

EXECUTIVE SUMMARY

OF

ENVIRONMENTAL IMPACT ASSESSMENT REPORT

FOR

PUBLIC HEARING

OF

**Expansion of Integrated Cement Plant
Clinker (6.5 to 10.0 MTPA), Cement (3.3 to 7.0 MTPA),
WHRS (16 to 36 MW) and CPP (80 MW)**

At

**Village : Rawan, Tehsil : Simga,
District : Balodabazar-Bhatapara (Chhattisgarh)**

APPLICANT



M/s. UltraTech Cement Ltd.

(Unit: Rawan Cement Works)

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INDEX

S.No.	Particulars	Page No.
1.0	Project Description	1
1.1	Introduction	1
1.2	Site Selection for the project	2
1.3	Brief Description of the Project	2
1.4	Location Map	3
1.5	Major Requirements for proposed Project	5
1.5.1	Raw Material Requirement	5
1.5.2	Fuel Requirement	5
1.5.3	Other Basic Requirement	6
1.6	Process Description	6
1.6.1	Cement Manufacturing Process	6
1.6.2	Waste Heat Recovery System (15 MW)	6
2.0	Description of Environment	7
2.1	Presentation of Results (Air, Noise, Water & Soil)	7
2.2	Biological Environment	7
2.3	Socio-Economic Environment	7
3.0	Anticipated Environmental Impacts and Mitigation Measures	8
4.0	Environmental Monitoring Programme	9
5.0	Additional Studies	10
6.0	Emergency Preparedness Plan	10
7.0	Project Benefits	10
8.0	Environment Management Plan	10
9.0	Occupational Health and Safety	12
10.0	Conclusion	12



EXECUTIVE SUMMARY

1.0 PROJECT DESCRIPTION

1.1 Introduction

UltraTech Cement Ltd. is the largest manufacturer of Grey Cement, Ready Mix Concrete (RMC) and White Cement in India. It is also one of the leading cement producers globally. UltraTech as a brand embodies 'strength', 'reliability' and 'innovation'. Together, these attributes inspire engineers to stretch the limits of their imagination to create homes, buildings and structures that define the new India.

The company has consolidated capacity of 117.35 Million Tonnes Per Annum (MTPA) of grey cement. UltraTech Cement has 23 Integrated Plants, 1 Clinkerization Plant, 27 Grinding Units and 7 Bulk Terminals. In the white cement segment, UltraTech has a white cement plant with a capacity of 0.56 MTPA and 2 WallCare putty plants with a combined capacity of 0.8 MTPA. Its operations span across India, UAE, Bahrain, Bangladesh and Sri Lanka. UltraTech Cement is also India's largest exporter of cement reaching out to meet the demand in countries around the Indian Ocean and the Middle East.

M/s. Ultratech Cement Ltd. (Unit: Rawan Cement Works) plant was commissioned in the year 1995. Rawan Cement Works is the largest unit of UltraTech Cement Ltd. in Eastern Cluster of India. M/s. UltraTech Cement Ltd. (Unit: Rawan Cement Works) has an existing Integrated Cement Project - Clinker (6.5 MTPA), Cement (3.3 MTPA), CPP (80 MW) and WHRS (16 MW) at Village: Rawan, Tehsil: Simga, District: Balodabazar (Chhattisgarh). Environmental Clearance for the existing plant has been obtained from MoEFCC, New Delhi vide their letter no. J-11011/262/2009-IA II (I) dated 17th March, 2011 in the name of Grasim Industries Ltd; which has been transferred in the name of M/s. UltraTech Cement Ltd. vide letter dated 5th Sept., 2016.

The Company is now proposing an Expansion of Integrated Cement Plant- Clinker (6.5 to 10.0 MTPA), Cement (3.3 to 7.0 MTPA), WHRS (16 to 36 MW) and CPP (80 MW) at Village: Rawan, Tehsil: Simga, District: Balodabazar- Bhatapara (Chhattisgarh).

As per EIA Notification dated 14th Sept., 2006 & as amended from time to time; this project falls under Category "A"; Project Activity '3 (b)' Cement Production.

Application (Form-1/ToR and Pre-Feasibility Report) for obtaining Environmental Clearance for this expansion project was submitted to MoEFCC, New Delhi on 20th Sept., 2018. The project was considered in front of Expert Appraisal Committee (EAC) (Industry- 1) for its First Technical Presentation (for ToR approval) on 10th October, 2018. ToR Letter was issued by MoEFCC, New Delhi vide letter no. J-11011/262/2009-IA-II (I) on 9th November, 2018.

Table - 1

Production Capacities Before and After Expansion

S. No.	Particular	Existing Capacity (MTPA)	Additional Capacity (MTPA)	Total Capacity after expansion (MTPA)
1.	Clinker (MTPA)	6.5	3.5	10.0**
2.	Cement (MTPA)	3.3	3.7	7.0
3.	CPP (MW)	80	Nil	80
4.	WHRS (MW)	16*	20	36
5.	D.G. Set (MW)	12	Nil	12

* As per CTO obtained from CECB
**Clinker will also be sent to sister grinding units

Source: Pre-Feasibility Report

1.2 Site Selection For The Project

The proposed expansion project will be achieved within the existing plant premises at Village: Rawan, Tehsil- Simga, Dist-Balodabazar-Bhatapara, (Chhattisgarh); hence, no alternative site is considered for the expansion activity.

1.3 Brief Description Of The Project

Brief description about the Project is given in Table - 2.

Table – 2

S. NO.	PARTICULARS	DETAILS			
A.	Nature of the Project	Expansion			
B.	Size of the Project	Unit	Existing Capacity	Additional Capacity	Total capacity after expansion
		Clinker (MTPA)	6.5	3.5	10.0**
		Cement (MTPA)	3.3	3.7	7.0
		CPP (MW)	80	Nil	80
		WHRS (MW)	16*	20	36
		D.G. Set (MW)	12	Nil	12
		* As per CTO obtained from CECB **Clinker will also be sent to sister grinding units			
C.	Location Details				
	Village	Rawan			
	Tehsil	Simga			
	District	Balodabazar- Bhatapara			
	State	Chhattisgarh			
	Latitude	21° 33' 40.65" N to 21° 35' 19.83" N			
	Longitude	82° 00' 0.06" E to 82° 01' 57.62" E			
	Toposheet No.	F44Q2, F44Q3, F44P14 & F44P15			
D.	Area Details				
	Total Plant Area	388.37 ha (Plant + Colony); proposed expansion will be done within the existing plant premises.			
	Greenbelt / Plantation Area (ha)	155.58 ha (i.e. ~40% of the total plant area) has already been developed under greenbelt/plantation.			
E.	Environmental Setting Details (with approximate aerial distance and direction from the plant site)				
1.	Nearest Town	Balodabazar (~15.0 km in NE direction)			

S. NO.	PARTICULARS	DETAILS
2.	Nearest National Highway / State Highway	<ul style="list-style-type: none"> ○ SH - 9 (~11.0 km in SE direction) ○ SH - 10 (~12.5 km in NE direction)
3.	Nearest Railway station	Bhatapara Railway Station (~17.0 km in NNW direction)
4.	Nearest Airport	Swami Vivekananda Airport, Raipur (~50 km in SW direction)
5.	National Parks, Wildlife Sanctuaries, Biosphere Reserves, within 10 km radius	No National Park, Wildlife Sanctuary, Biosphere Reserve and Protected forest falls within 10 km radius.
6.	Reserved Forests (RF) etc. within 10 km radius	<ul style="list-style-type: none"> ○ Dhabadih RF (~7.0 km in NE direction)
7.	River / Water Body (within 10 km radius)	<ul style="list-style-type: none"> ○ Mahanadi Canal (Adjacent in East direction) ○ Banjari Nala (~3.0 km in NW direction) ○ Chitawar Nala (~3.5 km ENE direction) ○ Ameri Diversion canal (~4.5 km in WNW direction) ○ Khorsi Nala (~5.0 km in SSE direction) ○ Chitawar Nala (~5.5 km in South direction) ○ Jhorki Nala (~5.5 km in ESE direction) ○ Tengna Nala (~6.5 km in SSW direction) ○ Kukardih Talab (~9.5 km in NNE direction) ○ Other than the above, rain water collected in mine sumps are also available in the study area.
8.	Seismic Zone	Zone - II [as per IS 1893 (Part-I): 2002]
F.	Cost Details	
	Total Cost of the Expansion Project	Rs. 1800 Crores
	Cost for Environment Management Plan	<ul style="list-style-type: none"> ○ Capital Cost - Rs. 50 Crores ○ Recurring Cost- Rs. 5.0 Crores / annum

Source: Pre-feasibility Report

1.4 LOCATION MAP

The project site is located at Village Rawan of Simga Tehsil of Balodabazar- Bhatapara district in the state of Chhattisgarh.

S. No	Location Details	
1.	Village	Rawan
2.	Tehsil	Simga
3.	District	Balodabazar- Bhatapara
4.	State	Chhattisgarh
5.	Latitude	21° 33' 40.65" N to 21° 35' 19.83" N
6.	Longitude	82° 00' 0.06" E to 82° 01' 57.62" E
7.	Toposheet No.	F44Q2, F44Q3, F44P14 & F44P15

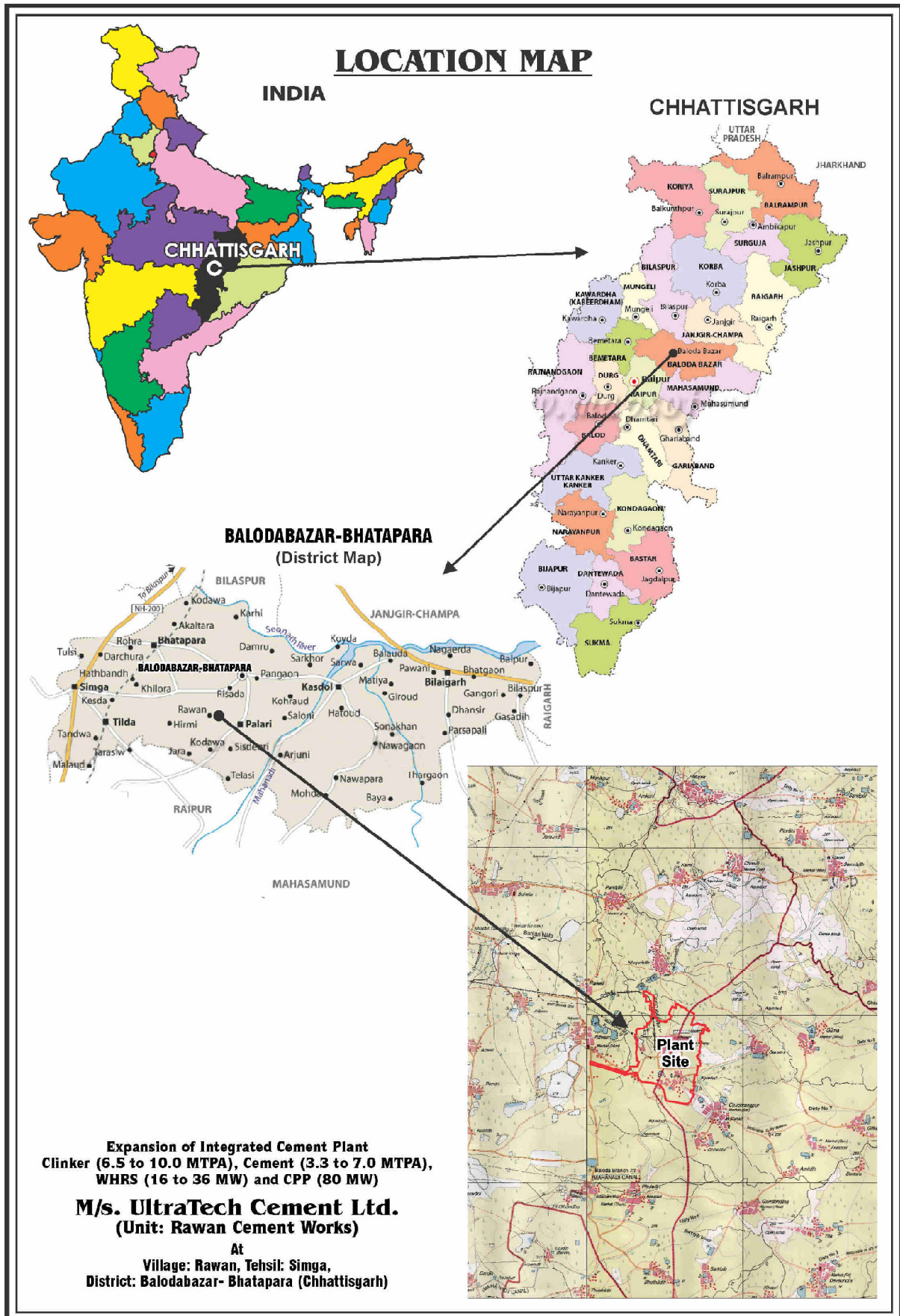


Figure - 1.1: Location Map

1.5 MAJOR REQUIREMENTS FOR PROPOSED EXPANSION PROJECT

1.5.1 Raw Material Requirement

Major raw material required for cement production is Limestone, Iron Ore, Gypsum, Fly ash, Slag and Performance Improver. Details regarding quantity of raw materials required, their source along with distance and mode of transportation are given in Table - 3

Table - 3

Raw Material Requirement for Cement Plant

S. No.	Name of Raw Material	Quantity (MTPA)			Source	Distance & Mode of Transportation
		Existing	Additional	Total		
1.	Limestone	9.75	5.25	15.0	Captive Mines	Covered Conveyor Belt
2.	Iron Ore	0.05	0.03	0.08	Rashi steel /Sparsh baldev	100 km / Road
3.	Fly ash	1.15	1.30	2.45	CPP, BALCO, NTPC Korba	250 km / Rail
4.	Gypsum	0.165	0.185	0.35	Koromandal fertilizer / Paradeep phosphate Ltd	650 km / Road / Rail
5.	Slag	2.31	2.59	4.90	Bhilai steel plant/ NICCO	100 km / Road / Rail
6.	Performance Improver	0.16	0.18	0.34	-	-

Source: Pre-feasibility Report

1.5.2 Fuel Requirement

Details regarding quantity of fuel required, their source along with distance & mode of transportation for proposed expansion project are given in Table - 4.

Table - 4

Fuel Requirement

S. No.	Name of Fuel	Quantity Required (MTPA)			Calorific value (Kcal. /kg)	% Ash	% Sulphur	Source	Distance & Mode of Transportation
		Existing	Additional	Total After Expansion					
1.	Coal (Cement Plant)	0.90	0.47	1.35	4500 - 6000	15	0.5	USA, Saudi Arab and Reliance/ Essar/ CPCL, Coal India Ltd. Korba & Bilaspur	200 to 500 km / Road
	Petcoke (Indigenous & Imported)				7000 - 8200	0.8	6.5		
2.	Coal (CPP)	0.60	-	0.60	3500	45	0.5		

Source: Pre-feasibility Report

1.5.3 Other Basic Requirement

Other basic requirements for the proposed expansion project are given in Table - 5.

Table - 5
Basic Requirements for the Project

S. No.	Particular	Existing	Additional	Total	Source
1.	Water (m ³ /day)	3962	2000	5962	Ground Water, Mine Sump Water & Rainwater harvesting structures
2.	Power (MW)	59	44	103	Captive Power Plant, WHRS & Grid {Excess Power will also be sourced from Sister Unit (Hirmi Cement Works)}.
3.	Manpower	565	310	875	Unskilled/semi-skilled manpower will be sourced from the local area and skilled manpower will be sourced from outside/local.

Source: Pre-feasibility Report

1.6 PROCESS DESCRIPTION

1.6.1 Cement Manufacturing Process

The Cement Plant is based on Dry Process Technology for Cement manufacturing with Pre-Heating and Pre-Calcliner Technology.

The process involves in cement production largely comprises of the following steps:

- ❖ Transport of excavated limestone from Captive mines
- ❖ Raw Mix Preparation & Homogenization
- ❖ Preheating, Calcination & Clinkerization
- ❖ Clinker Cooling
- ❖ Clinker Storage & Transport
- ❖ Cement Grinding, Storage, Packing & Dispatch

1.6.2 Waste Heat Recovery system (16 to 36 MW)

M/s. UltraTech Cement Ltd. (Unit: Rawan Cement Works) is proposing an expansion of Waste Heat Recovery System (WHRS) from 16 MW to 36 MW for re-utilization of the exhaust gases from the Pre-heater/ Cooler to generate electric power and consequently reduce consumption of grid power through fossil fuel. The project will contribute to the more efficient use of energy and will reduce reliance on exhaustible fossil fuel.

In the cement plant, WHRS will consist of two waste heat recovery boilers viz.

- Pre-Heater (PH) boiler: PH boiler will be installed after Pre-Heater and recovers heat from Pre-Heater exhaust gases.
- Clinker Cooler (AQC) boiler: Clinker cooler or Air Quenching Cooler (AQC) boiler will be installed after Clinker cooler and recovers heat from Clinker cooler exhaust gases.

2.0 DESCRIPTION OF ENVIRONMENT

2.1 Presentation of Results (Air, Noise, Water & Soil)

Baseline study of the study area was conducted during Winter Season (Dec., 2018 to Feb., 2019).

Ambient air quality monitoring has been carried out at 9 stations in the study area on 24 hourly basis. Ambient Air Quality Monitoring reveals that the concentrations of PM₁₀ and PM_{2.5} were found between 48.1 to 92.8 µg/m³ and 24.2 to 56.5 µg/m³, respectively. The concentrations of SO₂ and NO₂ were found to be in range of BDL to 13.3 µg/m³ and 8.9 to 27.9 µg/m³ respectively. CO concentration was found to be in range of 0.41 mg/m³ to 0.98 mg/m³. PAHs concentration was observed as BDL at all locations.

Ambient noise levels were measured at 10 locations around the plant site. Noise levels vary from 43.4 to 65.3 Leq dB (A) during day time and from 42.6 to 60.5 Leq dB(A) during night time.

The ground water analysis for all the 10 sampling stations shows that pH ranged from 7.11 to 8.21. The value of total hardness was 111.88 to 499.95 mg/l, alkalinity 96.9 to 494.7 mg/l and fluoride 0.13 to 1.22 mg/l.

The surface water analysis for 1 sampling station shows that the pH of collected water sample found as 7.65. Total hardness is 123.75 mg/l and Total dissolved solids 236 mg/l. BOD is 2.6 mg/l & COD is 11.4 mg/l.

Soil monitoring was carried out at 10 locations and the analysis results show that all soil samples have neutral to slightly alkaline in nature, having pH range from 6.95 to 7.49, bulk density 1.38 to 1.46 g/cc, with organic matter from 0.63% to 1.45%. The soil texture is desirable for agriculture.

2.2 Biological Environment

Flora: Most common species found in the study area are *Acacia nilotica* (Babool), *Phoenix sylvestris* (Khajoor), *Azadirachta indica* (Neem), *Butea monosperma* (Palash), *Calotropis procera* (Aak), *Anogeissus latifolia* (Dhaura), etc.

Fauna: Most common species found in the study area are *Herpestes edwardsii* (Mongoose), *Funambulus pennanti* (Palm Squirrel), *Lepus nigricollis* (Black-napped Hare), *Presbytes entellus* (Common Langoor) etc.

Two schedule - I species i.e. *Varanus bengalensis* (Monitor lizard) & *Python molurus* (Python) has been reported in study area of the proposed expansion project according to (IWPA) Indian Wildlife Protection Act, 1972. Wildlife Conservation Plan has been prepared and submitted to Forest Officer, Balodabazar for approval.

2.3 Socio-Economic Environment

The population as per 2011 Census records is 83575 (for 10 km radius). Total no. of household is 3040, 7651 and 6137 respectively, in primary, secondary and outer zone. Sex ratio is 985, 1008, 1007 (females per 1000 males) observed in primary, secondary and outer zone respectively. SC population distribution is 3057, 10060 and 6227 respectively in primary, secondary and outer zone. ST population distribution is 1147, 3233 and 3340 respectively in primary, secondary and outer zone respectively. Average household size is 4.97. Total No. of villages observed within the 10 km radius

from the project area are 65. Percentage of total working population and non-working population is 48.69 % and 51.31% respectively in the surveyed villages.

3.0 ANTICIPATED ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Anticipated environmental impacts due to operation of the proposed expansion project along with mitigation measures are given below in Table – 6:

Table - 6

Anticipated Environmental Impacts and Mitigation Measures

Discipline	Anticipated Impact	Mitigation Measures
Construction Phase		
Air	Increase in Particulate Matter (dust) and NO _x concentration due to Leveling activity and Heavy vehicular movement	<ul style="list-style-type: none"> * Sprinkling of water in the construction area and on unpaved roads * Proper maintenance of vehicles will be done. * Use of vehicles meeting PUC norms
Noise	Increase in noise level due to Construction Equipment	<ul style="list-style-type: none"> * Equipment will be kept in good condition to keep the noise level within 90 dB (A). * Workers will be provided necessary protective equipment e.g. ear plugs, earmuffs.
Water	Increase in suspended solids due to soil run-off during heavy precipitation due to Loose soil at construction site	<ul style="list-style-type: none"> * Adequate drainage system for runoff water during construction phase
Solid waste	Construction waste	<ul style="list-style-type: none"> * Construction waste will be used for land filling
Operation Phase		
Air	Increase in concentration of Particulate Matter Emissions & Gaseous emission	<ul style="list-style-type: none"> * Installation & maintenance of pollution control equipment like ESP / Reverse Air Bag House / Bag House / Bag Filters. * Storage of clinker, fly ash and cement in silos. * Storage of limestone in Stockpile and Iron ore in Open/Shed. * Storage of coal/Petcoke and gypsum in covered shed. * Covered storage facilities for raw material, fuel and product * All the roads inside the plant premises are concreted. * Water sprinkling to reduce the PM emission level * CPCB and CREP guidelines are being / will be followed
	Increase in NO ₂ emissions	<ul style="list-style-type: none"> * Low NO_x burners in CFBC Boiler
Noise	Increase in noise level within the plant area	<ul style="list-style-type: none"> * Equipment designed to conform to occupational noise levels prescribed by regulatory agencies * Earmuffs/ Earplugs provided to persons working in high noise zone * Properly insulated enclosures for equipment making excessive noise * Greenbelt development/ plantation to help in

Discipline	Anticipated Impact	Mitigation Measures
		attenuating noise
Water	Generation of waste water	* STP for treating domestic waste water from plant and colony and utilized for greenbelt development/plantation. * Wastewater from CPP & RO reject are treated in ETP and treated water is re-used for greenbelt development/ plantation, dust suppression
Soil	Degradation of soil quality due to settling of air borne dust	* Use of efficient pollution control systems * Maintained proper stack height * Soil samples are / will be collected periodically and soil quality is / will be tested
Biological Environment		
a. Terrestrial Ecology	Positive as greenbelt of appropriate width has been developed and maintained by M/s. UltraTech Cement Ltd. in the area	-
b. Aquatic Ecology	No impact as no effluent is being / will be discharged outside the plant premises	-
Socio-economic Environment	Overall development of the area in respect of the infrastructure development, educational growth, health facilities etc.	-

4.0 ENVIRONMENTAL MONITORING PROGRAMME

Details of the environmental monitoring schedule / frequency, which will be undertaken for various environmental components, as per conditions of EC / CTE / CTO are given in Table - 7.

Table - 7
Post Project Monitoring

S. No.	Description	Frequency of Monitoring
1.	Meteorological Data	Hourly
2.	Ambient Air Quality	Twice a Week & Continuous Online Monitoring
3.	Fugitive Monitoring	Quarterly
4.	Stack Monitoring	Continuous Online Monitoring
5.	Water Quality	Twice in a year / As per CGWA NOC
6.	Waste Water Monitoring	Monthly & as per CTO
7.	Water Level	Monthly as per CGWA NOC
8.	Noise Level Monitoring	Monthly & as per EC / CTO
9.	Medical Checkup of Employee	Yearly
10.	Energy Audit	At regular interval
11.	Environment Audit	At regular interval

5.0 ADDITIONAL STUDIES

Additional Studies conducted as per ToR Letter No. J-11011/262/2009-IA.II (I) dated 09th Nov., 2018, issued by MoEFCC, New Delhi, are Hydro-geological Study & Rain water Harvesting Plan and Risk Assessment & Disaster Management Plan.

6.0 EMERGENCY PREPAREDNESS PLAN

M/s. UTCL (Unit: Rawan Cement Works) is having an Emergency Plan (Onsite & offsite) at the plant site. Suitable Risk Control Measures with respect to Risk Assessment is being implemented to minimize the risk to an acceptable level. Regular Training, Implementation of SOPs and compliance of relevant Personal Protective Equipments (PPEs) helps to minimize the health hazards and incidental casualties. Same will be followed for the proposed expansion.

7.0 PROJECT BENEFITS

The proposed expansion project will help in combating the growing demand of cement in the market & hence will help in the economic growth of the country. M/s. UltraTech Cement Ltd. (Unit: Rawan Cement Works) is/will be actively involved in the ESC/CER activities in the nearby villages of the project site. Infrastructure development in the nearby villages, creating educational facilities, empowering women through self-help groups, gainful employment for rural, health awareness programmes & surgical camps, assistance in social forestry programmes in the area, are some of the activities further to be undertaken under ESC/CER planning phase manner for the development and upliftment of the society. As per OM dated 01st May, 2018, company has proposed to spend Rs. 8.5 Crores towards CER activities based on the proposed project cost of Rs. 1800.

8.0 ENVIRONMENT MANAGEMENT PLAN

The major sources of pollution in Integrated Cement Plant are Particulate Matter. Air pollution is the major concern to be looked upon for the project activity. No major water, noise and soil pollution is envisaged from the project activity. Various mitigation measures have been proposed to take care of the environment in respect of air, water, noise, soil and the green cover of the plant site and nearby villages.

Particulars	Details
Air Quality Management	<ul style="list-style-type: none"> ⊗ Installation & maintenance of pollution control equipment like ESP / Reverse Air Bag House/Bag House / Bag Filters. ⊗ Bag filters is being/ will be provided to control dust emitted from various dust generating points in the plant and at all material transfer points. ⊗ Storage of clinker, fly ash and cement in silos ⊗ Storage of limestone in Stockpile and Iron ore in Open/Shed ⊗ Storage of coal/Petcoke and gypsum in covered shed. ⊗ Fly ash is being/will be transported in closed tankers. ⊗ Greenbelt has been/will be developed around/ within the premises of the plant site to arrest the fugitive emissions. ⊗ Unloading of trucks is being/will be carried out with proper care avoiding dropping of the materials from height.

Particulars	Details
	<ul style="list-style-type: none"> ⊗ Sprinkling of water is being/will be done along the internal roads in the plant in order to control the dust arising due to the movement of vehicles ⊗ Proper maintenance of vehicles is being/will be done to reduce gaseous emissions ⊗ Low NO_x burners ⊗ Regular ambient air quality and stack emission monitoring is being/will be carried out as per CPCB / RSPCB norms to ensure that ambient air quality standards will be met all the time.
Water Management	<ul style="list-style-type: none"> ⊗ No waste water is being/will be generated from the Cement manufacturing process. ⊗ Blow down water from cooling towers and boiler is being / will be treated in neutralization pit and treated water is being / will be utilized in dust suppression ⊗ Domestic waste water from plant and colony is being / will be treated in STP and treated water is being / will be utilized for greenbelt development/plantation. ⊗ RO reject water is being / will be used in dust suppression. ⊗ Rain Water Harvesting is being / will be practiced within the plant premises.
Noise Management	<ul style="list-style-type: none"> ⊗ Personal Protective Equipments (PPEs) like earplugs and earmuffs are being/will be provided to the employees exposed to high noise level. ⊗ Proper maintenance, oiling and greasing of machines at regular intervals is being/ will be done to reduce generation of noise. ⊗ Silencers have been provided to all safety valves of the plant to control the Noise level. ⊗ Greenbelt has been developed all along the plant boundary. ⊗ Regular monitoring of noise levels is being/will be carried out and corrective measures in concerned machinery will be adopted accordingly to the possible extent.
Solid & Hazardous Waste Management	<ul style="list-style-type: none"> ⊗ Dust collected from various air pollution control equipment is being / will be recycled in the process. ⊗ STP Sludge is being / will be utilized as manure for greenbelt development / plantation within the plant premises. ⊗ Solid waste generated from colony/canteen is being / will be disposed after segregating the waste into bio-degradable and non-degradable. Bio degradable waste is being / will be composted and non-degradable wastes is disposed off. ⊗ Used oil generated as hazardous waste is being/will be sold to CPCB authorized recycler.
Green Belt Development / Plantation	<ul style="list-style-type: none"> ⊗ M/s. UTCL Cement Ltd. has already developed 155.58 ha (~40% of the total plant area i.e. 388.37 ha) under greenbelt / plantation. The present greenbelt

Particulars	Details
	<p>will be maintained in order to reduce dust & noise pollution levels and to increase aesthetic beauty of the area.</p> <p>☞ Native plant species have been planted by UTCL in consultation with local horticulturist such as Teak, Shisham, Karanj, Peltaforum, Casia Samia, Amaltas, Ashoka, Bamboo, Ficus, Champa, Gulmohar and Neem etc.</p>

9.0 OCCUPATIONAL HEALTH & SAFETY

To control and minimize the risks at workplace, M/s. UltraTech Cement Ltd. (Unit: Rawan Cement Works) has implemented Health, Safety and Environment Policy with the following objectives:

- ☞ To prevent hazards
- ☞ To provide safe and healthy environment to all the employees.

The company, therefore, has adopted the policy for the purpose of creating and maintaining safe and healthy environment.

10.0 CONCLUSION

As discussed, it is safe to say that the proposed expansion project is an environmental friendly project, as adequate preventive measures will be adopted to maintain the various pollutants within permissible limits. Green belt development around the area would also be taken up as an effective pollution mitigation technique.

