UPDATED FORM – I

For

EXPANSION OF CEMENT PLANT
(By Modernisation of Unit-I, Installation of New Line, Unit-II and 50 MW Coal based Captive Power Plant)

With

CLINKER PRODUCTION from 1.485 MTPA to 5.15 MTPA
(TOR Granted: 1.485 MTPA to 3.485 MTPA)
CEMENT PRODUCTION from 1.65 MTPA to 7.00 MTPA
(TOR Granted: 1.65 MTPA to 5.00 MTPA)
&
Installation of 50 MW Coal based Power Plant
Chilamkur Village, Yerraguntla Mandal,
Y.S.R.Kadapa District, Andhra Pradesh,

By
THE INDIA CEMENTS LIMITED

PREPARED BY

B.S. ENVI-TECH (P) LTD
SECUNDERABAD – 500 017

UPDATED FORM – I

UPDATED FORM 1
(As Per New Notification of Mo.E.F dated 1-12-2009 vide SO 3067 (E))

<table>
<tr><th colspan="3">BASIC INFORMATION</th></tr>
<tr><th>S. No</th><th>Item</th><th>Details</th></tr>
<tr><td>1</td><td>Name of the Project/s</td><td>THE INDIA CEMENTS LIMITED</td></tr>
<tr><td>2</td><td>S. No. in the schedule</td><td>3(b)</td></tr>
<tr><td>3</td><td>Proposed capacity/ area/ length/ tonnage to be handled/ command area/ lease area/ number of wells to be drilled</td><td>Amendment in Terms of Reference
Expansion of Cement Plant
Increase of Production
Clinker : 1.485 to 5.15 MTPA(TOR granted 1.485 to 3.485 MTPA)
Cement: 1.65 to 7.00 MTPA(TOR granted 1.65 to 5.00 MTPA)
Coal based Captive Power Plant; 50 MW (TOR granted-Nil)

TOR GRANTED FOR THE PRODUCTION CAPACITIES (MTPA)
<table>
<tr><th rowspan="2">Cement Plant</th><th colspan="2">Present Approved Capacity as per Earlier EC</th><th colspan="2">Proposed Enhancement</th><th colspan="2">Capacity after Proposed Expansion</th></tr>
<tr><th>Clinker</th><th>Cement</th><th>Clinker</th><th>Cement</th><th>Clinker</th><th>Cement</th></tr>
<tr><td>Unit –I</td><td>1.485</td><td>1.65</td><td>-</td><td>-</td><td>1.485</td><td>1.65</td></tr>
<tr><td>Unit –II</td><td>-</td><td>-</td><td>2.00</td><td>3.35</td><td>2.00</td><td>3.35</td></tr>
<tr><td>Total</td><td>1.485</td><td>1.65</td><td>2.00</td><td>3.35</td><td>3.485</td><td>5.00</td></tr>
</table>
TOR AMENDMENT REQUESTED FOR PRODUCTION CAPACITIES
<table>
<tr><th rowspan="2">Cement Plant</th><th colspan="2">Present Capacity</th><th colspan="2">TOR issued (Capacity after expansion)</th><th colspan="2">TOR Amendment Requested (Capacity after expansion)</th></tr>
<tr><th>Clinker (MTPA)</th><th>Cement</th><th>Clinker (MTPA)</th><th>Cement</th><th>Clinker (MTPA)</th><th>Cement</th></tr>
<tr><td>Unit –I</td><td>1.485</td><td>1.65</td><td>1.485</td><td>1.65</td><td>1.65 (upgradation of of Unit-I</td><td>2.00</td></tr>
<tr><td>Unit –II</td><td>-</td><td>-</td><td>2.00</td><td>3.35</td><td>3.50 (new Unit-II)</td><td>5.00</td></tr>
<tr><td>Total</td><td>1.485</td><td>1.65</td><td>3.485</td><td>5.00</td><td>5.15</td><td>7.00</td></tr>
<tr><td>Coal based Captive Power Plant</td><td colspan="2">Nil</td><td colspan="2">Nil</td><td colspan="2">50 MW Installation of new coal based captive power plant)</td></tr>
</table>
Area: 234.76 Ha(No change in the area.)</td></tr>
<tr><td>4</td><td>New/ expansion/ modernization</td><td>Expansion</td></tr>
<tr><td>5</td><td>Existing capacity/ Area etc.</td><td>Clinker – 1.485 MTPA
Cement – 1.65 MTPA</td></tr>
<tr><td>6</td><td>Category of Project i.e ‘A’ or</td><td>A</td></tr>
</table>

	'B'	
7	Does it attract the general condition? If yes please specify.	No
8	Does it attract the specific condition? If yes please specify.	No
9	Location	
	Plot/ Survey/ Khasra No	**Refer Annexure-1**
	Village	Chilamkur
	Tehsil	Yerraguntla
	District	YSR Kadapa
	State	Andhra Pradesh
10	Nearest railway station/ airport along with distance in Kms.	Kalamala RS – 0.55 km - SE Kadapa Airport – 35.6 km – ESE.
11	Nearest town, city, district head quarters along with distance in kms.	Kadapa – 46.8 km – SE.
12	Village panchayaths, Zilla parishad, Municipal Corporation, Local body (Complete postal addresses with telephone nos to be given)	Chilamkur village in Yerraguntla Mandal, Y.S.R.Kadapa district of Andhra Pradesh.
13	Name of the applicant	M/s. The India Cements Limited
14	Registered address	**The India Cements Limited,** Dhun Building, 827, Anna Salai, Chennai – 600002, Tamil Nadu
15	Address for correspondence	**The India Cements Limited,** Chilamkur- 516310 , Yerraguntla(Mandal), Kadapa(Dist), Andrapradesh.
	Name	**P. Muni Reddy**
	Designation (Owner /Partner/ CEO)	**Joint President(Manufacturing)**

	Address	**The India Cements Limited** Chilamkur , Yerraguntla(Mandal), Kadapa(Dist), Andrapradesh.
	Pincode	516310
	E- mail	munireddy.p@indiacements.co.in
	Telephone no.	08563-276150, 276302 9849456108
	Fax no.	08563-276155
16	Details of Alternative sites examined, if any location of these sites should be shown on a topo sheet.	Not Applicable, as it is an expansion project at the same premises.
17	Interlinked projects	Captive Limestone Mines at Kalamalla & Chilamkur Villages, Yerraguntla Mandal, YSR Kadapa District, Telangana State.
18	Whether separate application of interlinked project has been submitted?	No
19	If yes, date of submission	-
20	If no, reason	-
21	Whether the proposal involves approval/ clearance under: if yes, details of the same and their status to be given. (a) The Forest (Conservation) Act, 1980 (b) The Wild Life (Protection)Act, 1972 (c) The CRZ Notification, 1991	Nil
22	Whether there is any Government Order/ Policy relevant/ relating to the site?	No

23	Forest land involved (hectares)	Nil
24	Whether there is any litigation pending against the project and/or land in which the project is propose to be set up? (a) Name of the court (b) Case No (c) Orders/ directions of the court, if any and its relevance with the proposed project.	Nil

(I) Activity			
Construction, operation or decommissioning of the Project involving actions, which will cause physical changes in the locality (topography, land use, changes in water bodies, etc.)			
S.No.	**Information/Checklist confirmation**	**Yes/No**	**Details thereof (with approximate quantities /rates, wherever possible) with source of information data**
1.1	Permanent or temporary change in land use, land cover or topography including increase in intensity of land use (with respect to local land use plan)	**Yes**	The land in which the present cement plant (under operation) is located is ICL's own land of 234.76 Ha. Installation of new line along with 50 MW Coal based Power Plant will be done within the same premises. No additional land will be required for the proposed expansion.
1.2	Clearance of existing land, vegetation and buildings?	**No**	None
1.3	Creation of new land uses?	**Yes**	The area within the existing Cement complex will be used
1.4	Pre-construction investigations e.g. bore houses, soil testing?	**No**	Not required

1.5	Construction works?	**Yes**	For erecting the new line & CPP
1.6	Demolition works?	**No**	No Demolition works
1.7	Temporary sites used for construction works or housing of construction workers?	**No**	Not required. The present premises can accommodate the temporary workforce.
1.8	Above ground buildings, structures or earthworks including linear structures, cut and fill or excavations	**Yes**	Line – 1 – only upgradation of process equipment Line – II; New kiln, Crusher, Stacker & Reclaimer, Raw mills, Coal mills& Cement mills, Packing section will be installed 50 MW Coal based Power Plant-Boiler,Turbine and other Auxiliaries
1.9	Underground works including mining or tunneling?	**No**	Not applicable
1.10	Reclamation works?	**No**	Not applicable
1.11	Dredging?	**No**	Not applicable
1.12	Offshore structures?	**No**	Not applicable
1.13	Production and manufacturing processes?	**Yes**	**Cement manufacturing Process** 1. Raw material grinding 2. Blending of raw material 3. Coal grinding and fine coal handling 4. Preheating of raw mix in the six stage pre-calciner string-proposed 5. Pyro processing and calcination in the kiln 6. Clinker cooler and storage 7. Cement grinding & packing **Coal based Captive Power Plant;** The power plant is based on CFBC Technology The steam generated in the boiler is impinged on blades of turbine, which rotates. The rotating mechanical energy is converted into Electrical energy through Alternator**.**
1.14	Facilities for storage of goods or materials?	**Yes**	Adequate storage facility for limestone, gypsum, Bauxite and coal under closed sheds; fly ash & clinker in closed silos were provided to meet the requirements of the plant. Good workshop facility both for mechanical and electrical equipment repairs and

			maintenance is existing.
1.15	Facilities for treatment or disposal of solid waste or liquid effluents?	**Yes**	No solid waste will be generated from the cement plant. Flyash generated from Power Plant will be consumed in Cement plant. The solid waste from sewage treatment plant is used as manure in plantation.
1.16	Facilities for long term housing of operational workers?	**No**	Existing Colony meets the purpose for proposed expansion.
1.17	New road, rail or sea traffic during construction or operation?	**No**	Existing road and rail facilities are quite adequate to take care of the expansion activity.
1.18	New road, rail, air waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc?	**No**	Existing road and rail facilities are quite adequate to take care of the expansion activity.
1.19	Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements?	**No**	Not required
1.20	New or diverted transmission lines or pipelines?	**No**	Not required
1.21	Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers?	**No**	Not required
1.22	Stream crossings?	**No**	Not applicable
1.23	Abstraction or transfers of water form ground or surface waters?	**No**	Not required. Additional water requirement is 1000 m^3/day for cement plant and 500m^3/day for Power Plant. making the total water requirement to 1500 m^3/day for expansion phase. This will be met from Mines harvesting water and Penneru river. Present water consumption is 2300 m^3/Day and plant is having permission for water drawl of 4546 m^3/day. Hence additional quantity permission for water drawl is not required

1.24	Changes in water bodies or the land surface affecting drainage or run-off?	**No**	Does not happen.
1.25	Transport of personnel or materials for construction, operation or decommissioning?	**Yes**	During construction
1.26	Long-term dismantling or decommissioning or restoration works?	**No**	Not applicable
1.27	Ongoing activity during decommissioning which could have an impact on the environment?	**No**	Not applicable
1.28	Influx of people to an area in either temporarily or permanently?	**Yes**	Additional manpower will be required at the time of erection & commissioning.
1.29	Introduction of alien species?	**No**	Local species will be planted
1.30	Loss of native species or genetic diversity?	**No**	Nil
1.31	Any other actions?	**No**	None

2. Use of Natural resources for construction or operation of the Project (such as land, water, materials or energy, especially any resources which are non-renewable or in short supply):

S.No.	Information/checklist confirmation	Yes/ No	Details thereof (with approximate quantities /rates, wherever possible) with source of information data
2.1	Land especially undeveloped or agricultural land (ha)	**No**	No additional land is required for new line of cement plant and power plant as they will be located within the existing cement plant expansion complex.
2.2	Water (expected source & competing users) unit : KLD	**Yes**	Additional water requirement is 1000 m^3/day for cement plant and 500m^3/day for Power Plant. making the total water requirement to 1500 m^3/day for expansion phase. This will be met from Mines harvesting water and Penneru river. Present water consumption is 2300 m^3/Day and plant is having permission for water drawl of 4546 m^3/day. Hence additional quantity permission for water drawl is not required

2.3	Minerals (MT)	**Yes**	Limestone – 7.7 Million Tonnes Per Annum. (from Captive Mines)
2.4	Construction material – stone, aggregates, sand / soil (expected source – MT)	**Yes**	Coarse aggregate-50000 m^3 Sand-30000m^3.
2.5	Forests and timber (source – MT)	**No**	None
2.6	Energy including electricity and fuels (source, competing users) Unit: fuel (MT), energy (MW)	**Yes**	The peak power consumption in the ICL Cement plant complex including mine is 22.5 MW. Power requirement is met from Grid. An additional power of 50 MW is required for the proposed expansion project. <u>Existing :</u> Coal for cement plant- 0.25(for Imported coal) million tonnes per annum. <u>For new line:</u> Coal for cement plant- 0.76 (for Imported coal) million tonnes per annum. Source : Imported/SCCL **Power Plant** ; Coal-0.30 Million Tonnes per annum (Indian)/ 0.20 Million Tonnes Per Annum (Imported Coal) Source; Imported /Indian Coal
2.7	Any other natural resources (use appropriate standard units)	**No**	None

3. Use, storage, transport, handling or production of substances or materials, which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health.			
S.No.	**Information/Checklist confirmation**	**Yes/ No**	**Details thereof (with approximate quantities/ rates, wherever possible) with source of information data**
3.1	Use of substances or materials, which are hazardous (as per MSIHC rules) to human health or the environment (flora, fauna, and water supplies)	**No**	None

3.2	Changes in occurrence of disease or affect disease vectors (e.g. insect or water borne diseases)	**No**	Not anticipated
3.3	Affect the welfare of people e.g. by changing living conditions?	**No**	None
3.4	Vulnerable groups of people who could be affected by the project e.g. hospital patients, children, the elderly etc.,	**No**	None
3.5	Any other causes	**No**	None

4. Production of solid wastes during construction or operation or decommissioning (MT/month)			
S.No.	**Information/Checklist confirmation**	**Yes/ No**	**Details thereof (with approximate quantities/ rates, wherever possible) with source of information data**
4.1	Spoil, overburden or mine wastes	**No**	Not Applicable
4.2	Municipal waste (domestic and or commercial wastes)	**No**	Not Applicable
4.3	Hazardous wastes (as per Hazardous Waste Management Rules)	**Yes**	The Hazardous waste like Used oil and Used Lead acid. batteries are disposed to APPCB approved recyclers.
4.4	Other industrial process wastes	**No**	None
4.5	Surplus product	**No**	None
4.6	Sewage sludge or other sludge from effluent treatment	**No**	Not Applicable
4.7	Construction or demolition wastes	**No**	Not Applicable
4.8	Redundant machinery or equipment	**No**	None
4.9	Contaminated soils or other materials	**No**	None
4.10	Agricultural wastes	**No**	None
4.11	Other solid wastes	**No**	None

5. Release of pollutants or any hazardous, toxic or noxious substances to air (kg/hr)			
S.No.	**Information/Checklist confirmation**	**Yes/ No**	**Details thereof (with approximate quantities/ rates, wherever possible) with source of information data**
5.1	Emissions from combustion of fossil fuels from stationary or mobile sources	**Yes**	Emissions are from the kiln and power plant due to burning of coal and also from the vehicles.
5.2	Emissions from production	**Yes**	Dust emissions are envisaged

	processes		from the cement plant. SO_2 and NOx emissions from the kiln and power plant due to burning of coal
5.3	Emissions from materials handling including storage or transport	**Yes**	Fugitive dust during coal and raw material handling.
5.4	Emissions from construction activities including plant and equipment	**No**	None
5.5	Dust or odours from handling of materials including construction materials, sewage and waste	**Yes**	Fugitive dust for short duration
5.6	Emissions from incineration of waste	**No**	None
5.7	Emissions from burning of waste in open air (e.g. slash materials, construction debris)	**No**	None
5.8	Emissions from any other sources	**No**	None

6. Generation of Noise and Vibration, and Emissions of Light and Heat:			
S. No.	**Information/Checklist confirmation**	**Yes/ No**	**Details thereof (with approximate quantities/ rates, wherever possible) with source of information data with source of information data**
6.1	From operation of equipment e.g. engines, ventilation plant, crushers	**Yes**	The equipment in the plant are designed for noise levels not exceeding 90 dB(A). Proper encasement of noise generating sources to be done to control the noise levels below 75 dB(A) at plant boundary.
6.2	From industrial or similar processes	**Yes**	The equipment in the plant are designed for noise levels not exceeding 90 dB(A). Proper encasement of noise generating sources to be done to control the noise levels below 75 dB(A) at plant boundary.
6.3	From construction or demolition	**Yes**	Noise levels of construction machinery will be there for short duration
6.4	From blasting or piling	**No**	None
6.5	From construction or operational traffic	**Yes**	Construction equipment - < 90 dB(A)
6.6	From lighting or cooling systems	**No**	None

6.7	From any other sources	**No**	None

7. Risks of contamination of land or water from releases of pollutants into the ground or into sewers, surface waters, groundwater, coastal waters or the sea:			
S.No.	**Information/Checklist confirmation**	**Yes/ No**	**Details thereof (with approximate quantities/ rates, wherever possible) with source of information data**
7.1	From handling, storage, use or spillage of hazardous materials	**No**	The hazardous materials are stored at earmarked area and disposed to APPCB approved recyclers.
7.2	From discharge of sewage or other effluents to water or the land (expected mode and place of discharge)	**No**	None
7.3	By deposition of pollutants emitted to air into the land or into water.	**No**	All the pollution control equipment will be designed adequately to meet the board norms.
7.4	From any other sources	**No**	None
7.5	Is there a risk of long term build up of pollutants in the environment from these sources?	**No**	None

8. Risk of accidents during construction or operation of the Project, which could affect human health or the environment			
S.No.	**Information/Checklist confirmation**	**Yes/ No**	**Details thereof (with approximate quantities/ rates, wherever possible) with source of information data**
8.1	From explosions, spillages, fires etc from storage, handling, use or production of hazardous substances	**No**	None
8.2	From any other causes	**No**	None
8.3	Could the project be affected by natural disasters causing environmental damage (e.g. floods, earthquakes, landslides, cloudburst etc)?	**No**	None

9. Factors which should be considered (such as consequential development) which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the

locality.			
S. No.	**Information/Checklist confirmation**	**Yes/ No**	**Details thereof (with approximate quantities/ rates, wherever possible) with source of information data**
9.1	Lead to development of supporting facilities, ancillary development or development stimulated by the project which could have impact on the environment e.g.: • Supporting infrastructure (roads, power supply, waste or waste water treatment, etc.) • housing development • extractive industries • supply industries • other	**Yes**	The project brought ➲ Generation of employment and improved standard of living; ➲ Establishment of small and medium scale engineering ancillaries, agro based industries with cascading employment opportunities; ➲ Improved green cover; ➲ Superior communication and transport facilities etc.
9.2	Lead to after-use of the site, which could have an impact on the environment	**Yes**	An aesthetic, pleasant environment with lush greenery and greenbelt will be developed.
9.3	Set a precedent for later developments	**Yes**	Development of good landscape and greenery.
9.4	Have cumulative effects due to proximity to other existing or planned projects with similar effects	**No**	None

(III) Environmental Sensitivity			
S.No.	**Areas**	**Name/ Identity**	**Aerial distance (within 15 km.) Proposed project location boundary**
1	Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value	No	Rajivgandhi National Park at Proddatur - 11.5 Km.
2	Areas which are important or sensitive for ecological reasons - Wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests	Yes	Penneru River – 9.4 km – NNE Pageru River – 9.6 km - SE Pedda Vanka- 0.8 km - SSE

			Penneru River –Third order Stream - 1.5 km – North direction.
3	Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, over wintering, migration	Yes	Niduzuvvi RF – 4.0 km – SE Kosinepalle RF- 2.9 km-NW
4	Inland, coastal, marine or underground waters	No	None
5	State, National boundaries	No	None within 15 km
6	Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas	No	None
7	Defence installations	No	None
8	Densely populated or built-up area	No	None
9	Areas occupied by sensitive man-made land uses (hospitals, schools, places of worship, community facilities)	No	None
10	Areas containing important, high quality or scarce resources (ground water resources, surface resources, forestry, agriculture, fisheries, tourism, minerals)	No	None
11	Areas already subjected to pollution or environmental damage. (those where existing legal environmental standards are exceeded)	No	None
12	Areas susceptible to natural hazard which could cause the project to present environmental problems (earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions)	None	Area falls under Seismically less active zone. i.e., Zone – III.

"I hereby give under taking that the data and information given in the application and enclosures are true to the best of my knowledge and belief and I am aware that if any part of the data and information submitted is found to be false or misleading at any stage, the project will be rejected and clearance given, if any to the project will be revoked at our risk and cost".

Signature of the Applicant (Project proponent/ Authorized signatory)	
Name	P. Muni Reddy
Designation	Joint President (Manufacturing)
Address	**M/s. The India Cements Limited,** Chilamkur- 516310, Yerraguntla(Mandal), Kadapa(Dist), Andrapradesh. munireddy.p@indiacements.co.in Mobile: 9849456108

ANNEXURE – 1

Survey Numbers

Sl. No.	Description of Land - including Nature of Land / Purpose	Extent of Land (only numerals)		Survey No. Reference
1	Plant	1	53	1128/1
	Plant	1	86	1128/2
	Plant	1	01	1128/3
	Plant	2	61	1129/1
	Plant	2	89	1129/2
	Plant	6	21	1130
	Plant	4	30	1131
	Plant	1	66	1132
	Plant	2	16	1133/2
	Plant	1	95	1134
	Plant	1	86	1135
	Plant	7	06	1140
	Plant	0	96	1476
Total		**36**	**06**	
2	Plant	7	95	1067/1
	Plant	2	44	1067/2
	Plant	2	82	1067/3
	Plant	10	98	1069
	Plant	1	21	1139/1
	Plant	1	25	1139/2
	Plant	1	20	1139/3
	Plant	2	60	1139/4
	Plant	2	71	1139/5
	Plant	2	80	1139/6
	Plant	11	14	1141
	Plant	1	93	1142
Total		**49**	**03**	
3	Plant	1	93	1063/1
	Plant	1	63	1063/2
	Plant	2	0	1063/3
	Plant	1	66	1063/4
	Plant	1	80	1063/5
	Plant	1	77	1063/6
	Plant	8	43	1064
	Plant	4	08	1065
	Plant	5	71	1072

Sl. No.	Description of Land - including Nature of Land / Purpose	Extent of Land (only numerals)		Survey No. Reference
	Plant	3	95	1144
	Plant	2	50	1148/1
	Plant	2	50	1148/2
	Plant	5	32	1149
Total		**43**	**28**	
4	Plant	2	88	1145
	Plant	2	71	1146
	Plant	9	01	1147
	Plant	2	25	1150
	Plant	6	15	1151
	Plant	1	90	1152/1
	Plant	5	59	1153
	Plant	14	28	1154
Total		**44**	**77**	
5	Plant	6	04	1136/1
	Plant	6	36	1136/2
	Plant	5	95	1136/3
	Plant	5	04	1137/1A
	Plant	5	04	1137/1B
	Plant	5	06	1137/1C
	Plant	5	10	1137/2
	Plant	4	58	1138/1
	Plant	4	56	1138/2
	Plant	5	06	1156
Total		**52**	**79**	
6	Plant	21	09	1157
	Plant	8	77	1158
	Plant	10	36	1161
Total		**40**	**22**	
Total		**3**	**79**	
7	Plant	1	38	1061/2
	Plant	4	50	1071/2
Total		**5**	**88**	
29	Plant (Kalamala road west side)	0	84	1169
	Plant (Kalamala road west side)	1	98	1170
	Plant (Kalamala road west side)	2	59	1171
	Plant (Kalamala road west side)	3	64	1172
	Plant (Kalamala road west side)	4	97	1173
	Plant (Kalamala road west side)	2	75	1174
	Plant (Kalamala road west side)	1	26	1175/1

Sl. No.	Description of Land - including Nature of Land / Purpose	Extent of Land (only numerals)		Survey No. Reference
	Plant (Kalamala road west side)	1	47	1175/2
	Plant (Kalamala road west side)	2	66	1176
Total		**22**	**16**	
30	Plant (Kalamala road west side)	4	05	1177/1
	Plant (Kalamala road west side)	3	36	1177/2
	Plant (Kalamala road west side)	2	14	1178
	Plant (Kalamala road west side)	5	37	1179/1
	Plant (Kalamala road west side)	1	64	1179/2
	Plant (Kalamala road west side)	2	98	1179/3
	Plant (Kalamala road west side)	3	17	1179/4
	Plant (Kalamala road west side)	3	95	1180/1
	Plant (Kalamala road west side)	3	46	1180/2
	Plant (Kalamala road west side)	4	04	1182/1
	Plant (Kalamala road west side)	3	01	1182/2
	Plant (Kalamala road west side)	4	56	1182/3
	Plant (Kalamala road west side)	4	49	1182/4
Total		**46**	**22**	

REVISED
PRE FEASIBILITY REPORT

FOR

EXPANSION OF CEMENT PLANT

With
Clinker Production from 1.485 MTPA to 5.15 MTPA
Cement Production from 1.65 MTPA to 7.00 MTPA
(By Installation of New Line)
&
Installation of 50 MW Coal Based Captive Power Plant.

At
THE INDIA CEMENTS LIMITED
Chilamkur Village, Yerraguntla Mandal,
Y.S.R.Kadapa District, Andhra Pradesh,

By

THE INDIA CEMENTS LIMITED
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Table of Contents

Figure

Annexures

1.0 EXECUTIVE SUMMARY

M/s The India Cements Limited (ICL) is operating Cement Plant with present production capacity of 1.485 million tonnes per annum (MTPA) of Clinker with 1.65 MTPA of Cement production near Chilamkur village in Yerraguntla Mandal, Y.S.R.Kadapa district of Andhra Pradesh.

ICL has received Environmental Clearance for the present operating capacity vide MoEF letter no. J-11011/ 126/2011-IA, II (1) dt 7.12.2012 (**Annexure-I)**

The current status of various units of **ICL** along with installed production capacities are given below:

OVERVIEW OF PRODUCTION CAPACITIES OF ICL

Cement Plant	(MTPA)	
	Clinker	Cement
Line –I	1.485	1.65

ICL is involved in manufacturing of varieties of Cement viz. Ordinary Portland Cement (OPC), Pozzolona Portland Cement (PPC) & Sulphate Resisting Portland Cement (SRPC).

PRESENT PROPOSAL

ICL had proposed to increase the production capacity of the cement plant i.e Clinker from 1.485 to 3.485 MTPA and cement from 1.65 to 5.00 MTPA in the operating plant located at near Chilamkur village in Yerraguntla Mandal, Y.S.R.Kadapa district of Andhra Pradesh. TOR was issued by MoEFCC vide MoEFCC letter no J-11011/ 126/2011-IA, II (1) dt 18.01.2017 (Proposal NO. IA/AP/IND/59343/2016) (Enclosed as Annexure – II)

Due to market demand, ICL proposes to increase the cement plant capacity i.e clinker from 1.485 to 5.15 MTPA and cement from 1.65 to 7.00 MTPA. Also to provide uninterrupted power supply to the process, it is proposed to install 50 MW coal based captive power plant within the existing cement plant complex of 234.76 Ha. The present proposal is being submitted to MoEFCC for obtaining the amendment in TOR for the proposed change in clinker and cement production and for inclusion of 50 MW coal based thermal power plant. The following table shows the present capacity of the plant, capacity for which TOR was issued and capacity for which TOR amendment is requested

TOR AMENDMENT REQUESTED FOR PRODUCTION CAPACITIES

Cement Plant	**Present Capacity**		**TOR issued (Capacity after expansion)**		**TOR Amendment Requested (Capacity after expansion)**	
	Clinker	**Cement**	**Clinker**	**Cement**	**Clinker**	**Cement**
	(MTPA)		**(MTPA)**		**(MTPA)**	
Unit –I	1.485	1.65	1.485	1.65	1.65 **(upgradation of Unit-I**	2.00
Unit –II	-	-	2.00	3.35	3.50 **(new Unit-II)**	5.00
Total	**1.485**	**1.65**	**3.485**	**5.00**	**5.15**	**7.00**
Coal based Captive Power Plant	Nil		Nil		50 MW Installation of new coal based captive power plant)	

ICL has submitted PFR for which TOR was granted. Due to change in capacities of the plant and inclusion of 50 MW coal based captive power plant, the Revised PFR has been prepared. The subject report presents details of revised production capacities and the 50 MW power plant.

The peak power consumption in the ICL Cement plant complex including mine is 22.5 MW. Power requirement is met from Grid, APGPCL, IEX, TATA power etc. An additional power of 50 MW is required for the proposed expansion project.

The limestone requirement of the proposed clinker enhancement to 5.15 MTPA will increase the limestone requirement from present requirement of 2.00 MTPA to 7.70 MTPA. This additional limestone requirement from the existing captive limestone mine of 602.137 Ha near Chilamkur & Kalamalla Village, Yerraguntla Mandal, Y.S.R.Kadapa district of Andhra Pradesh. The proposal is being submitted to MoEF & CC separately for necessary Environmental Clearance

The present proposal is being submitted to MoEFCC for obtaining the amendment in TOR issued by MoEFCC for the proposed change in clinker and cement production capacities and for inclusion of 50 MW coal based thermal power plant.

The Indian/Imported coal will be used in the power plant

The present water requirement for the plant is 2300 m^3/day and is sourced from Penneru River, Mines harvesting water. Additional Water requirement of the proposed expansion is 1500 m^3/day the same will be met from Penneru River and Mines harvested water.

The project is based on Clinkerization factor of 1.50 on kiln feed basis with specific heat consumption of 700 Kcal/ kg clinker.

Power Plant comprising of 2 CFBC boilers each of 100 TPH capacity will be installed

No solid waste generation from the cement plant or after expansion. Ash (0.105 MTPA (287 t/day)) generated from the proposed Thermal power plant will be utilized in cement plant.

There are no wild life sanctuary, national park, eco-sensitive area within the 10 km radius of the project site. Rajivgandhi National Park is at Proddatur, 11.5 Km away from the plant.

For transporting cement from the cement plant to the market and obtaining raw materials like coal, gypsum and other additives, railway siding is existing.

In the proposed expansion, no wastewater will be generated from the cement plant. Power plant will be based on air cooled condensate system and the wastewater generated from the power plant from boilers and auxiliary cooling will be treated in ETP and reused in the power plant

Greenbelt is maintained in more than 33 % of the total area.

Additional quarter's will be constructed in the existing colony which is having adequate space.

Wastewater generated is only from domestic activities at cement plant and residential colony. A full-fledged sewage treatment plant (STP) is in operation designed for a maximum load of 400 m^3/day. Treated domestic wastewater is 100% reused for greenbelt development within ICL cement plant complex.

Plant expected to be commissioned in 18-24 months from date of commencement of construction

Total capital Investment Cost is INR. 1250 Crores

DETAILS OF CAPTIVE LIMESTONE MINE

Captive limestone mine of extends over an area of 602.137 Ha falling in the jurisdiction of Chilamkur village, Yerraguntla Mandal, Anantapur District Andhra Pradesh. This lease is named as **"COROMANDEL LIMESTONE MINE".**

Limestone requirement for Cement Plant expansion will also be met from Coromandel Limestone mine. The Captive Mining Lease comprises of North (about 260 Ha) and South block (about 342 Ha). A railway track exists between these two blocks. Further, a village road divides the North block into two (eastern and western sides of the road). Statutory safety zones are maintained along these infrastructures in accordance with 'Regulations' and guidelines.

The mineable reserves are estimated as 276.06 million tonnes. Mechanized method of mining is adopted. The limestone produced is crushed and transported to cement plant by conveyor.

Present limestone production of 2.0 MTPA will be increase to 7.7 MTPA.

ICL is adopting opencast mechanized mining which involves deep drilling and blasting for breaking the rock, hydraulic excavators to handle the broken material and loading into 35 T dumpers for transporting the ROM material to crusher.

Drilling operations are presently conducted with 150 mm dia of Atlas Capco BVB-25-10 model drills with compressor of 550 Cfm. Hydraulic excavators with bucket capacity of 3.3m^3 are deployed to load the blasted limestone into Dumpers. The blasted/ excavated limestone is sent to crusher and then to cement plant through conveyor.

Location of cement plant and captive limestone mine are shown in Figures provided in the subsequent paragraphs

2.0 INTRODUCTION OF THE PROJECT/ BACKGROUND INFORMATION

i) Identification of project and project proponent. In case of mining project, a copy of mining lease / letter of intent should be given.

India Cements is one of the leading cement manufacturing companies in India and also a market leader in South India. The Company's vision is to create value on a sustained basis for all stakeholders through lofty standards of transparency, accountability and leadership in cement manufacture.

ICL had proposed to increase the production capacity of the cement plant i.e Clinker from 1.485 to 3.485 MTPA and cement from 1.65 to 5.00 MTPA in the operating plant located near Chilamkur village in Yerraguntla Mandal, Y.S.R.Kadapa district of Andhra Pradesh.

Due to market demand, ICL proposes to increase the cement plant capacity i.e clinker from 1.485 to 5.15 MTPA and cement from 1.65 to 7.00 MTPA. Also to provide uninterrupted power supply to the process, it is proposed to install 50 MW coal based captive power plant within the existing cement plant complex of 234.76 Ha.

ii) Brief description of nature of the project

ICL at present is producing 1.485 MTPA of Clinker & 1.65 MTPA of Cement. ICL now proposes to increase the production capacities by implementing the following:

a) Increase of Clinker production capacity from 1.485 to 1.65 MTPA and cement production capacity from 1.65 to 2.00 MTPA by upgradation of existing line i.e Line – I
b) Installation of new line i.e Line – II of 3.50 MTPA of Clinker and 5.0 MTPA of
c) Installation of 50 MW Coal based Power Plant

Cement Plant	**Present Capacity**		**Proposed capacity**	
	Clinker	**Cement**	**Clinker**	**Cement**
	(MTPA)		**(MTPA)**	
Unit –I	1.485	1.65	1.65 **(upgradation of Unit-I**	2.00
Unit –II	-	-	3.50 **(new Unit-II)**	5.00
Total	**1.485**	**1.65**	**5.15**	**7.00**
Coal based Captive Power Plant	Nil		50 MW Installation of new coal based captive power plant)	

The additional limestone requirement of the proposed expansion will be met from the existing captive limestone mines of ICL located in an area of 602.137 Ha located near Chilamkur village in Yerraguntla Mandal, Y.S.R.Kadapa district of Andhra Pradesh..

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

The cement market has growth potential due to the central government liberalization policies and new schemes for housing, road projects. Cement demand growth is anticipated to be about 9 to 10% increase mainly through road projects (Golden Quadrilateral), Housing Projects (1.3 million houses in rural & 0.7 million in urban areas). Continuous demand for exports to China and other South-East Asian countries along with the increased requirement of the domestic sector have led all the cement manufacturers in the country to plan for increased capacities.

So with a view to capture growing opportunity demand, the management ICL wants to take up the section wise capacity balancing and optimization. The proposed expansion will enable the company to maximize its profitability by optimum utilization of technology, manpower, present infrastructure and capital.

The cost of production will substantially reduce due to power efficient equipment, fuel, financial charges and other fixed overheads on account of large scale economics due to higher volume of production and sales.

It would also enable the company to withstand against the considerable competitive pressure from large-scale units in the country and also to create wider brand loyalty for the product.

The increase of production within the existing plant is based on the following considerations

- Proximity of the site to captive limestone mines and abundant availability of reserves.
- Market demand
- Availability of land – no further land is proposed to be acquired
- Availability of existing infrastructure.

Demand – supply Gap

Now State and Central Governments are providing thrust for infrastructure development and housing to the poor people. Also Govt.

is giving incentives for construction of own houses by the middle class people. Cement is one of the main commodities for construction of structures, houses and infrastructures. Thus continued growth of cement industry is expected for next few decades.

Growth of infrastructure, Irrigation and housing scenario automatically drives the increased requirement of Cement in the market.

v) Imports Vs. Indigenous production

India is self sufficient to meet the demands of the market with the GDP projected at 10 % in the coming decades and in view of the infrastructure.

The end product being cement, the importance of the project is detailed below with respect to cement demand.

India is self sufficient to meet the demands of the market with the GDP projected at 10% in the coming decades and in view of the infrastructure.

vi) Export possibility

No export of cement outside the country is planned.

vii) Domestic / export markets

This new line project is proposed to meet the domestic markets demand.

viii) Employment generation (direct and indirect) due to the project.

Due to new project 500 members of direct & indirect additional manpower will be employed.

3.0 PROJECT DESCRIPTION

i. Type of project including interlinked and interdependent projects, if any

ICL proposes to increase the cement plant capacity i.e clinker from 1.485 to 5.15 MTPA and cement from 1.65 to 7.00 MTPA. Also to provide uninterrupted power supply to the process, it is proposed to install 50 MW coal based captive power plant within the existing cement plant complex of 234.76 Ha.

The additional limestone requirement of the proposed expansion will be met from the existing captive limestone mines of ICL located in an area of 602.137 Ha near Chilamkur village in Yerraguntla Mandal, Y.S.R.Kadapa district of Andhra Pradesh..

ii. Location (map showing general location, specific location, and project boundary & project site layout) with co-ordinates.

The Cement plant is located near Chilamkur village in Yerraguntla Mandal, Y.S.R.Kadapa district of Andhra Pradesh. The center point of the plant falls in 14°39'54.39"North latitude and 78°27'31.91" East longitude with an average altitude of 196 m above msl. The area falls within Survey of India Toposheet no. 57 J/6, [1:50000 scale]

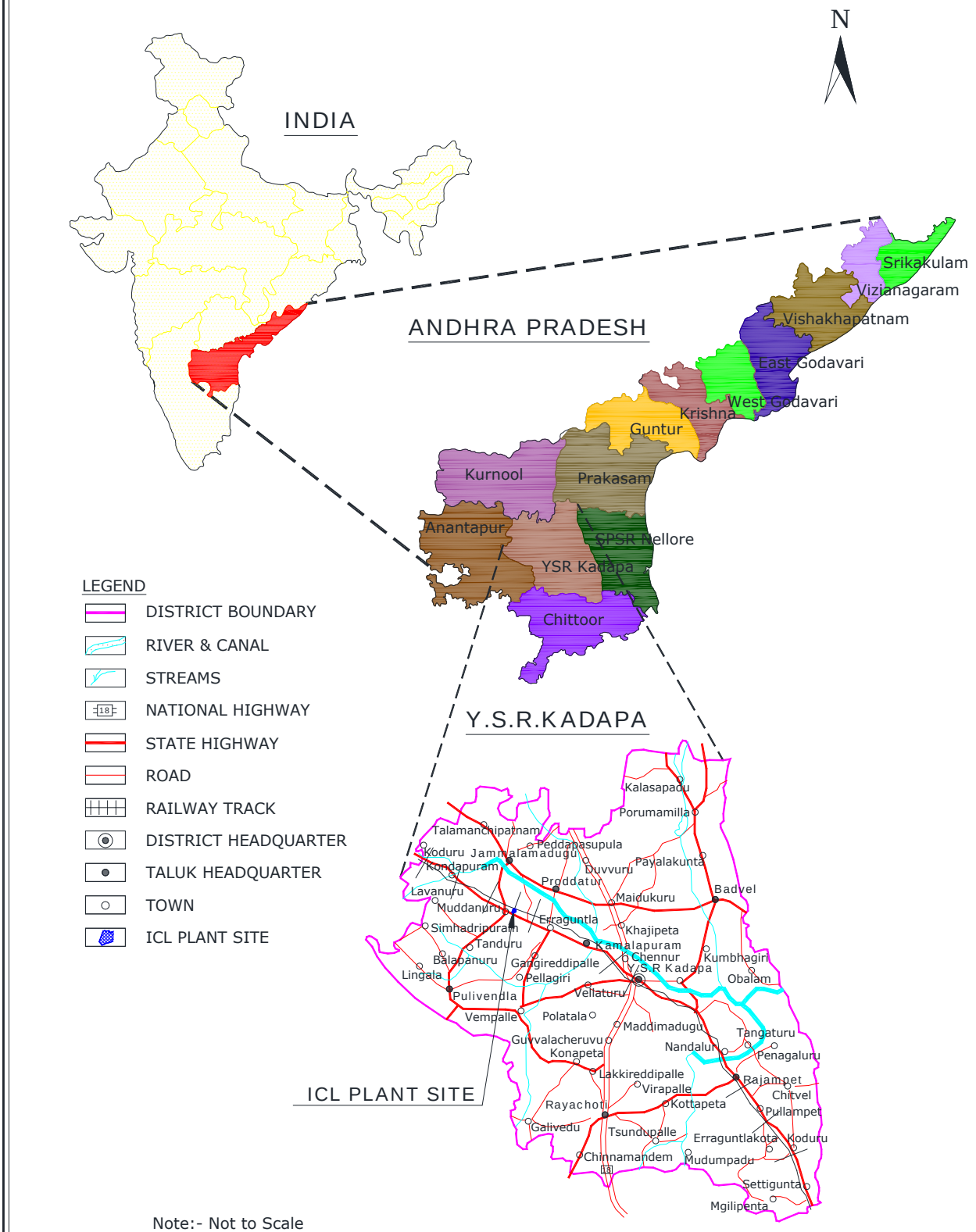
The area is well connected by road and rail. National Highway - NH-18 connecting Chittoor – Kurnool is at 28.6 km in ENE direction to the Plant site.

Fig-1 shows the location map of the Plant Site and captive limestone mine. The key map showing the location of captive mine and the cement plant are shown in **Fig – 2**

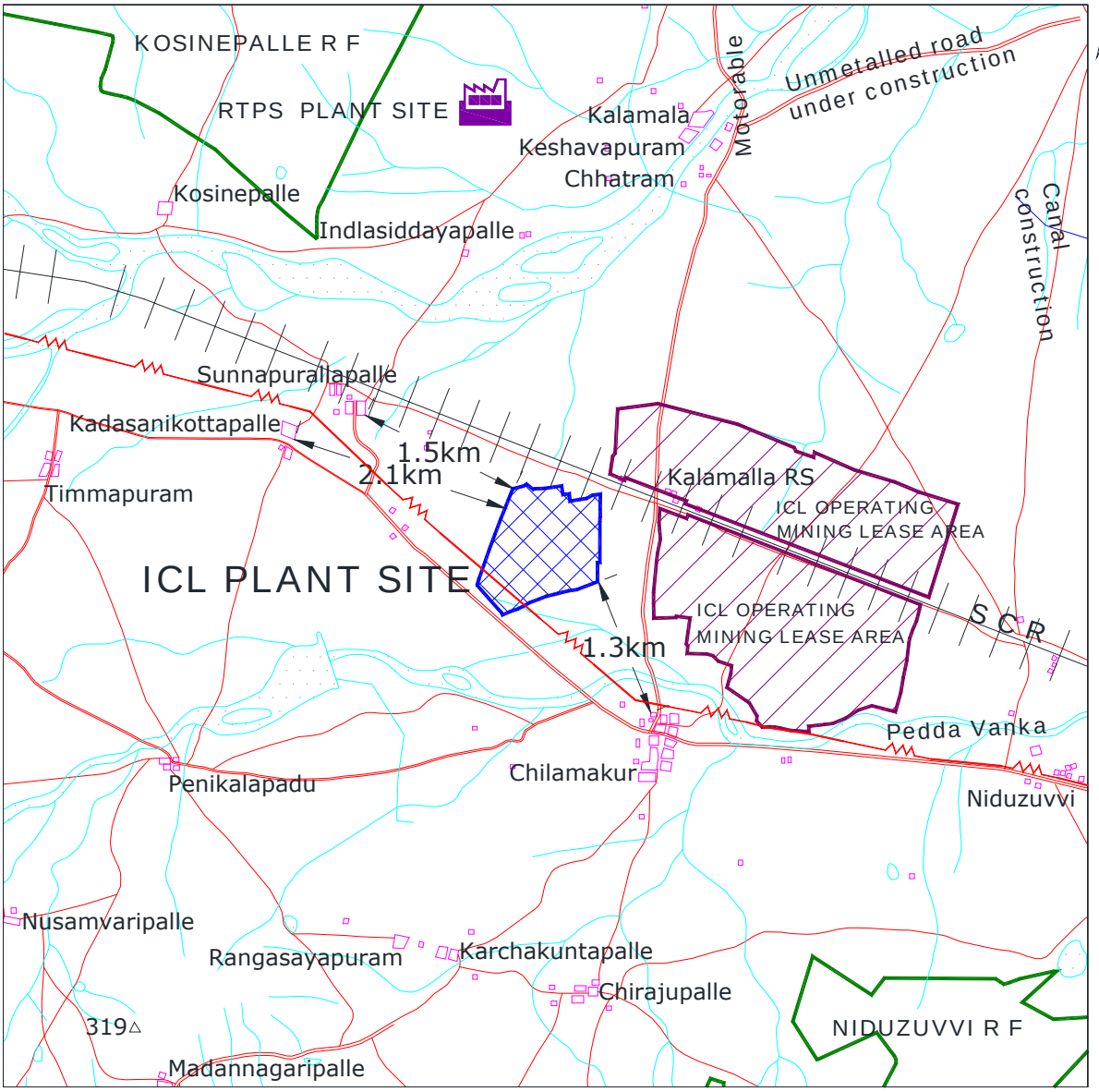
Nearest Settlements:

- Chilamakur – 1.3 km – SSE
- Kadasanikottapalle – 2.1 km – WNW
- Sunnapurallapalle – 1.5 km – WNW

FIG - 1
LOCATION MAP



Note:- Not to Scale



LEGEND

- ROADS
- STREAMS/ TANKS
- FOREST
- CANAL
- SETTLEMENTS
- POWER LINE
- RAILWAY LINE
- 319△ SPOT HEIGHT
- RTPS PLANT SITE
- ICL OPERATING MINING LEASE AREA
- ICL OPERATING MINING LEASE AREA
- ICL PLANT SITE

SCALE

0 1 2km

FIG - 2

CLIENT : M/s. THE INDIA CEMENTS LTD.,

PROJECT : CEMENT PLANT

Chilamkur Village, Yerraguntla Mandal, YSR Kadapa District, Andhra Pradesh.

TITLE : KEY MAP

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SECUNDERABAD

Nearest Reserved Forests:

- Niduzuvvi RF – 4.0 km – SE
- Kosinepalle RF- 2.9 km- NW

Due to availability of rich limestone deposits, major cement plants, which are located within 10 km, are given below:

DETAIL OF CEMENT PLANTS IN STUDY AREA

- India Cements Limited (Niduzuvvi) – 7.0 km – ESE
- Zuari Cements – 8.8 km –SE
- Rayalaseema Thermal Power Station – 3.5 km – NNW

Fig-3 shows the 10 km radius around Cement plant. Salient features of the plant site are given in **Table-1.**

iii. Details of alternate sites considered and the basis of selecting the proposed site, particularly the environmental considerations gone into should be highlighted.

As the expansion is proposed in the existing premises, no alternate sites are considered for the proposed expansion project.

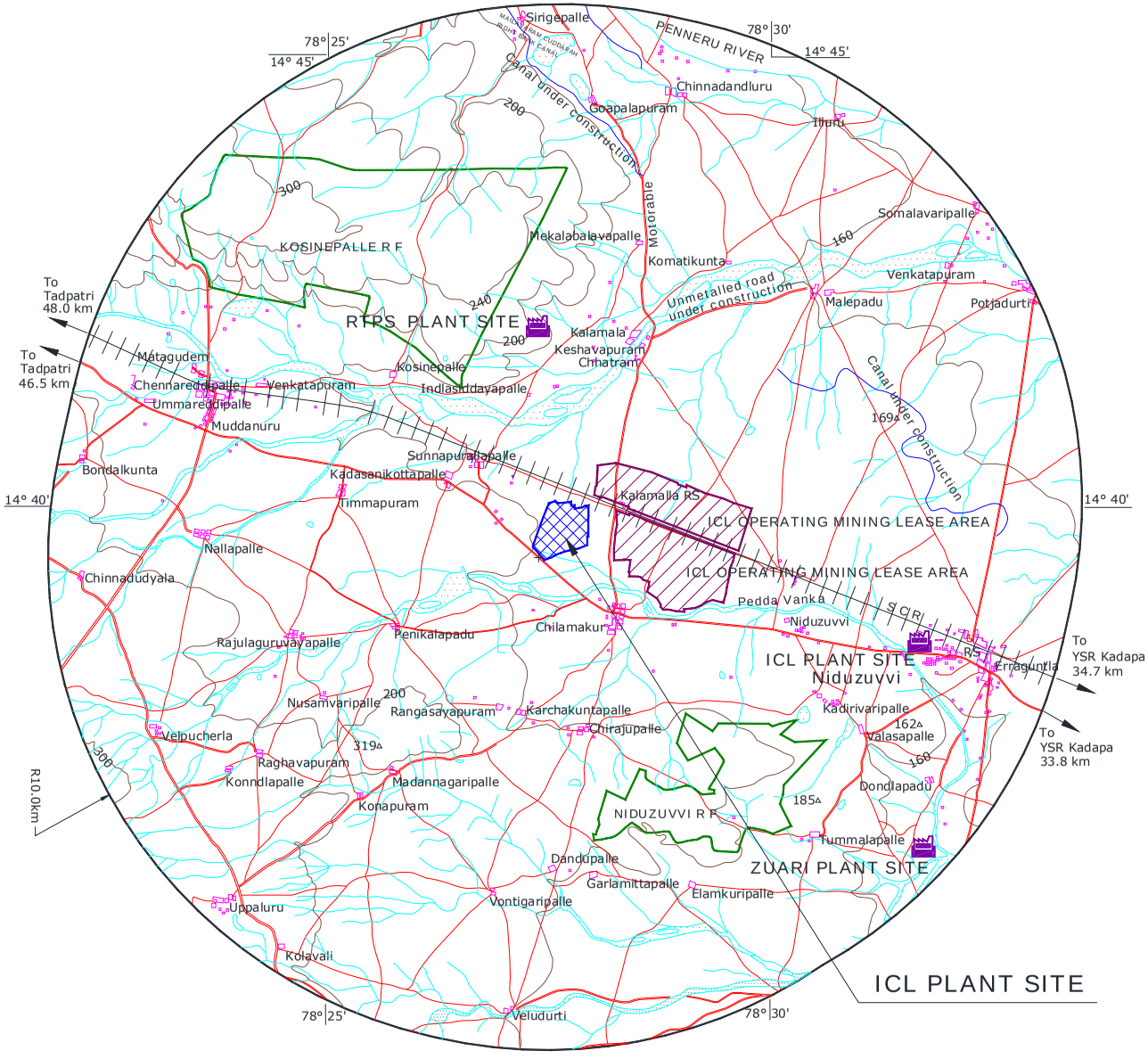
iv. Size or magnitude of operation

With the proposed expansion, the clinker production will be 5.15 MTPA and Cement at 7.00 MTPA.

ICL is manufacturing varities of Cement viz. Ordinary Portland Cement (OPC), Pozzolona Portland Cement (PPC)& Sulphate Resisting Portland Cement(SRPC).

Manufacturing Process:

Limestone Mining: Mechanized mining of lime stone is done by deep hole drilling, nonel blasting, excavation and hauling. The blasted lime stone of size less than 1000mm will be transported to lime stone crusher for crushing.



LEGEND

- ROADS
- STREAMS/ TANKS
- CONTOURS
- FOREST
- CANALS
- RIVER
- SETTLEMENTS
- SPOT HEIGHT
- RAILWAY LINE
- ICL PLANT SITE (NIDUZUVVI)
- ZUARI PLANT SITE
- RTPS PLANT SITE
- ICL OPERATING MINING LEASE AREA
- ICL OPERATING MINING LEASE AREA
- ICL PLANT SITE

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REFER TO THIS MAP AS:- 1:50,000
SHEET 57/J/6 FIRST EDITION
Published under the direction of
the Surveyor General of India - 1978

Index to
Survey of India Toposheets

57 J/1	57 J/5	57 J/9
57 J/2	57 J/6	57 J/10
57 J/3	57 J/7	57 J/11

SCALE

0 3 6 km

FIG - 3

CLIENT : M/s. THE INDIA CEMENTS LTD.,

PROJECT : CEMENT PLANT
Chilamkur Village, Yerraguntla Mandal, YSR Kadapa District, Andhra Pradesh.

TITLE : TOPOGRAPHICAL MAP SHOWING 10 km RADIUS

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B.S.ENVI-TECH (P) LTD.,
SECUNDERABAD

TABLE – 1.1
SALIENT FEATURES OF THE PLANT SITE

Feature	**Details**
Altitude	196 m above msl
Longitude & Latitude	14°39'54.39"N- 78°27'31.91"E
Village, Mandal, District, State	Chilamakur & Kalamalla Village, Yerraguntla Mandal, Y.S.R.Kadapa district of Andhra Pradesh
Maximum Temperature °C	45.6
Minimum Temperature °C	6.7
Relative Humidity, %	25-77
Annual rainfall, mm	725.9
Topography	Plain
Soil Type	Clayey
Nearest IMD Station	Kurnool – 132.5 km – NNW
Nearest Waterbodies	Penneru River – 9.4 km – NNE Pageru River – 9.6 km - SE Pedda Vanka- 0.8 km - SSE Penneru River –Third order Stream - 1.5 km – North direction.
Nearest Highway	National Highway - NH-18 connecting Chittoor – Kurnool is at 28.6 km in ENE direction to the Plant site.
Nearest Railway station	Kalamala RS – 0.5 km - E
Nearest Industries	India Cements Limited (Niduzuvvi) – 7.0 km – ESE Zuari Cements – 8.8 km –SE Rayalaseema Thermal Power Station – 3.5 km – NNW
Nearest Village	Chilamakur – 1.3 km – SSE Kadasanikottapalle – 2.1 km – WNW Sunnapurallapalle – 1.5 km – WNW
Nearest Town/City	YSR Kadapa – 44.0 km – SE.
National Parks/ bird sanctuaries	None within 10km Radius map
Nearest Inter State Boundary	Andhra Pradesh – Karnataka – 94.0 km – SSW, Andhra Pradesh – Telangana – 154.0 km – Northen direction
Nearest Air port	Hyderabad (Shamshabad) Airport– 285.0 km – N, YSR Kadapa Airport – 37.0km – ESE,
Nearest Forest	Niduzuvvi RF – 4.0 km – SE Kosinepalle RF- 2.9 km- NW
Historical places	Gandikota – 24.2 km-WNW

Note :Distances mentioned are aerial distances

Limestone Crushing: A single Rotor Impact Crusher is installed to reduce limestone size from 1000 mm to 45mm.

Stacking & Reclaiming: The crushed lime stone is stacked longitudinally with stacker as per the required quality given by Quality Control Dept. The capacity of stock pile is 80000 T. After forming the stockpile, the reclaimation will be started. The total process of stacking and reclaiming is called chevron method.

Raw material grinding: Blended lime stone will be reclaimed and will be filled into raw material hopper in the Vertical Roller Mill (VRM) section. Laterite (out source material) and corrective limestone will be filled into laterite hopper and corrective limestone hopper respectively. All the three materials with the required ratio are conveyed through the weigh feeders and belt conveyors to Vertical Roller Mill, where grinding takes place.

VRM within built system of separator will grind the raw materials 45 mm size to 17-20 %R on 90 micron size. The product called Raw meal is collected in cyclones and Pulse jet BH and transported through air slides and bucket elevator and stored in blending Silo.

Coal Crushing & Grinding: Raw Coal unloaded from open trucks to yard and transported by Belt Conveyors to crusher where the size is reduced from 100mm to 15 mm and conveyed to raw coal hopper through conveyor belts. Vertical roller mill (VRM) pulverizes raw coal to fine coal with fineness of 16%R on 90 microns, which is collected in Bag Filter. The fine coal is further conveyed mechanically to fine coal bins and transported to kiln and calciner pneumatically (through FK pumps) for firing.

Pyro-Processing: This system consists of Rotary Kiln with 6 stage Pre-heater and In-line Calciner. Raw meal from Silos is conveyed through pre-heater. Fine coal is fired through burner pipe into kiln and into pre-calciner. The material is 90 to 92 % calcined before entering into kiln and balance calcination, Pre burning and sintering takes place in the kiln for ensuring completion of chemical reactions. Clinker formed is cooled in Static grate coolers with high pressure fans. The clinker after cooling is transported mechanically to clinker storage tanks.

Cement Grinding: Clinker from clinker storage tank is conveyed to clinker hopper. Gypsum is filled into gypsum hopper. Closed Circuit Ball Mill with dynamic separator grinds clinker and gypsum in a ratio of 96; 4 respectively. The product, called Ordinary Portland cement (OPC) is conveyed mechanically to cement storage silos.

Similarly Clinker, Fly ash, gypsum in a ratio of 65: 30: 5 to make Portland Pozzolona cement (PPC) are ground in the Ball Mill which is conveyed mechanically to cement storage silos.

Cement Packing: Electronic Packers 8 spout- double discharge) automatically fill the PP bags or paper bags of 50 Kg. These bags are loaded to the trucks and rail rakes through belt conveyors and loaders.

The Plant is well automated and operated form Central Control Room and Control system is based on PLC.

Quality Control: All the raw materials, in- process and products are carried out by means of XRF and XRD of PAN Analytical. The preventive measures are taken to ensure the consistent and best quality is achieved. Material testing is undertaken on calibrated instruments for both Physical and Chemical parameters all the time. The people involved in this stream are highly qualified and experienced and quality conscious. The product is well accepted in the market and customers like Ready mix concrete, Industries and Builders prefer our product very well.

Process Control: The plant operation through ABB Automation is equipped with Distributed Control Systems (DCS), comprising the SDR system. PIDs with closed loops systems are intact and PLC is in advanced modern system. Fuzzy logic from FLS is also adopted for smooth and consistent operation of the plant. The process parameter is designed by the experts and is operated by qualified and experienced engineers. The deviations are minimized and the tolerances are limited. This is resulting in achieving the productivity in terms of best quality, optimal production and energy conservation (thermal as well as electrical).

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

The raw material required for production of clinker is Limestone, Iron ore, Bauxite and Coal. Available limestone reserves of existing mines. The requirement of raw material per annum on an average for the production clinker and cement at capacity of 7.00 MTPA is presented in **Table-2**.

Table-2
Raw Material Requirement (Million Tonnes per Annum)

S.No	Materials		Existing	After Expansion	Source
1	Limestone		2.00	7.700	Captive mines
2	Gypsum		0.083	0.350	By product from the chemical plant
3	Fly ash		0.495	2.450	Thermal plant
4	Coal	Cement Plant	0.210	0.760	Indian/Imported
		Power Plant	0	0.308	Indian/Imported
5	Laterite/Iron ore		0.134	0.464	Mines

For obtaining raw materials like coal, gypsum, additives and transporting cement from the cement plant to the market, well connected roads are available.

vii. Resource optimization / recycling and reuse envisaged in the project, if any, should be briefly outlined.

Available limestone reserves of existing mine which cater to limestone needs of Cement Plant.

Cooling water circuit is close circuited, thereby ensuring no generation of wastewater. The process, selected envisages re-cycling all the material collected in the pollution control equipment whereby ensuring no generation of solid waste.

viii. Availability of water its source, energy / power requirement

Water

Water is required for cooling, dust suppression, sanitary facilities and gardening. Water requirement for proposed line is 1000 m^3/day, thermal power plant is 500 m^3/day bringing the total consumption of complex to 3800 m^3/day. The source of water is Penneru river, Mine Pit.

Power

The peak power consumption in the ICL Cement plant complex including mine is 22.5 MW. Total power requirement for the ICL cement plant complex is met from Grid/Captive Power Plant. Additional power required is about 50 MW.

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

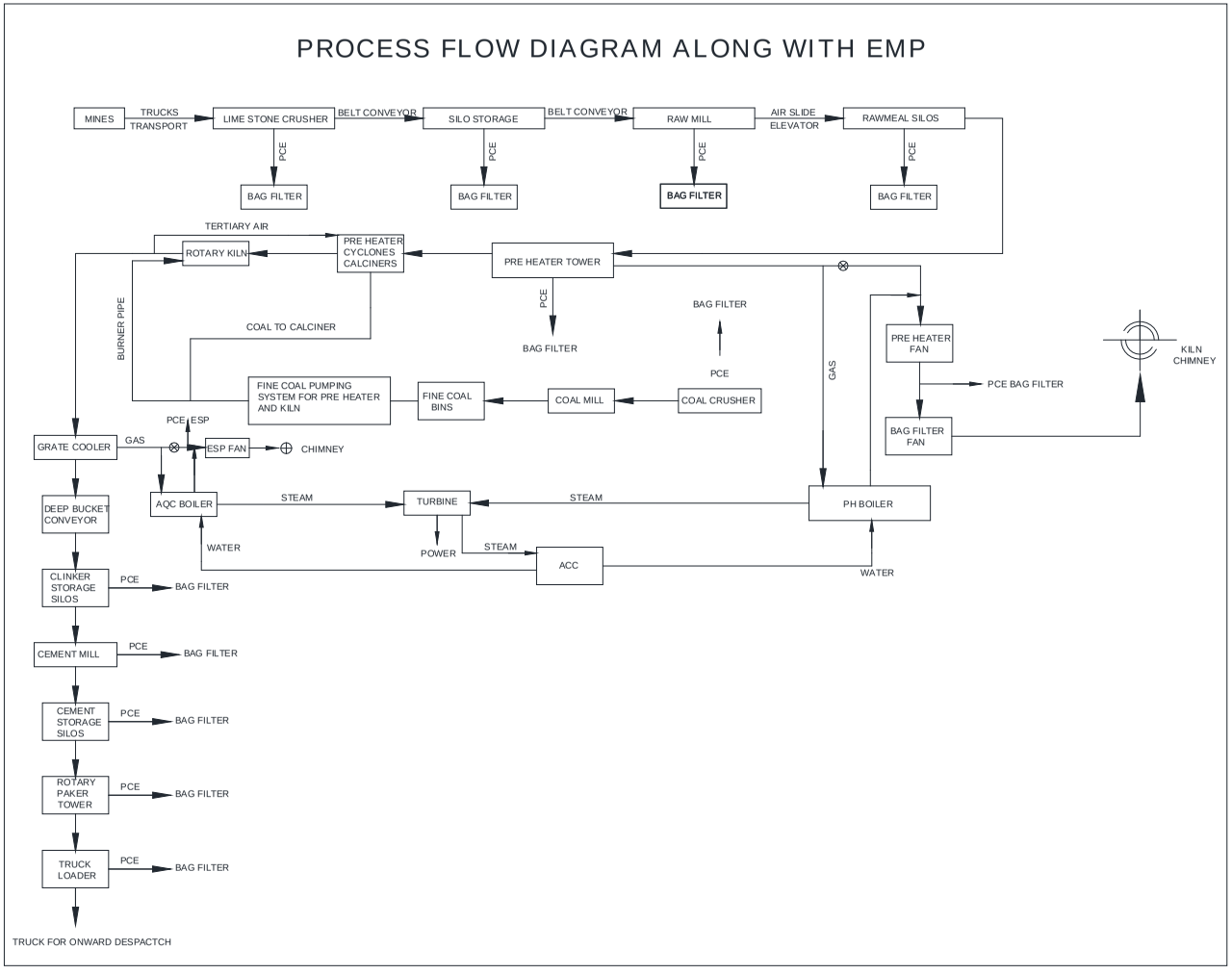
In cement plant water is used for cooling, gas conditioning and raw material addition at various stages. This water is totally absorbed in the process or will be subjected to evaporation and hence no wastewater is released from the cement plant.

Wastewater generated is only from domestic activities at cement plant and residential colony. A full-fledged sewage treatment plant (STP) is in operation designed for a maximum load of 400 m^3/day. Treated domestic wastewater is 100% reused for greenbelt development within ICL cement plant complex.

No solid waste will be generated from the cement plant. The dust collected in the pollution control devices is being 100% recycled back to the process.

x. Schematic representations of the feasibility drawing which give information of EIA purpose.

PROCESS FLOW DIAGRAM ALONG WITH EMP



4.0 SITE ANALYSIS

i. Connectivity

The Cement plant is located at Chilamkur village in Yerraguntla Mandal, Y.S.R. Kadapa district of Andhra Pradesh.

ii. Land form, land use and land ownership.

Break-up of present land use of existing cement plant is given in **Table-2** and ICL cement plant layout is shown in **Fig-4.** No additional land acquisition will be required for proposed new line. Proposed new line will be located within the existing cement plant area.

TABLE-2
LAND AVAILABILITY

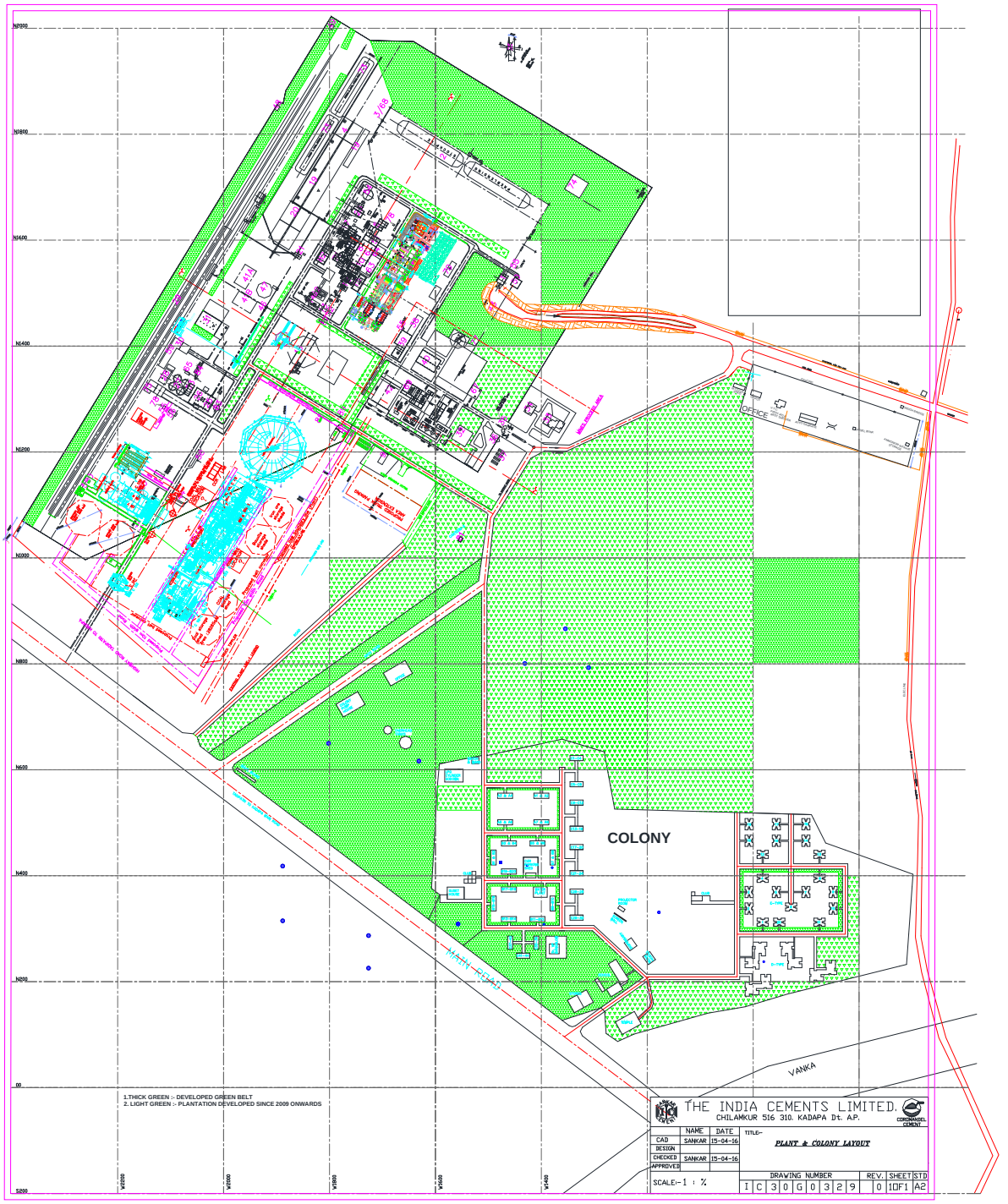
S.No		Area (ha)
1.	Cement Plant area (including process area, railway siding, roads, and colony) New Line and power plant will be located within the existing plant area	39.7
2.	Greenbelt	98.64
3.	Vacant Land	96.33
	Total	**234.76**

iii. Topography (along with map)

The existing ICL Cement plant site is located at an elevation of 196 m above MSL.

The Cement plant is located at Chilamkur village in Yerraguntla Mandal, Y.S.R. Kadapa district of Andhra Pradesh. The center point of the plant falls in 14°39'54.39"North latitude and 78°27'31.91" East longitude with an average altitude of 196 m above msl. The area falls within Survey of India Toposheet no. 57 J/6 [1:50000 scale].

FIG – 4 PLANT LAYOUT



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.

The existing cement plant is located at Chilamkur Village. No additional land will be required for proposed expansion project. There are no sensitive places within 10 km of the plant boundary.

v. Existing Infrastructure

For transporting cement from the cement plant to the market and obtaining raw materials like coal, gypsum and other additives, well connected road and railway siding are available.

vi. Soil Classification

The proposed new line will be located in existing plant area. No additional land will be required for proposed new line.

Soil in the area is found to be sandy clayed in texture with sand percentage in the range between 20-60%, silt between 18-41% and clay 22-44%.

vii. Climate data from secondary sources

The tropical climate of the region is manifested in hot and humid summer, moderately monsoon and mild winter seasons. May is the hottest month in the year. The maximum temperature during the day time was recorded as 45.6 ^{0}C and During the cold months of December, the temperature falls to 6.7^{o}C. The rainfall of the district is 725.9 mm. The months of December, January & February are considered to have pleasant climate.

viii. Social infrastructure available

A well-equipped Occupational Health center is provided at colony, which has full time male and lady medical officers assisted, by compounders and nurses. Necessary free medicines and medical aid is available for the company employees.

A good canteen is provided for the benefit of the employees. The canteen serves tea & snacks at subsidized rates to the employees.

Adequate number of shelters with fans, drinking water etc. for taking food and rest are provided for the benefit of the employees.

Safe hygienic drinking water is provided at the plant. Drinking water facility is available near rest shelters.

A full-fledged Training hall is available in the ICL cement plant complex. The training to workmen is provided on basics as well as for refreshers.

The employees are provided with well-designed houses having electricity and water connections.

For the education facility of employee's children School is provided at our colony.

5.0 PLANNING BRIEF

i. Planning concept (type of industries, facilities, transportation etc) town and country planning / development authority classification.

This is expansion project of existing cement plant within the present ICL cement plant complex. Additional civil structures will be required for proposed unit.

ii. Population projection

The total manpower at the existing plant is approx. 500. Due to new project 500 members of direct & indirect additional manpower will be employed.

Apart from the jobs, the company provided medical and educational facilities to the employees which were availed by the people around the plant. Adequate recreational facilities for the staff of the company and the local people were created.

iii. Land use planning (breakup along with greenbelt etc.,)

This is expansion project of existing cement plant. The present land use pattern of the existing ICL cement plant complex is given in **Table-2.** No additional land will be required for proposed expansion project.

iv. Assessment of infrastructure demand (physical & social)

No additional housing facility will be created.

v. Amenities / Facilities

All infrastructure facilities such as education, health facilities and other social facilities are adequate at district headquarter which makes the region adequate in amenities.

6.0 PROPOSED INFRASTRUCTURE

i. Industrial area (processing area)

The following are the major equipment proposed under the new production line

Main Machinery	**Item**	**Type**	**Capacity**
	Limestone Crusher	Impact crusher	1000 TPH
	Limestone Stacker	Longitudinal chevron type	40000 Tons/Pile
	Limestone Reclaimer	Bridge type Harrow with bucket conveyor	40000 Tons/Pile
	Raw Material Grinding	Vertical Roller Mill	550 TPH
	Coal Grinding	Vertical Roller Mill	40 TPH
	Preheater / Calciner	Six stage suspension pre heater with inline calciner	
	Kiln	Rotary kiln	
	Clinker Cooler	High efficiency Grate cooler	
	Cement Grinding	Vertical Roller Mill	500 TPH
	Packing Plant	8 Spouts rotary packer	4 * 120 TPH
Main Storages	**Item**	**Type**	**Capacity**
	Limestone Stock pile	Longitudinal chevron type	80000 Tons
	Chemical gypsum Stockpile	Closed shed	2000 Tons
	Raw Meal Silo	CF Silo	12000 Tons
	Fly Ash Silo	Concrete silo	4000 Tons
	Clinker Silo	Clinker Stock Pile	90000 Tons
	Cement Silo	Concrete Silos	3 * 10000 Tons

ii. Residential area (non-processing area)

ICL has constructed a full-fledged colony in upwind direction consisting of 296 houses for the benefit of employees. The Colony can accommodate the additional requirement for the new employees.

All the necessary infrastructure facilities such as School, Dispensary, Park and Playground, Temple, Commercial Complex, etc., are provided in the colony.

A full-fledged water supply and drainage system is already in place and the wastewater generated from the colony is being treated in the sewage treatment plant (STP) to meet the standards. The treated sewage is used for greenbelt development within Cement plant complex.

iii. Greenbelt

ICL has already developed greenbelt in and around the plant site.

iv. Social infrastructure

ICL has well defined CSR policy to Carryout social development and welfare measures in the surrounding villages. Under CSR activity ICL will initiate community development projects, in the fields of health, education and environmental preservation, in the study area around the plant as is done in their existing units.

v. Connectivity (traffic and transportation road/rail/metro/water ways etc)

For transporting cement from the cement plant to the market and obtaining raw materials like coal, gypsum and other additives, well connected roads/rail are available. The National Highway [NH-18] connecting Chittoor – Kurnool is at a distance of about 28.6 km.

vi. Drinking water management (source & supply of water)

The existing cement plant is having safe drinking water facility. RO water is supplied to all the employee and contract workmen.

vii. Sewerage System

Existing STP will be utilized for treatment of domestic wastewater after expansion of project.

viii. Industrial waste management

The production of cement will be based on completely dry process; hence no process waste water will be generated from the plant. Also the cooling water will be through a closed circuit system. The only waste water generated will be domestic waste water from residential

township and the same will be treated in STP and used for green belt development.

Hazardous wastes like spent oil from construction equipment, DG sets etc., generated in small quantities during construction and operational phase would be appropriately stored & handled and properly disposed off in accordance with the provisions of the Hazardous and other Wastes (Management and Transboundary movement) Rules, 2016.

Emission from expansion

All Pollution Control Equipment in Cement plant of Line– I will be upgraded for the enhanced production capacity after detailed adequacy study to meet the limit of 30 mg/Nm3 for particulate matter emission.

The additional emissions are from the upgradation of existing Line– I and installation of new Line – II along with 50 MW coal based CPP. The major pollutant from the plant are Particulate Matter, SO_2 and NO_2

ICL proposes to install Bag house for Raw mill/kiln, bag filter for cement mills and Coal mill and ESP for cooler for line - II. At all other ventilation systems,

Other sources of particulate system include ventilation systems from limestone weigh feeder, raw material storage silo, raw meal blending silo, raw coal hopper, clinker, clinker transport to cement mill and packing machines.

All the pollution control equipment in the Line– II will be designed for an outlet emission of 30 mg/Nm^3. Filter bag house will be designed for 125 % of the air flow rate. The filter bag will be PTFE dipped PPS type. The dust collected from the various pollution control equipment will be recycled in the cement manufacturing process.

The other pollutants generated from the cement plant are SO_2 and NO_x emissions from Kiln of Line II due to burning coal of in Kiln. SO_2 emissions have been computed based on the sulfur content of the coal and quantity fired in the kiln. SO_2 emissions of the kiln are influenced by the combined operation of the raw mill and kiln, where considerable amount of SO_2 generated in the kiln process gets absorbed in the raw material (about 90%).

The proposed power plant will result in emission of particulate matter, sulphur dioxide and oxides of nitrogen due to burning of coal in the

boilers. The boilers will be of CFBC technology. Boilers will be designed for the worst coal quality of 40 % ash and sulphur content of 0.5%. ICL will receive coal from Singareni Coal Mines/imported. The typical characteristics of coal for use is given below

TYPICAL CHARACTERISTICS OF INDAIN COAL

Parameter	*Range*
Fixed carbon (%)	18.57 - 46.21
Ash content (%)	25.02 - 40%
Volatile matter (%)	24.27 - 29.78
Calorific value (Kcal/Kg)	4000-4500
Moisture content (%)	4.5 - 6.5
Sulphur content (%)	0.4 - 0.5

The steam requirement of the 2 X 25 MW will be met from CFBC boiler each of 100 TPH capacity fired with coal containing maximum ash content of 40 % and sulphur content of 0.50 %.

Fuel consumption for generation of steam for 2 X 25 MW power generation is estimated to be about 845 TPD based on the station heat rate of 3000 kcal/kwhr. Major pollutants emitted from coal burning are particulate matter, SO_2 and NO_x.

AIR POLLUTION CONTROL EQUIPMENT

The emission from the line–II of cement plant constitute flue gases from raw mill, coal mill, cement mills, packing section, kiln and crusher. The major emission is particulate matter. SO_2 and NOx emissions are generated from the kiln.

Line – II will be designed to comply with the new emission norm specified in MoEFCC notification GSR 612(E) dated 25.08.2014 for particulate matter and GSR 496 (E) dated 09.05.2016 for Sulphur dioxide and Oxides of Nitrogen. The new line will have the following air pollution control equipment and systems:

- Bag house system for cleaning of 1 Nos. of raw mill/kiln flue gas with 99.9 % efficiency.
- Bag houses for 1 Nos. of coal mills and 2Nos. for Cement Mill
- 1 No. of ESP for each cooler for control of dust.
- Bag filter systems along with ventilation systems to control the fugitive dust generated from the material handling areas.
- Low NOx burner & Low NOx Calciner for both kiln.

All the flue gas outlets will be provided with state of art air pollution control equipment to maintain the particulate emission level below 30 mg/Nm^3.

The cement dust collected in the pollution control devices will be recycled back to the cement manufacturing process.

The power is a coal based power and Particulate Matter, SO_2 and NOx are the major pollutants emitted due to combustion of coal containing Sulphur content of 0.40-0.50 % (max).

Air pollution control measures of Power plant have been designed to comply with the following new emission norms of MoEF & CC stipulated for Thermal Power Plants as per the Gazette Notification S.O. 3305 (E) dated 07.12.2015.

ESP outlet dust concentration	: 30 mg/Nm^3
SOx	: 100 mg/Nm^3
NOx	: 100 mg/Nm^3
Mercury	: 0.03 mg/Nm^3

Flue gas treatment system is proposed for:

a. Reduction of Particulate emissions
b. Reduction of SO_2 emissions
c. Reduction of NO_x emissions

- 2 Nos. of ESPs for 2 Nos. of boilers with 99.9 efficiency to control particulate matter emissions.

- Lime injection in the CFBC boiler for control of Sulphur dioxide emissions

The power project is designed to meet the SO_2 limit of 100 mg/Nm^3 by adopting limestone injection

- Low NO_x burner for control of Oxides of Nitrogen.

The power project is designed to meet the NOx limit of 100 mg/Nm^3.

Installation of low NOx burners will be done to reduce the NOx concentration at the outlet to meet regulatory standards. In the CFBC, increasing the retention time of fuel in combustion zone will be done for maintaining temperature at 900^oC to minimize NOx emissions.

ix. Solid waste Management

No solid waste is generated from the cement plant. The ash generated from the power plant will be used for cement manufacturing The dust

collected in the pollution control devices is being 100% recycled back to the process.

x. Power requirement & Supply/Source.

The peak power consumption in the ICL Cement plant complex including mine is 22.5 MW. Total power requirement for the ICL cement plant complex is met from grid. An additional power 50 MW is required for the proposed expansion project.

7.0 REHABILITATION AND RESETTLEMENT (R&R) PLAN

The new line and 50 MW captive power plant will be located within the existing complex owned by ICL. No additional land will be acquired and R&R is involved.

8.0 PROJECT SCHEDULE & COST ESTIMATES

The project is expected to be completed in a period of 18 months from the date of receipt of all the approvals from statutory authorities. The estimated cost of the project is Rs. 1250 Crores

9.0 ANALYSIS OF PROPOSAL (FINANCIAL RECOMMENDATIONS)

The capital cost, for the proposed production enhancement project and power plant works out to Rs. 1250 Crores. Financial institutions will be funding the project.

Growth of infrastructure, Irrigation and housing scenario automatically drives the increased requirement of Cement in the market. Based on the growing demand in the South East region of the country for Cement over the next 10 years, the proximity of the project location to this market is an advantage with respect to reduction in freight of cement to these markets. The financial viability also show a good Rate of return from the project. Considering the above ICL is planning to go ahead with the project, once it gets all the statutory approvals for this enhancement project.

Annexure-I

Environmental Clearance

F. No. J-11011/126/2011-IA-II (I)
Government of India
Ministry of Environment and Forests
(I.A. Division)

Paryavaran Bhawan
CGO Complex, Lodhi Road
New Delhi – 110 003

E-mail : aditya.narayan@nic.in
Telefax : 011: 2436 0549
Dated 7th December, 2012

To,

The Senior Vice President,
M/s India Cement Limited
Narayanaswamy Nagar, Village Chilamkur,
Mandal Yerraguntla, District Y.S.R.
Andhra Pradesh

Ph: 08563-276174; Fax: 08563- 276155; E-mail: nagaraju.r@indiacement.co.in

Sub: Enhancement of Cement Plant (Clinker from 4200 TPD to 4500 TPD) at Chilamkur Village, Yerraguntla Mandal, Y.S.R. District in Andhra Pradesh by M/s India Cement Limited- regarding Environmental Clearance

Sir,

This has reference to your letter No. Nil dated 2105.2012 along with a copy of EIA/EMP report seeking environmental clearance under the provisions of EIA Notification, 2006.

2. The Ministry of Environment and Forests has examined your application. It is noted that M/s. India Cement Ltd. is an existing plant having clinkerisation and cement plant at Chilamkur Village, Yerraguntla Mandal, YSR District in Andhra Pradesh. It is proposed to enhance the clinker production capacity from 4200 TPD to 4500 TPD by optimization of process/operations. Total existing project area is 579.88 acres and the enhancement of Clinker capacity will be carried within the existing plant premises only. About 223 acres of area has already been developed under green belt. There will not be any additional investment for the proposed Clinker capacity enhancement. Kosinepalle RF is present at distance of 3.5 Kms. from the project site. No national parks / biosphere reserves / ecologically sensitive areas are located within 10 km radius of the project area. River Penneru flows at a distance of 9.0 Kms. from the project site. Raw material required for the proposed enhancement capacity will be Limestone (156 TPD), Iron ore (161 TPD), Laterite/Bauxite (121 TPD), Coal (23 TPD). Limestone will be sourced from captive mines. Iron ore will be sourced from the Kurnool / Bethamcherla. Coal will be sourced from Indonesia/Russia/Australia.

3. Following is the existing and proposed plant configuration:

Product	Existing	Enhancement	After Enhancement
Clinker	1.386 MTPA	0.099 MTPA	1.485 MTPA
Cement	1.650 MTPA	NIL	1.650 MTPA

4. It is noted that improvement in ESP performance will be brought by reduction in dust returning from pre heater due to lower tower pressure and conversion of ESP to Bag house will reduce emission levels to meet the stipulated standards. The trucks will be covered with tarpaulin to prevent the fugitive emissions.

5. Water required for the existing plant is being sourced from River Penneru. There will not be any additional water requirement for the clinker capacity enhancement. There will not be

any process effluent generation as closed circuit water system is being implemented and it will be followed after proposed enhancement. Zero effluent discharge system is being adopted in the existing plant. Similar practice will be followed after the proposed capacity enhancement also.The dust collected in the APCS will be recycled in to the process. Hence, there will not be any solid waste generation from the process due to the proposed enhancement. There will not be any hazardous waste generation from the process due to the proposed enhancement.

6. The Cement Plants with production capacity ≥1.0 MTPA are covered under Category A as per para 3(b) of the Schedule of EIA notification, 2006 and appraised by the Expert Appraisal Committee (Industry-1) in the MoEF. Public hearing was exempted under para 7(ii) of the EIA Notification, 2006.

7. The proposal was considered by the Expert Appraisal Committee-1 (industry) in its 37th Meeting held during 14th & 15th June, 2012. The Committee recommended the proposal for environmental clearance subject to stipulation of specific conditions along with other environmental conditions.

8. Based on the information submitted by you, presentation made by you and consultant, M//s Pioneer Enviro Laboratories & Consultants Pvt. Ltd., Hyderabad, the Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA Notification dated 14th September 2006 subject to strict compliance of the following Specific and General conditions:

A. SPECIFIC CONDITION

i. The company shall comply with all the conditions stipulated while granting environmental clearance and NOC for the existing plant.

ii. Continuous stack monitoring facilities to monitor gaseous emissions from all the stacks shall be provided. After expansion, limit of SPM shall be controlled within 50 mg/Nm^3 by installing adequate air pollution control system. Electrostatic precipitators to clinker cooler, bag house to raw mill/kiln and bag filters to coal mill and cement mill shall be installed.

iii. Possibilities shall be explored for the proper and full utilization of gases generated from the kiln in waste heat recovery boiler (WHRB) and a feasibility report shall be prepared and submitted to the Ministry and its Regional Office at Bangalore within 3 months from the date of issue of the letter.

iv. The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.

v. Secondary fugitive emissions shall be controlled and shall be within the prescribed limits and regularly monitored. Guidelines / Code of Practice issued by the CPCB in this regard should be followed.

vi. Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land. All the raw materials including fly ash should be transported in the closed containers only and shall not be overloaded. The company shall have separate truck parking area. Vehicular emissions should be regularly monitored.

vii. Efforts shall be made to further reduce water consumption by using air cooled condensers for bag house. All the treated wastewater shall be recycled and reused in the process and/or for dust suppression and green belt development and other plant related activities etc. No process wastewater shall be discharged outside the factory premises and 'zero' discharge should be adopted.

viii. Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir should be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources.

ix. Regular monitoring of influent and effluent surface, sub-surface and ground water should be ensured and treated wastewater should meet the norms prescribed by the State Pollution Control Board or described under the Environment (Protection) Act, 1986 whichever are more stringent. Leachate study for the effluent generated and analysis should also be regularly carried out and report submitted to the Ministry's Regional Office at Bangalore, SPCB and CPCB.

x. All the bag filter dust, raw mill dust, coal dust, clinker dust and cement dust from pollution control devices should be recycled and reused in the process and used for cement manufacturing. Spent oil and batteries shall be sold to authorized recyclers / reprocessors only.

xi. Efforts shall be made to use low-grade lime, more fly ash and solid waste in the cement manufacturing.

xii. An effort shall be made to use of high calorific hazardous waste in the cement kiln and necessary provision should be made accordingly.

xiii. As proposed, green belt shall be developed in at least 33 % area in and around the cement plant as per the CPCB guidelines to mitigate the effects of air emissions in consultation with local DFO.

xiv. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Cement plants should be implemented.

xv. At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on earlier Public Hearing Issues, locals need and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office at Bangalore. Implementation of such program shall be ensured accordingly in a time bound manner.

B. **GENERAL CONDITIONS:**

i. The project authorities must strictly adhere to the stipulations made by the Andhra Pradesh State Pollution Control Board and the State Government.

ii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.

iii. The gaseous emissions from various process units shall conform to the load/mass based standards notified by this Ministry on 19th May, 1993 and standards prescribed from time to time. The State Pollution Control Board may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location.

iv. At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of PM_{10}, SO_2 and NO_x are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Bangalore and the SPCB/CPCB once in six months.

v. Industrial wastewater shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended form time to time. The treated wastewater shall be utilized for plantation purpose.

vi. The overall noise levels in and around the plant area shall be kept well within the standards 85 dB(A) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (nighttime).

vii. Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.

viii. The company shall develop surface water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.

ix. The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report. Further, the company must undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc.

x. The requisite funds shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. An implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Regional Office of the Ministry at Bangalore. The funds so provided shall not be diverted for any other purpose.

xi. A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.

xii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEF at Bangalore. The respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; PM10, SO_2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

xiii. The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry at Bangalore / CPCB / SPCB shall monitor the stipulated conditions.

xiv. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company alongwith the status of compliance of environmental conditions and shall also be sent to the respective Regional Office of the MOEF at Bangalore by e-mail.

xv. The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment and Forests at http:/envfor.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional office at Bangalore.

xvi. Project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.

9. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

10. The environmental clearance accorded shall be valid for a period of 5 years to start operations by the power plant.

11. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.

12. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

13. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.

(A.N. Singh)
Dy. Director (S)

Copy to:-

1. The Secretary, Department of Environment and Forests, Govt. of Andhra Pradesh, Mantralaya, Hyderabad, A.P.
2. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110032.
3. The Chairman, Andhra Pradesh Pollution Control Board, Paryavaran Bhavan, A-3, Industrial Estate, Sanathnagar, Hyderabad 500 018, A. P.
4. The Chief Conservator of Forests (Central), Ministry of Environment & Forest, Regional Office (SZ), Kendriya Sadan, IVth Floor, E & F Wing, 17th Main Road, Koramangla, Bangalore - 560 034, Karnataka.
5. Adviser, IA-II (I), Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi. - 110003.
6. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi-110003.
7. Guard file / Record file / Monitoring file.

(A.N. Singh)
Dy. Director (S)