PRE - FEASIBILITY REPORT

1.0 EXECUTIVE SUMMARY

M/s. Ambuja Cements Limited has an existing Cement Grinding Unit of 1.5 MTPA capacity at Nalagarh Grinding unit, Village: **Navagraon, P.O. Jajhra, Tehsil - Nalagarh, District - Solan (Himachal Pradesh)**

Now, the company is proposing an enhancement Cement Production Capacity (1.5 MTPA to 2.2 MTPA) of Existing Grinding Unit by Process Optimization at Village- Navagraon, P.O. Jajhra, Tehsil- Nalagarh, District- Solan (Himachal Pradesh)

Table - 1

Salient Features of the Project

S. NO.	PARTICULARS	DETAILS
A.	*Nature & Size of the Project*	Proposed Enhancement in Cement Production Capacity (1.5 MTPA to 2.2 MTPA) of Existing Grinding Unit by Process Optimization at Village- Navagraon, P.O. Jajhra, Tehsil- Nalagarh, District- Solan (Himachal Pradesh) by M/s. Ambuja Cements Limited (Unit: Nalagarh)
B.	*Category of the Project*	As per EIA Notification dated 14th Sept., 2006, as amended from time to time; the project falls under Category "B", Project or Activity '3(b)'; but since, the inter-state boundary of Himachal Pradesh and Punjab falls within 10 Km radius of the plant site, therefore, the General Condition (iv) is applicable to the proposed enhancement project; thus, the project has been considered as Category 'A' Project.
C.	*Location Details*	
	Village	Navagraon
	P.O.	Jajhra
	Tehsil	Nalagarh
	District	Solan
	State	Himachal Pradesh
	Latitude	31°06'39.21" N to 31°07'3.72" N
	Longitude	76°38'20.19" E to 76°38'50.63" E
	Toposheet No.	53A/12
D.	*Area Details*	
	Total Plant Area	29.09 ha
	Greenbelt / Plantation Area (ha)	10.3 ha (i.e. approx. 35 % of total plant area has already been developed under greenbelt/plantation; same will be maintained & enhanced in future.
E.	*Environmental Setting Details (with approximate aerial distance & direction from the plant site)*	
1.	Nearest Town / City	Nalagarh (9.5 Km in ESE direction)
2.	Nearest National Highway / State	○ NH - 21 A (2.5 Km in NE direction)

S. NO.	PARTICULARS	DETAILS		
	Highway	o NH - 21 (3.0 km in SW direction)		
3.	Nearest Railway Station	Bharatgarh (4.5 Km in West direction)		
4.	Nearest Airport	Chandigarh (50 Km in SSE direction)		
5.	National Parks, Wildlife Sanctuaries, Biosphere Reserves within 10 Km radius	No National Park, Wildlife Sanctuary, Biosphere Reserve exists within 10 Km radius of the plant site.		
6.	Reserve Forests (RF) / Protected Forests (PF) within 10 Km radius	o Hatra PF (0.7 Km in SE direction) o Sobal PF (5.0 Km in ESE direction) o Aduwal PF (5.5 Km in ENE direction) o Khobla PF (6.5 Km in East direction) o Ratwari PF (7.0 Km in ENE direction) o Rakh Palasi PF (8.0 Km in South direction) o Chikni Palasra PF (8.0 Km in SE direction) o Rajwaen PF (8.5 Km in NE direction) o Bir Palasi PF (9.0 Km in SSW direction) o Sihl PF (9.5 Km in NE direction) o Dhangoh PF (9.5 Km in NE direction)		
7.	Water Bodies (within 10 Km radius)	o Satluj River (6.0 Km in WSW direction) o Sirsa Nadi (7.0 km in SW direction) o Hydel channel (3.5 km in West direction) o Kanahan Nala (8.5 kmin SSW direction) o Kundlu ki Khad (1.5 km in North direction) o Lotan Khad (4.0 km in West direction) o Luhund Khad (7.5 km in NNW direction)		
8.	Seismic Zone	Zone - IV [as per IS 1893 (Part-1): 2002]		
F.	*Cost Details*			
	Total Cost of the Enhancement Project	NIL		
	Cost for Environment Management Plan	o Capital Cost - NIL o Recurring Cost - Rs. 80 Lacs / annum.		
G.	*Basic Requirements for the project*	*Existing*	*Additional for proposed enhancement*	*Total after proposed enhancement*
	Water Requirement (KLD)	400	Nil	400
		Source: Ground water		
	Power Requirement (MW)	9.0	Nil	9.0
		Source: Himachal Pradesh State Electricity Board		
	Man Power Requirement	69	Nil	69

2.0 INTRODUCTION OF THE PROJECT/ BACKGROUND INFORMATION

(i) Identification of Project and Project Proponent

M/s. Ambuja Cements Limited (ACL), a part of a global conglomerate Holcim, popularly known as "Ambuja Cement" is one of India's leading cement manufacturers. Ambuja Cement has always been in the forefront to undertake environmental safeguard and improvement initiatives in all units and facilities.

ACL has an excellent track record with respect to productivity, energy conservation, quality control and environmental pollution control. ACL has won a number of National Awards for all these parameters.

Ambuja Cement has grown dynamically over the past decade. Its current cement capacity is 27.25 Million Tons. The Company has five integrated cement manufacturing plants and eight cement grinding units across the country. It is the first Indian cement manufacturer to build a captive port with three terminals along the country's western coastline to facilitate timely, cost effective and environmentally cleaner shipments of bulk cement to its customers. The Company has its own fleet of ships. All units of ACL are certified to Environment Management System (ISO -14001).

(ii) Brief description of nature of the project

M/s. Ambuja Cements Limited has an existing Cement Grinding Unit of 1.5 MTPA capacity at Nalagarh Grinding unit, Village: Navagraon, P.O. Jajhra, Tehsil- Nalagarh, District- Solan (Himachal Pradesh)

Environmental Clearance for the same has been obtained from MoEF, New Delhi vide letter no. F. No. J-11011/173/2008-IA II (I) dated 22nd Aug., 2008.

Now, the company is proposing an enhancement in Cement Production Capacity (1.5 MTPA to 2.2 MTPA) of Existing Grinding Unit by Process Optimization at Village- Navagraon, P.O. Jajhra, Tehsil- Nalagarh, District- Solan (Himachal Pradesh).

Details of the products with capacities are given in the table below:

S. No.	Product	Existing Capacity (MTPA)	Additional Capacity (MTPA)	Total capacity after proposed enhancement (MTPA)
1.	Cement (PPC/OPC)	1.5	0.7	2.2

Screening Category: As per EIA Notification dated 14th Sept., 2006, as amended from time to time; the project falls under Category "B", Project or Activity '3(b)'; but since, the inter-state boundary of Himachal Pradesh and Punjab falls within 10 Km radius of the plant site, therefore, the General Condition (iv) is applicable to the proposed enhancement project; thus, the project has been

considered as Category 'A' Project.

(iii) Need for the project and its importance to the country and or region

Indian cement industry is large, growing and with consumption of 185kg/capita/yr in 2011 (compared to global average of ~300 kg/capita/yr) the country itself has the capacity to demand significantly more cement as it develops.

Now with the government of India giving push to various infrastructure projects, housing facilities and road networks, the cement industry in India is currently growing at an enviable pace and further growth in the Indian cement industry is expected in the coming years. Therefore, there is an urgent need to increase the production capacity in the country.

The Location of the grinding units is governed by market demand of various types of cements in the area and availability from local clinker production or from surplus neighbouring states. Punjab is deficit state in availability of main raw material, Limestone & gypsum for manufacturing of cement and shortfall in demand is met through supplies from cement plants of nearby states. It is amply clear from above that there exists an imbalance between availability and demand.

Therefore, to bridge the gap, the company has decided to enhance the existing production project to cater the increasing demand of Cement in the country and region of Himachal Pradesh and Punjab.

(iv) Demand-Supply Gap

India's cement demand is expected to reach 550-600 MTPA by 2025. Demand - Supply projection for cement on National and State basis reveals that there exists an imbalance between availability and demand of cement particularly in southern and eastern region. Under these circumstances to bridge the gap, Ambuja Cement Limited has proposed to enhance the Cement production capacity of existing Grinding unit at Navagraon, P.O - Jhajra (Himachal Pradesh).

(v) Import vs. Indigenous Production

Imports are not feasible. Cement produced in the state will be consumed domestically.

(vi) Export Possibility

No cement export is envisaged

(vii) Domestic / Export Markets

The proposed cement production will cater to the cement demands in the Northern region and particularly in the states of Himachal Pradesh, Punjab, Haryana, J&K and Delhi.

(viii) Employment Generation (Direct and Indirect) due to the project

Indirect employment will be generated due to the project. **Existing manpower is 69 persons; n**o additional manpower is required for the proposed enhancement. However, employment opportunities are certainly going to improve indirectly.

3.0 PROJECT DESCRIPTION

(i) Type of Project including interlinked and independent projects, if any.

Ambuja Cement Limited is proposing an enhancement of Cement Grinding Unit from 1.5 to 2.2 MTPA at Village: Navagraon, P.O. - Jajhra, Tehsil - Nalagarh, District - Solan (Himachal Pradesh)

Interlinked Projects:

Existing Clinkerization Unit (2.6 MTPA) at Village - Rauri, Tehsil - Arki, District - Solan (Himachal Pradesh)

Environmental Clearance for the same has been obtained from MoEFCC, New Delhi vide letter no. J-11011/986/2008-IA-II(I) dated 15th September 2015;

Existing Cement Plant (2.6 MTPA) at Village - Suli, Tehsil - Arki, District - Solan (Himachal Pradesh)

Environmental Clearance for the same has been obtained from MoEF, New Delhi vide letter no. J-11011/792/2007-IA II(I) dated 29th February 2008.

Independent Projects: There is no independent project.

(ii) Location (map showing general location, specific location, and project boundary & project site layout) with coordinates

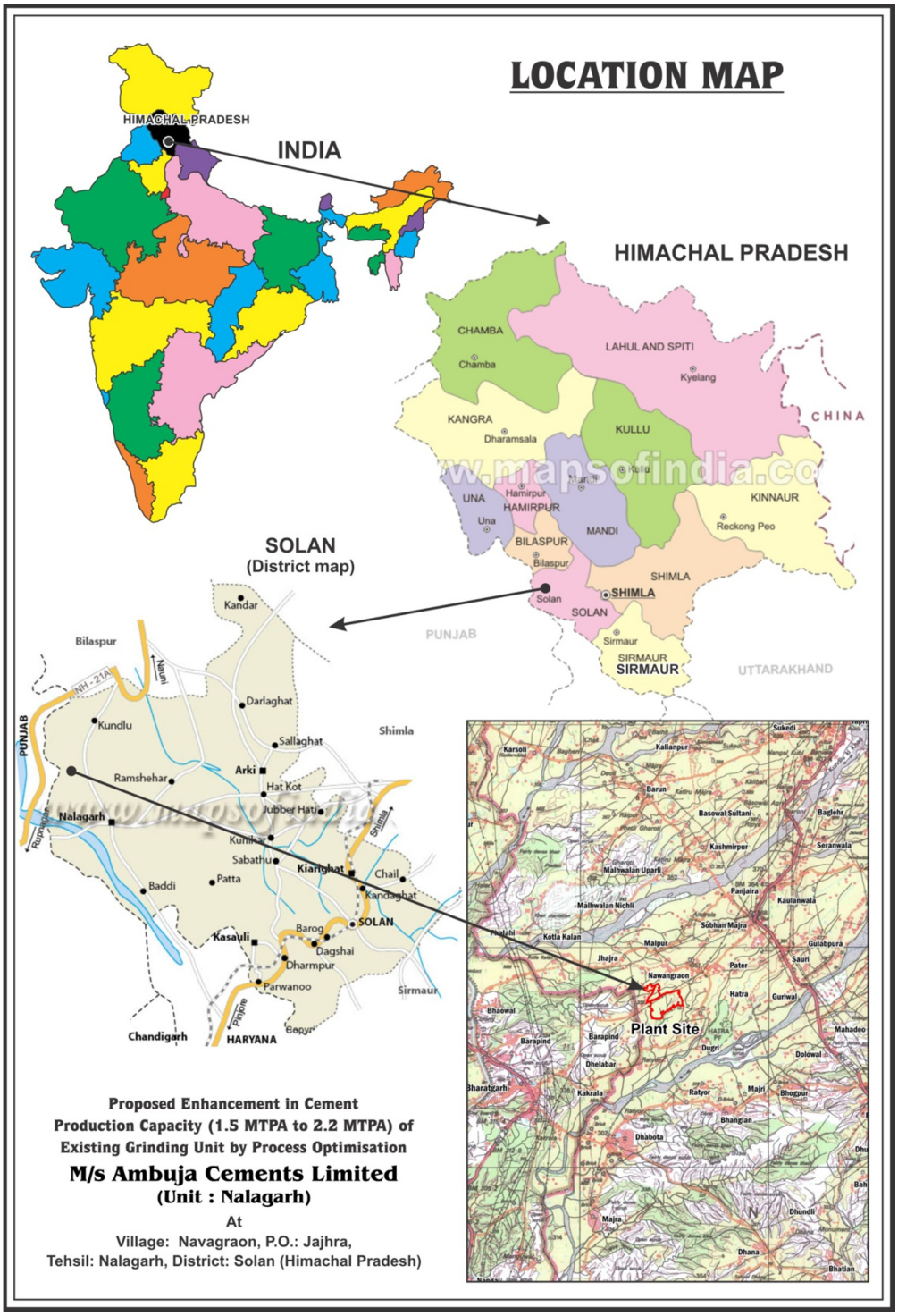


Figure 1: Location Map

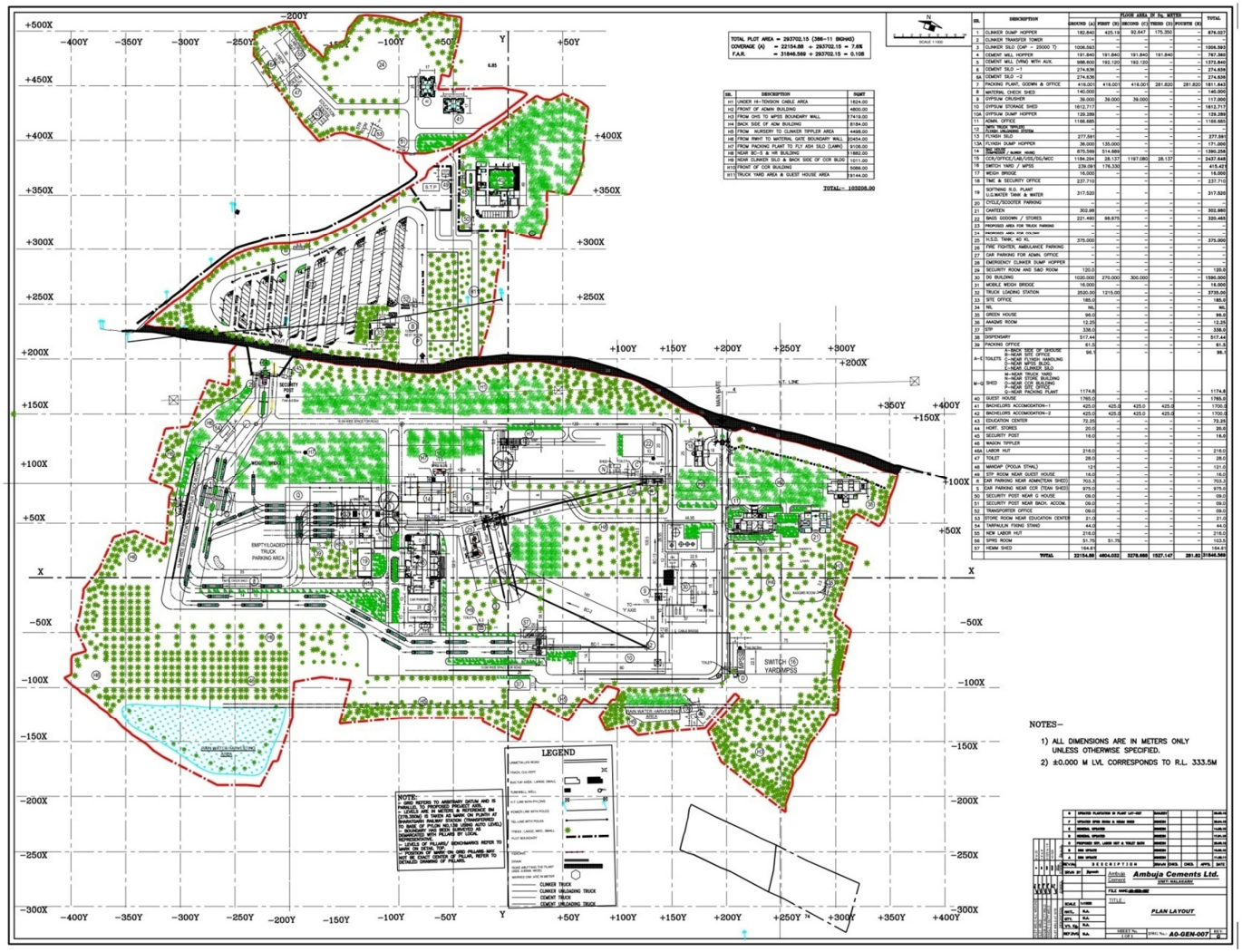


Figure 2: Plant Layout

(iii) Key Plan

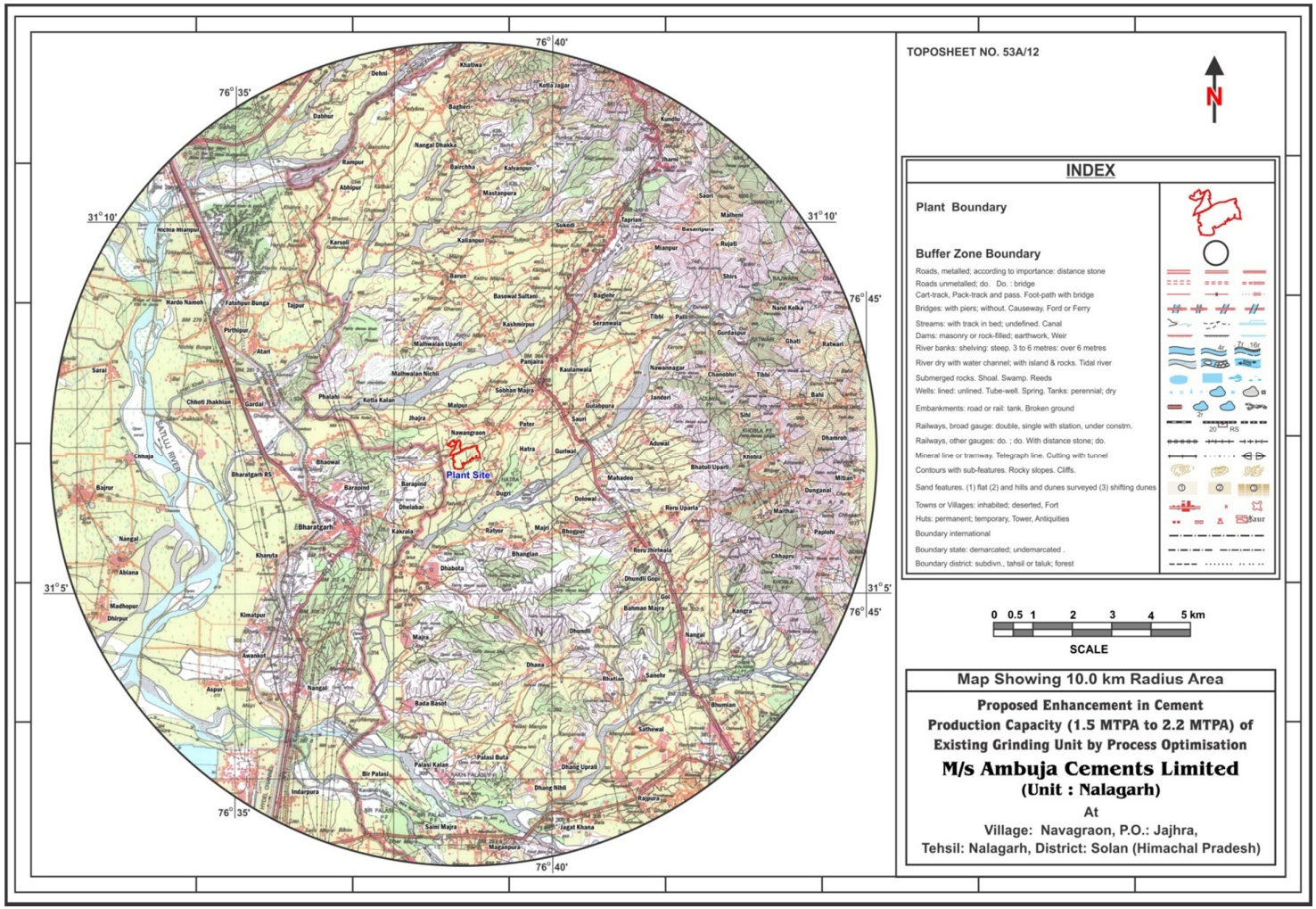


Figure 3: Key Plan

(iv) Details of alternative sites consideration and basis of selecting the proposed site, particularly the environmental considerations gone into should be highlighted.

The proposed enhancement will be carried out within the existing plant premises by process optimization, hence, no alternative site has been considered.

(v) Size or magnitude of operation

Proposed Enhancement in Cement Production Capacity (1.5 MTPA to 2.2 MTPA) of Existing Grinding Unit by Process Optimization at Village- Navagraon, P.O. Jajhra, Tehsil- Nalagarh, District- Solan (Himachal Pradesh).

(vi) Project description with process details (a schematic diagram/ flow chart showing the project layout, components of the project etc. should be given)

Project Description

S. No.	Product	Existing Capacity (MTPA)	Additional Capacity (MTPA)	Total capacity after proposed enhancement (MTPA)
1.	Cement (PPC/OPC)	1.5	0.7	2.2

Process Details

The manufacturing process comprises of:

Clinker handling

Flyash handling

Gypsum storage & handling

Cement production and storage

Cement packing and dispatch.

The manufacturing process details are given below:

Clinker handling: Clinker is being received at plant site by road and at site unloaded through Tipplers and conveyed to Clinker Silo through covered conveyor belt. From the silo, clinker is being conveyed to mill hopper by a combination of extraction equipment and belt conveyors.

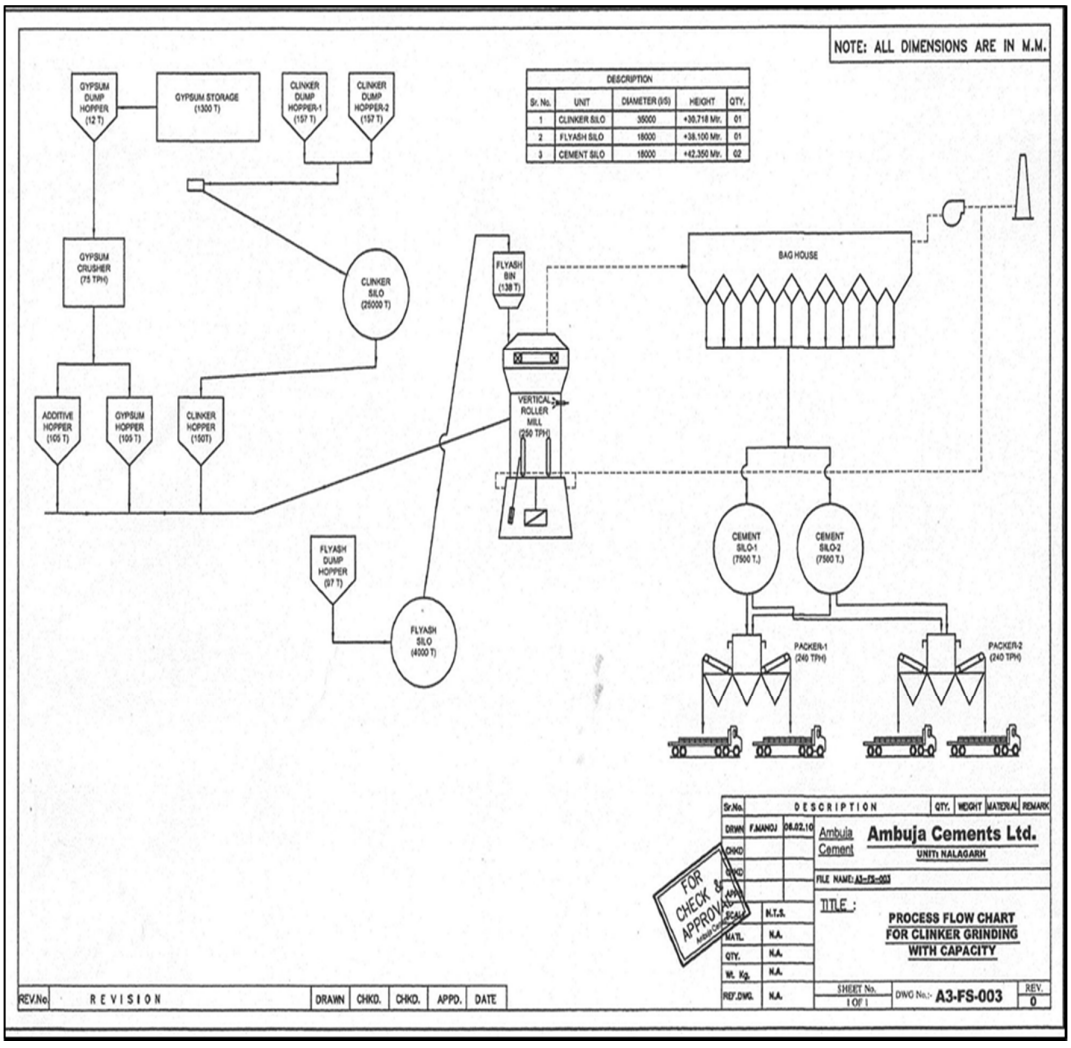
Fly ash handling: Fly ash from source is being transported through bulkers and closed body trucks. Fly ash from bulkers is fed into silo / Cement Mill (VRM) through bucket elevator whereas from the closed body trucks, it is unloaded through tippler equipped with Bag Filter to prevent any dust emission during unloading and fed into silo through bucket elevator. Fly Ash extraction from silo is done with the arrangement directly installed just below the silo and fed to cement mill.

Gypsum storage & handling: Gypsum received by road is unloaded on ground and stored in a covered shed. Gypsum is being handled by JCB and fed to ground level hopper for further conveying to Mill hopper through covered conveyor belts.

Cement Production: For PPC Production Clinker, Flyash and Gypsum is grounded in VRM and for OPC Clinker and Gypsum are grounded in VRM. In VRM, there are six rollers (three as masters and the other three as supporting). The discharge from Mill is being lifted by the fan and fed to the Bag House. Product from the Bag House is being collected through air slide and further transported to the Cement Silos by the system of air slides and elevator.

Hot Air Generator: Hot air required for pre-heating the VRM (Cement mill) only. This will be generated from hot air generator. Furnace Oil shall be used as fuel.

Cement Packing and Dispatch: Packing of Cement is being / will be done with Rotary electronic packing machines. Loading of packed bags on trucks shall be done by truck loading machines by operators.



Details about different types of Cements are given below:

Product Mix for PPC

S.No.	Component	Proportion, % by weight
1.	Clinker	60 % - 70 %
2.`	Fly ash	30 % - 35 %
3.	Gypsum	5 % - 7%

Product Mix for OPC

S.No.	Component	Proportion, % by weight
1.	Clinker	92 %
2.	Gypsum	8 %

(vii) Raw material required along with estimated quantity, likely source, marketing area of final products, mode of transport of raw material and finished product.

(a) Raw Material Requirement

S. No.	Name of Raw Material	Quantity (TPD)			Source	Distance & Mode of Transportation
		Existing	Additional	Total After Enhancement		
1.	Clinker	0.96	0.4	1.36	Ambuja's Rauri/ Darlaghat Clinkerisation Unit , Himachal Pradesh	Approx. 90 Km, by road
2.	Gypsum	0.10	0.043	0.143	Dabwali	Approx. 250 Km, by road
3.	Fly ash	0.438	0.266	0.704	Guru Govind Singh Thermal Power Plant, Ropar/Rajpura/Bathinda/Hisaar/Talwandi Sabo	25 Km/97 Km/230 Km/ 275 Km/245 Km, by road

(b) Fuel Requirement

S. No.	Name	Quantity			Source	Distance & Mode of Transportation	No. of trips per day & Loading Capacity
		Existing	Additional	Total After Enhancement			
1.	Furnace Oil (FO)	210	Nil	210	IOCL, Panipat	220 km / By Tankers	Furnace Oil (FO)

(c) Marketing Area and Mode of transportation of Final Product

Marketing areas will be in the Northern region and particularly in the states of Himachal Pradesh, Punjab, Haryana, J&K and Delhi**; and the mode of transportation for final product will be by road.**

(viii) Resources optimization/ recycling and reuse envisaged in the project, if any, should be briefly outlined.

- Dust collected from air pollution control equipments is being / will be recycled into the process.
- Water used for cooling is being / will be partially absorbed in the process and/or partially subjected to evaporation and recycling and hence, no wastewater will be discharged from the plant premises.
- Domestic wastewater generated from the plant, guest house etc. is being / will be treated in STP of 55 KLD and the treated water will be utilized for greenbelt development / plantation.

(ix) Availability of water it's source, energy /power requirement and source should be given.

(a) Water Requirement and Source

Existing water requirement is 400 KLD and no additional water will be required for enhancement in the production capacity of existing grinding unit by process optimization. Total water requirement after enhancement project will be 400 KLD.

Source: Groundwater

Water Break-Up

Purpose	Requirement (KLD)			Source
	Existing	Additional	Total after enhancement	
Cement Plant/ Grinding Unit	50	Nil	50	Ground Water
Greenbelt Development / Plantation	250	Nil	250	
Drinking	100	Nil	100	
Total	400	Nil	400	

(b) Power Requirement and Source

Existing power requirement is 9.0 MW and no additional power will be required for proposed enhancement project. Total power requirement after enhancement project will be 9.0 MW, which will be sourced from HPSEB (Himachal Pradesh State Electricity Board).

(x) Quantity of waste to be generated (liquid and solid) and scheme for their management/disposal

- Water used for cooling is being / will be partially absorbed in the process and/or partially subjected to evaporation and recycling and hence, no wastewater will be discharged from the plant premises.
- Domestic wastewater generated from the plant, guest house etc. is being / will be treated in STP of 55 KLD and the treated water will be utilized for greenbelt development / plantation.
- Dust collected from the APCEs is being / will be totally recycled to the process.
- Sludge generated from STP is being / will be used as manure in greenbelt development/ plantation.
- Used oil & grease generated from plant machinery / Gear boxes is being / will be sold to the CPCB authorized recycler.

4.0 SITE ANALYSIS

(i) Connectivity

The site is well connected to NH - 21 A (approx. 2.5 Km in NE direction from the plant site) and NH - 21 (approx. 3.0 km in SW direction). Nearest town is Nalagarh (approx. 9.5 Km in ESE direction from the plant site). Nearest Railway station is Bharatgarh (4.5 km in West direction from the plant site). Nearest Airport, Chandigarh is approx. 50 Km in SSE direction from the plant site. The site is well connected with communication facilities like telephone, fax, wireless and as such, no constraints are envisaged in this aspect as the tehsil and district headquarters are near to the site.

(ii) Land from Land use and Land ownership

Existing plant area is 29.09 ha and the proposed enhancement will be done within the existing premises; hence, no additional land is required for the proposed enhancement project.

(iii) Topography

The topography of the District is mountainous with elevation ranging from 300 meters to 3000 meters from the sea level. The mountain ranges of the district lie on the outer Himalayas and are a part of Shivalik ranges. Doon valley is the most fertile tract in Nalagarh Tehsil. Saproon Valley in Solan Tehsil and Kunihar valley in Arki though small in size, are also fertile.

(iv) Existing land use pattern (agriculture, non-agriculture, forest, water bodies (including area under CRZ)), shortest distances from the periphery of the project to periphery of the forests, national park, wild life sanctuary, eco sensitive areas, water bodies (distance from the HFL of the river), CRZ. In case of notified industrial area, a copy of the Gazette notification should be given

Table - 5
Environmental Settings of the Area

S. NO.	PARTICULARS	DETAILS *(with approximate aerial distance & direction from the plant site)*
1.	Nearest Town / City	Nalagarh (9.0 Km in ESE direction)
2.	Nearest National Highway / State Highway	o NH -21 A (2.5 Km in NE direction) o NH - 21 (3.0 km in SW direction)
3.	Nearest Railway station	Bharatgarh Railway Station (4.5 Km in West direction)
4.	Nearest Airport	Chandigarh Airport (50 Km in SSE direction)
5.	National Parks, Wildlife Sanctuaries, Biosphere Reserves within 10 Km radius	No National Park, Wildlife Sanctuary, Biosphere Reserve exists within 10 Km radius of plant site.
6.	Reserve Forests (RF) / Protected Forests (PF) within 10 Km radius	o Hatra PF (0.7 Km in SE direction) o Sobal PF (5.0 Km in ESE direction) o Aduwal PF (5.5 Km in ENE direction) o Khobla PF (6.5 Km in East direction) o Ratwari PF (7.0 Km in ENE direction) o Rakh Palasi PF (8.0 Km in South direction) o Chikni Palasra PF (8.0 Km in SE direction) o Rajwaen PF (8.5 Km in NE direction) o Bir Palasi PF (9.0 Km in SSW direction) o Sihl PF (9.5 Km in NE direction) o Dhangoh PF (9.5 Km in NE direction)
7.	River / Water Body (within 10 Km radius)	o Satluj River (6.0 Km in WSW direction) o Sirsa Nadi (7.0 km in SW direction) o Hydel channel (3.5 km in West direction) o Kanahan Nala (8.5 kmin SSW direction) o Kundlu ki Khad (1.5 km in North direction) o Lotan Khad (4.0 km in West direction) o Luhund Khad (7.5 km in NNW direction)
8.	Seismic Zone	Zone - IV [as per IS 1893 (Part-1): 2002]

(v) Existing Infrastructure

Total plant area is 29.09 ha and the proposed enhancement will be done within the existing plant premises area by process optimization.

- **Workshop**

  Separate Mechanical and electrical workshops are located to take care of the regular maintenance/ repair jobs in the plant.

- **Machinery stores**

A store building needed for storing tools, spare parts, consumables, etc. is available.

- **Cranes, Monorails and Pulley blocks**

  Adequate sized maintenance cranes, monorails and pulley blocks at all suitable locations at the plant for ease of maintenance and operation.

- **Time and Security office**

  At the entrance of the main plant, a time office and a security office has been constructed.

- **Hospital / Dispensary**

  A 2 bed Hospital with dispensary with first aid facilities has been provided within the unit premises.

- **Weighbridge**

  Electronic weighbridges are available in existing unit to take care of the incoming and outgoing materials in the existing plant premises.

- **Bags go down**

  Space has been provided in the packing plant area for the storage of bags.

- **Parking**

  Adequate parking space has been provided in the unit premises for the parking of vehicles.

(vi) Soil classification

The soils of Nalagarh region is Sandy, Sandy laom, Silty loam and Clay loam. Light rich loam locally known as 'Rusauli' covers the large area and is suited for cultivation of all crops; heavy clay known as 'Dakar' is largely found in the depressions and is mainly used for cultivation of rice. Bhur that contains three fourths sand is found on the higher level covering a small area. Overall soils are well textured and fertile in the area.

(vii) Climatic data from secondary sources

The Climate of the district is sub-tropical. Mean annual temperature is above 25.5 °C. The temperature ranges from 4.7 °C to 33.3°C in winter month and 20.4 °C to 44 °C in summer months. The district receives an annual rainfall of 980 mm. and most of it occurs during the rainy season.

(viii) Social Infrastructure available

Telephone and medical facilities are available in the nearby towns. Almost all the villages in the buffer zone are electrified. L.T. power is being supplied for drawing water from a large number of tube wells sunk around the important village of the buffer zone, for irrigation purpose. Ambuja Cements Limited is also working actively in nearby villages for socio-economic development.

5.0 PLANNING BRIEF

(i) Planning Concept (type of industries, facilities, transportation etc.) Town and country Planning/ Development authority classification.

Existing industry is cement industry. It is a state of the art plant with most modern technology.

Transportation of raw material and final product is being / will be done via existing road and rail network and cement concrete road has been developed within the existing plant premises.

(ii) Population Projection

As the proposed enhancement will be done by process optimization, no additional manpower is required.

(iii) Land use planning (breakup along with green belt etc)

Since, the proposed enhancement will be done within existing plant premises by process optimization, thus no additional land will be required. Out of the total plant area; 10.3 ha (approx. 35 % of the total plant area) has already been developed under greenbelt/ plantation in order to reduce dust and noise pollution levels and to increase aesthetic beauty of the area.

(iv) Assessment of infrastructure demand (Physical & Social)

Ambuja Cements Limited has assessed the demand of infrastructure (Physical & Social) in nearby area of the plant site and development activities are being undertaken under corporate social responsibilities program for rural development initiatives for the upliftment of the nearby communities from time to time.

(v) Amenities/Facilities

M/s. Ambuja Cements Limited has constructed 2 bed hospital with dispensary, staff bus, canteen, dhabha for truckers etc. at the site.

It is proposed to develop the amenities / facilities in nearby area of the plant site as per requirement of local people of the nearby area under corporate social responsibilities programme.

6.0 PROPOSED INFRASTRUCTURE-

(i) Industrial Area (Processing Area)

Total existing plant area is 29.09 ha. Proposed enhancement project will be done within the existing plant premises, therefore, no additional land will be required.

(ii) Residential Area (Non-processing area)

No residential facility is envisaged except Bachelors accommodation, guest house and hutments are provided for the workers.

(iii) Green Belt

10.3 Ha. (approx. 35 % of total plant area) has already been developed under greenbelt / plantation.

(iv) Social Infrastructure

Proposed enhancement project will result in growth of the surrounding areas by increased indirect employment opportunities in the region including ancillary development and supporting infrastructure.

(v) Connectivity

The site is well connected to NH - 21 A (approx. 2.5 Km in NE direction from the plant site) and NH - 21 (approx. 3.0 km in SW direction). Nearest town is Nalagarh (approx. 9.5 Km in ESE direction from the plant site). Nearest Railway station is Bharatgarh (4.5 km in West direction from the plant site). Nearest Airport, Chandigarh is approx. 50 Km in SSE direction from the plant site. The site is well connected with communication facilities like telephone, fax, wireless and as such, no constraints are envisaged in this aspect as the tehsil and district headquarters are near to the site.

(vi) Drinking Water

Existing drinking water requirement is 100 KLD and no additional water will be required for proposed enhancement; thus, total drinking water requirement after enhancement will be 100 KLD, which is being / will be sourced from Groundwater**.**

(vii) Sewage Treatment System

Domestic wastewater generated from plant, guest house etc. is being / will be treated in existing STP of 55 KLD and treated water is being / will be utilized in greenbelt development / plantation.

(viii) Industrial Waste Management

Water used for cooling at various stages of cement manufacturing is being / will be partially subjected to evaporation and partially recycled; hence, no waste water is being discharged from the unit.

(ix) Solid Waste Management

- ✓ Dust collected from various air pollution control equipments is being / will be recycled back to the process.
- ✓ Sludge generated from STP is being / will be used as manure in greenbelt development/ plantation.

(x) Power requirement and source

Existing power requirement is 9.0 MW and no additional power will be required for enhancement project. Total power requirement after proposed enhancement project will be 9.0 MW, which will be sourced from HPSEB.

7.0 REHABILITATION AND RESETTLEMENT (R & R) PLAN

(i) Policy to be adopted (Central/State) in respect of the project affected persons including home oustees, land oustees and landless labourers (a brief outline to be given).

Proposed enhancement will be done within the existing plant premises by process optimization and no additional land is required for the same; hence R & R is not applicable.

8.0 PROJECT SCHEDULE AND COST ESTIMATES

(i) Likely date of start of construction and likely date of completion (time schedule for the project to be given).

The project will start only after obtaining Environmental Clearance and other clearances from statutory authority.

(ii) Estimated project cost along with analysis in term of economic viability of the project.

Total cost of the Project: There is no requirement for investment as the enhancement will be done through process optimization.

Cost for Environment Protection Measures:

- Capital Cost: Rs. Zero Crores
- Recurring Cost/annum: 80 Lacs / annum.

9.0 ANALYSIS OF PROPOSAL (final recommendations)

(i) Financial and social benefits with special emphasis on the benefit to the local people including tribal population, if any, in the area.

Proposed enhancement project will result in growth of the surrounding areas by increasing indirect employment opportunities in the region including ancillary development and supporting infrastructure. Special emphasis on financial and social benefits are being/ will be given to the local people including tribal population, if any, in the area.

Development of social amenities will be in the form of medical facilities, education to underprivileged and creation of self help groups.

Himachal Pradesh state will get revenues in terms of taxes and local people will get indirect employment. Business opportunities for local community will be available like transport of cement to market, fly ash transport from power plant, maintenance & house-keeping contract work etc.