer • Trucks shall be required to have covers • Enhance and maintain green zones to serve as natural wind and noise barrier.	Results of ambient air quality monitoring is within DAO 2000-18

Project Activities	ENVT'L COMPONENT LIKELY TO BE AFFECTED	POTENTIAL IMPACT	OPTIONS FOR PREVENTION OR MITIGATION OR ENHANCEMENT	TARGET EFFICIENCY/PERFORMANCE OF PROPOSED MEASURE
	The Air	Increased levels of CO, PM, SO_2, NO_x and heavy metals brought about by vehicle and equipment emissions GHG emissions from plant and quarry activities may affect the micro-climate in the area.	• Conduct proper maintenance for the vehicles and equipment • Stacks with enough height will be provided for the proper dispersion of emissions • Continuous Opacity Monitoring Systems (COMS) will be installed in the cement lines. • Conduct regular source emission monitoring and monitoring of ambient air quality • Implement carbon sink programs	Results of ambient air quality monitoring is within DAO 2000-18 Results of emission monitoring is within DAO 2000-18
	The Water	Possible siltation of nearby coastal water and clogging of drainage due to surface runoff from cement plant	• Operate and maintain sedimentation ponds to capture surface run-off and allow settling of particulates prior to discharge. • Conduct regular desiltation of sedimentation ponds • Proper maintenance of rainwater drainage system in the cement plant.	Results of ambient water monitoring is within DAO 2016-08 and 2021-19 Effluent from the sedimentation ponds is within DAO 2016-08 and 2021-19
	The Land, Water, People	Improper management of hazardous wastes that may cause soil contamination, water pollution and may pose health risks to the workers and nearby community.	• Hazardous wastes shall be managed in accordance to the requirements of RA 6969 • Proper maintenance of the on-site temporary storage area within the project site	100% compliance to RA 6969

Project Activities	ENVT'L COMPONENT LIKELY TO BE AFFECTED	POTENTIAL IMPACT	OPTIONS FOR PREVENTION OR MITIGATION OR ENHANCEMENT	TARGET EFFICIENCY/PERFORMANCE OF PROPOSED MEASURE
			• The proper treatment and disposal of the hazardous wastes should be done by a DENR-accredited waste transporter and/or TSD facility.	
	The Land, Water	Soil, coastal and ground water contamination due to oil spills and leaks from equipment	• All maintenance activities shall be conducted in designated area with concrete flooring • Proper maintenance of the drainage system within the maintenance area • Proper maintenance of OWS • Implement oil spill response program • Use sawdust, rice hulls, or coir dusts to absorb the oil spills	Results of ambient water monitoring is within DAO 2016-08 and 2021-19
	The Water	Coastal and ground water contamination due to discharge of untreated wastewater	• Provision of sanitation facilities for workers (e.g. toilets, showers, etc.) • Operate sewage treatment plant	Treated effluent of the STP is within DAO 2016-08 and 2021-19
	The People	Occupational Health and Safety	• Proper training on safety • Provision of PPE	-
Effect of operations on local economy	The People	Increased tax revenue	• Proper registration, tax contribution, land registration and other laws/ordinances shall be followed	-
		Increased employment opportunities	• Priority in hiring of personnel shall be given to residents in the impact areas (host LGUs)	-

Project Activities	ENVT'L COMPONENT LIKELY TO BE AFFECTED	POTENTIAL IMPACT	OPTIONS FOR PREVENTION OR MITIGATION OR ENHANCEMENT	TARGET EFFICIENCY/PERFORMANCE OF PROPOSED MEASURE
Influx of delivery trucks in the area	The People	Traffic congestion due to influx of delivery trucks	• Provision of enough parking spaces for delivery trucks within the project site • Ensure that delivery trucks are parked in the parking space provided • Follow traffic management implemented by LGU.	No complaints regarding delivery trucks
	The People	Road damages due to influx of delivery trucks	• Coordination with the host municipal and barangay LGUs • Follow weight limit of the highway	No complaints regarding delivery trucks
	The People	Road accidents due to influx of delivery trucks	• Follow speed limits • Provide proper training to drivers	No complaints regarding delivery trucks

Operation of the pier facility	The Water	Coastal water contamination from accidental oil spills/leaks during barging operation	• Provision of oil skimmers and oil booms
			• Implementation of oil spill response plan. The oils spill response plan must define the following:
			  ○ Risk areas and activities
			  ○ Response organization structure
			  ○ Procedures for early detection and timely notification of oil spill
			  ○ Spill prevention and mitigation measures
				-

Project Activities	ENVT'L COMPONENT LIKELY TO BE AFFECTED	POTENTIAL IMPACT	OPTIONS FOR PREVENTION OR MITIGATION OR ENHANCEMENT	TARGET EFFICIENCY/PERFORMANCE OF PROPOSED MEASURE
			○ Spill response and management procedures ○ Risk assessment of areas near the affected site ○ Spill containment and recovery procedures • Final clean-up and waste disposal procedures	
	The People	Maritime traffic due to delivery of fuel via barging	• Develop and implement offshore traffic management plan • Coordinate with PCG	-
	The People	Potential collision of vessel and fishing structures during delivery	• Develop and implement offshore traffic management plan • Provide safety measures and warning signs • Route should be designed to avoid fishing structures	-

7.0 IDENTIFIED STAKEHOLDERS

The following project stakeholders have been identified based on the stakeholder groups indicated in Section 5 of DENR Administrative Order No. 2017-15:

a. LGUs in areas where all project facilities are proposed to be constructed/situated and where all operations are proposed to be undertaken

- Municipal LGU of Calatagan, Batangas (host municipality)
- Municipal LGU of Balayan, Batangas (adjacent municipality)
- Barangay LGU of Baha, Calatagan (host barangay)
- Barangay LGU of Talibayog, Calatagan (host barangay)
- Barangay LGU of Palikpikan, Balayan (adjacent barangay)
- Barangay LGU of Luya, Calatagan (adjacent barangay)
- Barangay LGU of Hukay, Calatagan (adjacent barangay)
- Barangay LGU of Sambungan, Calatagan (adjacent barangay)
- Barangay LGU of Carlosa, Calatagan (adjacent barangay)
- Barangay LGU of Encarnacion, Calatagan (adjacent barangay)

b. Government agencies with related mandate on the type of project and its impacts

- DENR CALABARZON
- DENR MGB CALABARZON
- DENR BMB
- Provincial Environmental Management Unit (PEMU) Batangas
- Batangas Provincial Environment and Natural Resources Office (PENRO)

c. Interest groups, preferably those with mission/s specifically related to the type and impacts of the proposed undertaking

- Fisherfolks:
  - Brgy. Baha
  - Brgy. Talibayog
  - Brgy. Palikpikan
  - Brgy. Luya
  - Brgy. hukay
  - Brgy. Sambungan
  - Brgy. Carlosa
  - Brgy. Encarnacion
- Women's Organizations:
  - Brgy. Baha
  - Brgy. Talibayog
  - Brgy. Palikpikan
  - Brgy. Luya
  - Brgy. hukay
  - Brgy. Sambungan
  - Brgy. Encarnacion
- Senior Citizens:
  - Brgy. Talibayog
  - Brgy. Palikpikan

- Brgy. Luya
- Brgy. hukay
- Brgy. Sambungan
- Brgy. Encarnacion

d. Local Institutions

- Brgy. Baha Church Representatives
- Brgy. Talibayog Church Representatives
- Brgy. Palikpikan Church Representatives
- Luya Elementary School
- Brgy. Hukay Church Representatives
- Hukay Elementary School
- Brgy. Sambungan Church Representatives

No “households, business activities, industries that will be displaced” (d) and “people whose socio-economic welfare and cultural heritage are projected to be affected by the project especially vulnerable sectors and indigenous populations” (e) have been identified for the project.

Other stakeholders for the proposed project include the local peace-and-order groups (i.e., PNP, Brgy. Police) and concerned non-government organizations (NGOs).

8.0 PROJECT PROPONENT'S STATEMENT OF COMMITMENT AND CAPABILITY TO IMPLEMENT NECESSARY MEASURES TO PREVENT ADVERSE NEGATIVE IMPACTS

The institutional organization of **ACIC** for the proposed Cement Plant and Quarry Expansion Project is shown in **Figure** 8-1. The organization is formed to achieve the following:

- Economical and safety operations and maintenance of the proposed cement plant components;
- Implementation of the company policies;
- Environmental compliance and sustainability; and
- Promotion and enhancement of the social acceptability of the proposed project.

The institutional organization will involve **ACIC's** top-level management, who is responsible for providing the corporate direction and policies of the company. The policies shall then be disseminated to the department heads and managers for implementation of the company personnel, including those who will be working on the operations of the proposed project.

ACIC will also establish a partnership with relevant government agencies, various stakeholders, and local host communities in relation to the project. This partnership is necessary to maintain a transparent and positive relationship for the proposed project and its stakeholders, as well as to ensure that the environmental protection and enhancement measures are complied with.

The key stakeholders of the proposed project will be identified as the following:

- Municipality of Calatagan, Batangas;
- Brgy. Baha, Brgy. Talibayog, Brgy. Encarnacion, Brgy. Hukay;
- Residents and community organizations that will be affected by the proposed project;
- Various industry organizations;
- Local peace-and-order councils (i.e., PNP, Barangay Police); and
- Other concerned non-government organizations.

ACIC commits to:

- Comply with the conditions that will be stipulated in the ECC and other related environmental laws;
- Foster mutually beneficial partnership and cooperation with the host community;
- Promote sustainable use and responsible development of resources by adopting appropriate technologies;
- Develop livelihood programs and upgrade skills of host community to contribute and enhance the quality of life; and
- Develop training programs for its employees to ensure that they will be continually prepared for the tasks assigned to them.

To manage environmental concerns of the quarry operation, a separate team will be formed. This will be led by the plant manager. Members of the team will be composed of the Mine Environmental Protection and Enhancement Office (MEPEO), Pollution Control Officer, Safety and Health Officer and the Community Relations Officer.

Figure 8-1: Organizational Chart for the Institutional Plan

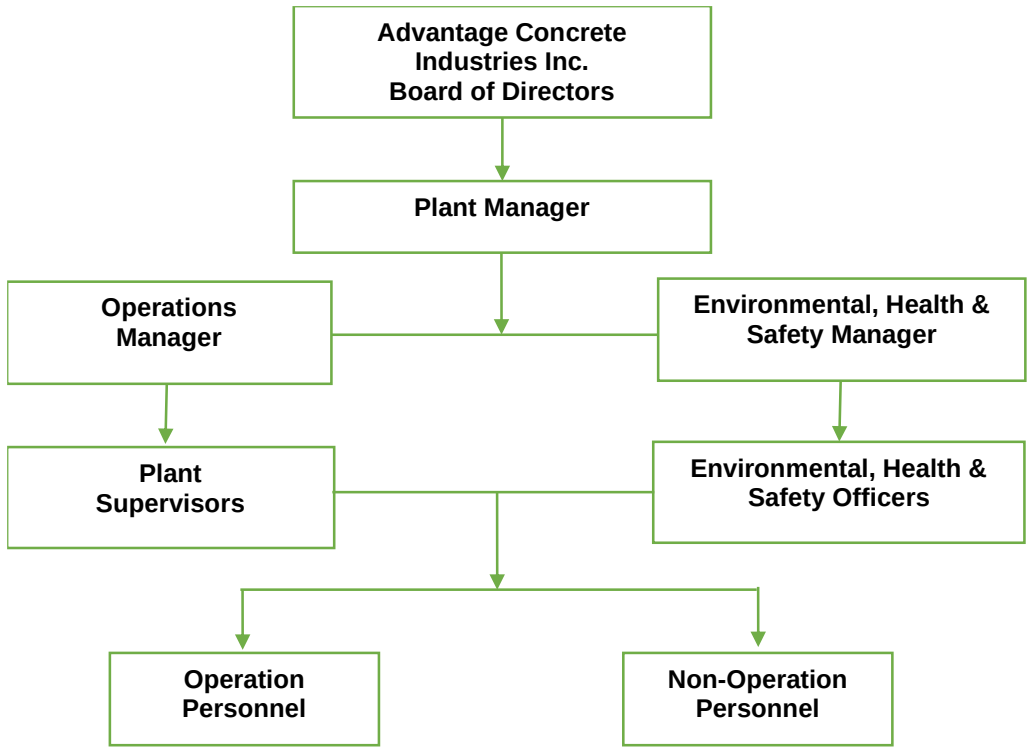


FIGURE TITLE: ORGANIZATIONAL CHART FOR THE INSTITUTIONAL PLAN		
PROJECT PROPONENT: **ADVANTAGE CONCRETE INDUSTRIES CORPORATION**	PROJECT TITLE & LOCATION: **CEMENT PLANT AND QUARRY EXPANSION PROJECT** Calatagan, Batangas	EIA PREPARER: **LCI ENVI CORPORATION**

For more information on ACIC's Proposed Cement Plant and Quarry Expansion project, you may contact the following:

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