ANDHRA CEMENTS LIMITED
DURGA CEMENT WORKS

SPEED-POST

ACL/DCW/MOEF/2020-21/ 75

Date: 23/10/2020

The Director (SEZ)
Ministry of Environment, Forest and Climate Change
Regional Office-South Eastern Zone
1st and 2nd Floor, HEPC Building,
NO.34, Cathedral Garden Road,
Nungambakkam, Chennai-600034
Tamil Nadu.

Sub: Submission of Six Monthly EC Compliance report (April 2020 to September 2020)-Plant & Mines.

Ref: Environmental Clearance granted by MoEF vide letter no.F.No.-J-11011/719/2007-IA II (I) Dated 20th December 2007.

Dear Sir,

With reference to above subject, we are enclosing herewith Six Monthly EC Compliance report for the period from April 2020 to September 2020 of Durga Cement Works (Plant & Mines), a unit of Andhra Cements Limited located at Durgapuram(V), Dachepally(M), Guntur(Dt), Andhra Pradesh.

This is for your kind information and request to arrange for acknowledgement, please.

Thanking you,

Yours faithfully
For **DURGA CEMENT WORKS**
(A Unit of Andhra Cements Limited)

(N.B.Singh)
Advisor-Technical

Encl: As above
Copy to:

The Member Secretary
AP Pollution Control Board
Head office,D.No.33-26-14D/2
Near Sunrise Hospital, Pushpa Hotel Centre
Chalamavari Street, Kasturibaipet, Vijayawada-520010 (AP State)

The Scientist & In charge
Central Pollution Control Board, 1th& 2thFloor, Nisarga Bhavan
A-Block, Thimmaiah Main Road, 7th D Cross, Shivanagar
opp.Pushpanjali Therature, Bengaluru, (Karnataka State)

The Environment Engineer
Regional Office, AP Pollution Control Board,
Door No.4-5-4/5C (EAST), Navbharat Nagar, Ring Road,
Guntur-522007, (A P State)

JAYPEE GROUP

ANDHRA CEMENTS LIMITED

Regd. Office & : Factory

Durga Cement Works, Durgapuram, Srinagar (P.O),
Dachepalli - 522 414, Guntur Dt. Andhra Pradesh
Ph : +91-8649-257428-29, Fax : +91-8649-257449

Name of the Project: : Durga Cement Works
A Unit of Andhra Cements Limited
Gamalapadu (V), Dachepalli (M)
Guntur District, Andhra Pradesh
Pin- 522414

Project Code: 02TS282

Clearance Letter No. : J-11011/719/2007-IA II (I) dated 20.12.2007.

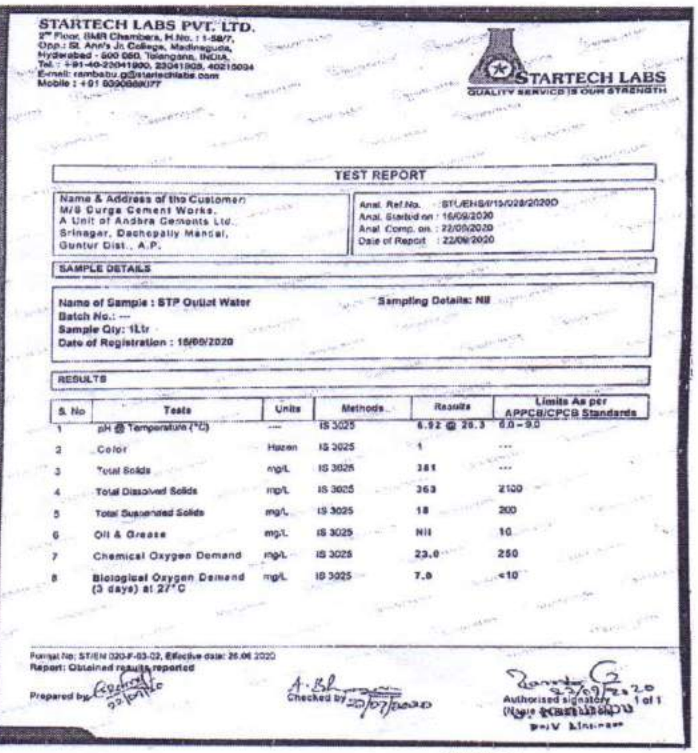
Period of Compliance : April 2020 to September 2020.

A. Specific Conditions:		
S. No	**Compliance Conditions**	**Compliance Status**
I.	Continuous monitoring system to monitor gaseous emissions shall be provided and limit of SPM shall be controlled within 50 Mg/Nm3 by installing adequate air pollution control system and data submitted to the Ministry's Regional Office at Bangalore, A.P. Pollution Control Board and CPCB regularly.	Continuous monitoring system to monitor gaseous emissions through stacks has been working and online real time monitoring data is being transmitted to APPCB & CPCB Server & Display board at factory gate regularly. Air pollution control equipments like RABH installed in Kiln & Raw Mill, Bag filter installed in Coal Mill, ESP installed in Cooler. Bag filters installed in Cement Mills. SPM level is maintained within prescribed standard limit. Data is being submitted to Ministry's Regional Office at Chennai, A.P. Pollution Control Board (APPCB) and CPCB regularly. Monitoring of Stack Emission was not carried out as plant is not in operation since February 2020.
II.	The company shall install adequate dust collection and extraction system to control fugitive dust emissions at various transfer points, raw mill handling (unloading, conveying, transporting, stacking), vehicular movement, bagging and packing areas etc. Crusher shall be operated with high efficiency bag filters. All conveyers shall be covered with GI sheets. Covered sheds for storage of raw materials and fully covered conveyers for transportation of materials shall be provided besides coal, cement, fly ash and clinker shall be stored in silos. Pneumatic system shall be used for fly ash handling.	Total 60 Nos. of Dust collection and extraction system (Bag filters) have been installed to control fugitive dust emissions at various transfer points i.e Raw Mill handling (unloading, conveying, transporting stacking) bagging and packing areas etc. a) 99.9% high efficiency bag filter installed in Crusher. b) All conveyors are covered. c) Covered sheds have been provided for storage of raw material such as laterite, coal, gypsum. d) Cement, Clinker and Fly ash are stored in silos. e) Pneumatic system is being used for fly ash handling.
III.	Secondary fugitive emissions shall be controlled within the latest permissible limits issued by the Ministry and regularly monitored. Guidelines / Code of Practice issued by the CPCB shall be followed and data submitted to the Ministry's Regional Office at Bangalore, CPCB and APPCB.	The secondary fugitive emissions have been controlled by providing dust collectors at all transfer points, water sprinklers, covered material storage and silos. Total 42 Nos. of water sprinklers have installed at identified emission points to control fugitive emission. Ambient Air quality Monitoring as per the guidelines of CPCB regularly monitored and data submitted to the Ministry's Regional Office at Bangalore, CPCB and APPCB.

<table>
<tr><td>IV.</td><td>Digital processing of the entire lease area using remote sensing technique should be done regularly once in three years for monitoring land use pattern and report submitted to Ministry of Environment and Forests and its Regional office, Bangalore.</td><td>The Director of Mines & Geology , Ibrahimpatnam accorded permission for empanel of agencies to carry out DGPS Survey of all Mining leases in Guntur District was allotted to M/s Geotrax International services, Hyderabad for conducting DGPS Survey, after survey work has been completed reports to be submitted to Ministry of Environment & Forests, and its Regional office, Bangalore.</td></tr>
<tr><td>V.</td><td>Regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of SPM and RPM such as haul road, loading and unloading points, transfer points and other vulnerable areas. It shall be ensured that the Ambient Air Quality Parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.</td><td>Regular water sprinkling is being carried out in all identified air pollution areas, to sustain the Ambient Air Quality as per norms prescribed by the CPCB/APPCB.

Monitoring of Ambient Air Quality was not carried out as plant is not in operation since February 2020.</td></tr>
<tr><td>VI.</td><td>Vehicular emissions shall be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in Mining operations and in transportation of mineral. The vehicles shall be covered with a tarpaulin and shall not be overloaded.</td><td>Being complied by taking suitable measures for maintenance of vehicles used in Mining operations and in transportation of Mineral.</td></tr>
<tr><td>VII.</td><td>Asphalting/concreting of roads and water spray all around the stockyard and Loading/unloading areas in the cement plant shall be carried out to control fugitive emissions.</td><td>Asphalting / concreting of roads all around the plants have been carried out as a continuous process. Water spray has regularly carried out on the roads through water tankers to control fugitive emission.
List of water sprinklers installed in plant as underneath:
<table>
<tr><th>S. No.</th><th>Area</th><th>Location</th><th>No. of Points</th></tr>
<tr><td>1</td><td>Limestone Crusher</td><td>Limestone Dump Hopper</td><td>2</td></tr>
<tr><td></td><td></td><td>Crusher lime stone carry Belt conveyor (211-BC2)</td><td>2</td></tr>
<tr><td></td><td></td><td>Limestone - Stacker Belt 211-BC4</td><td>3</td></tr>
<tr><td></td><td></td><td>Limestone - Boom belt</td><td>1</td></tr>
<tr><td>2</td><td>Clinker Silo Area</td><td>Near BC 5 Belt</td><td>1</td></tr>
<tr><td>3</td><td>Raw Mill Area</td><td>Laterite feeding belt conveyor</td><td>1</td></tr>
<tr><td></td><td></td><td>Weigh feeders</td><td>2</td></tr>
<tr><td></td><td></td><td>RABH side garden</td><td>6</td></tr>
<tr><td>4</td><td>Kiln</td><td>Drag Chain No.1</td><td>1</td></tr>
<tr><td></td><td></td><td>Drag Chain No.2</td><td>2</td></tr>
<tr><td>5</td><td>Coal Clet</td><td>Coal bulk receiving Unit - CBRU</td><td>1</td></tr>
<tr><td></td><td></td><td>Coal feeding belt - BC</td><td>1</td></tr>
<tr><td></td><td></td><td>Coal Stacker Belt</td><td>3</td></tr>
<tr><td></td><td></td><td>Coal Reclaimer belt</td><td>1</td></tr>
<tr><td></td><td></td><td>Coal yard</td><td>2</td></tr>
<tr><td></td><td></td><td>Coal Mill</td><td>1</td></tr>
<tr><td>6</td><td>Clinker feeding</td><td>Clinker feeding - (DBC-1)</td><td>1</td></tr>
<tr><td></td><td></td><td>Clinker feeding - (DBC-2)</td><td>1</td></tr>
<tr><td></td><td></td><td>Clinker feeding belt conveyor BC4</td><td>1</td></tr>
<tr><td>7</td><td>Cement Mill</td><td>Shift Office</td><td>2</td></tr>
<tr><td>8</td><td>Factory Gate -2</td><td>Dispatch Office</td><td>1</td></tr>
<tr><td>9</td><td>Factory Gate -1</td><td>Temple</td><td>2</td></tr>
<tr><td></td><td></td><td>Road Side</td><td>3</td></tr>
<tr><td colspan="3">Total</td><td>42</td></tr>
</table></td></tr>
</table>

VIII.	Total ground water requirement for cement plant and Mining shall not exceed 420 and 60 m^3/day (including 56 m^3/day mine water) respectively. All the treated wastewater shall be recycled and reused in the process and/or for ash quenching, dust suppression, green belt development and other plant related activities etc. No process wastewater shall be discharged outside the factory premises and 'zero' discharge shall be adopted.	Water consumption is maintained as per the APPCB limits. No process wastewater being discharged outside the factory premises and 'zero' discharge is maintained.
IX.	'Permission' for the drawl of ground water from SGWB / CGWA shall be obtained. Mined out area shall be developed as artificial reservoir. The water stored in the artificial reservoir made in the mine pit shall be used maximum to reduce ground water consumption.	Permission for the drawl of ground water obtained from Andhra Pradesh Ground Water Department Ref. Lr.No.2 /ACL/HO/2007- Dated 01.09.2007 Water collected in artificial reservoir in the Mine's pit is being used to minimize ground water consumption.
X.	Sewage treatment plant (STP) shall be installed for the colony. Treated domestic effluent shall be used for green belt development within the plant premises. Domestic waste from colony and STP shall be segregated in to bio-degradable and non-biodegradable. Bio-degradable waste shall be composted and non-biodegradable waste shall be land filled at identified sites. ETP should also be provided for workshop and mineral separation plant wastewater.	Sewage Treatment Plant of capacity 300 KLD has been working for the treatment of sewage water of colony and plant. Quality of treated water is within the norms. Treated water is being used in gardening and dust suppression. Sludge of STP is being used as manure in green belt development. Bio-degradable and non-biodegradable waste is being treated as directed.



STARTECH LABS PVT. LTD.
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TEST REPORT

Name & Address of the Customer:
M/S Durga Cement Works.
A Unit of Andhra Cements Ltd.,
Srinagar, Dachepally Mandal,
Guntur Dist., A.P.

Anal. Ref.No. : STL/EHS/I/15/028/2020D
Anal. Started on : 16/09/2020
Anal. Comp. on. : 22/09/2020
Date of Report : 22/09/2020

SAMPLE DETAILS

Name of Sample : STP Outlet Water
Batch No.: ---
Sample Qty: 1Ltr
Date of Registration : 16/09/2020
Sampling Details: Nil

RESULTS

S. No	Tests	Units	Methods	Results	Limits As per APPCB/CPCB Standards
1	pH @ Temperature (°C)	----	IS 3025	6.92 @ 26.3	6.0 – 9.0
2	Color	Hazen	IS 3025	1	---
3	Total Solids	mg/L	IS 3025	381	---
4	Total Dissolved Solids	mg/L	IS 3025	363	2100
5	Total Suspended Solids	mg/L	IS 3025	18	200
6	Oil & Grease	mg/L	IS 3025	Nil	10
7	Chemical Oxygen Demand	mg/L	IS 3025	23.0	250
8	Biological Oxygen Demand (3 days) at 27°C	mg/L	IS 3025	7.0	<10

Format No: ST/EN 020-F-03-02, Effective date: 26.06.2020
Report: Obtained results reported
Prepared by
Checked by
Authorised signatory
1 of 1

XI.	The project proponent shall ensure that no natural water course shall be obstructed due to any mining operations.	Agreed We ensured that, natural watercourse are not obstructed due to any mining operation.

XII.	All the bag filter dust, raw mill dust, coal dust, clinker dust and cement dust from pollution control devices shall be recycled and reused in the process and used for cement manufacturing. Sludge from domestic sources shall be used as manure for green belt development. Waste oil shall be sold to authorized recyclers / preprocessors only.	Being Complied Systems have been designed and installed for recycling and reuse of the dust collected through pollution control devices. Similarly, sludge from domestic sources has utilized as manure in green belt development. Waste oil is being sold to APPCB authorized recyclers / pre-processors only. Annual return (Form-4) of waste oil along with manifest recently submitted ref. Letter No.: ACL/DCW/ENV/HW/2019-20 dt.25.05.2020
XIII.	An effort shall be made to use of high calorific hazardous waste in the cement kiln and necessary provision shall be made accordingly.	Provision of use of high calorific hazardous waste in the cement kiln shall be explored.
XIV.	Efforts shall be made to use low-grade lime, more fly ash and solid waste in the cement manufacturing.	We are blending low and high grade Limestone to conserve the natural resources. Fly ash is utilizing for manufacturing PPC.
XV.	Action plan for the mining, management of over burden (removal, storage, disposal etc.), reclamation of the mined out area and mine closure shall be submitted to the Ministry and its Regional Office at Bangalore.	Not applicable, as there is no overburden present in our mine. Limestone is exposed on the surface.
XVI.	The top soil and solid waste shall be stacked separately at specified dumping site with proper safeguards. Top soil shall be used for the plantation / green belt development during reclamation and solid waste for backfilling.	Not applicable, there is no top soil and solid waste in our mine.
XVII.	The over burden (OB), inter burden and other waste generated from mines, if any, shall be stacked at the earmarked dump sites only and should not be kept active for long period. Backfilled OB dumps shall be scientifically vegetated with suitable native species to prevent erosion and surface run off. Monitoring and management of reclaimed areas shall continue until the vegetation becomes self-sustaining. Regular compliance shall be submitted to the Ministry and its Regional Office at Bangalore on six monthly basis.	There is no overburden, inter burden and other waste generated in our mine. Limestone is being 100% used for cement manufacturing.
XVIII.	The area for external over burden dump shall be reduced by suitably increasing the height of the dumps with proper terracing. It shall be ensured that the overall slope of the dump does not exceed 28°.	Not applicable, as there is no over burden in our mine.
XIX.	Garland drains shall be constructed to arrest silt and sediment flows from soil. The water so collected shall be used	Drains have been constructed to collect rain water into Mine's pit and used for watering the mine area, haul roads, green belt development etc. The drains shall be maintained properly.

	for watering the mine area, haul roads, green belt development etc. The drains shall be regularly de-silted and maintained properly.	
xx.	Suitable rainwater harvesting and conservation measures to augment groundwater resources in the area on long term basis shall be planned and implemented in consultation with Regional Director, Central Ground Water Board in cement plant and mining area to augment ground water resources and use for dust suppression and horticulture.	Being complied Rainwater is being collected into Mine's pit for further use in dust suppression on haul roads and blasted material wetting in mines and plant.
xxi.	Regular monitoring of ground water level and quality shall be carried out by establishing a network of existing wells and new peizo meters at suitable locations by the project proponent in and around project area in consultation with Regional Director, Central Ground Water Board during the mining operation. The ground water monitoring shall be carried out 4 times in a year i.e. pre-monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and data thus collected shall be regularly sent to the Ministry, its Regional Office at Bangalore, Central Ground Water Authority and State Ground Water Board, Bangalore.	Ground water level monitoring has carried out at 4 times in a year and water quality analyzed. Monitoring Report of the same has given below.

Ground Water Level Report				
Location	Plant Site near Security Main Gate	Srinagar Village	Ramapuram Village	Gamala padu Village
Direction	S	S	NW	SE
Distance From Plant	-	1.5 Km	6.0 Km	5.0 Km
Bore Well/ Open Well	Bore Well	Bore Well	Bore Well	Bore Well
Depth of Water From Ground Level (Meter)				
Date: 25.05.2020	25.6	68.5	70.2	50.2
Date: 28.09.2020	10.2	23.8	28.5	20.1

Durga Cement Works
(A Unit of Andhra Cements Limited)

Test Report

Nature of samples : Water
Sample received date : 14.09.2020
Sample analysis date : 14.09.2020
Analysis Completion date : 21.09.2020
Sample analyzed at : In-house Laboratory (Captive Power Plant)

Location:			Srinagar Village	Gamalapadu Village	Ramapuram Village	Plant Site near Security Main Gate	IS 10500 Drinking Water Standards Limit	
Type of Water:			BoreWell Water					
S. No.	Parameter	Unit	Results				Desirable Limit	Permissible limit
1.	pH	-	7.5	7.4	7.2	7.7	6.5 to 8.5	6.5 to 8.5
2.	Conductivity	(uh)	925	1014	1139	1025	NA	NA
3.	Turbidity	(NTU)	1.0	1.2	1.4	1.0	5-10	5-10
4.	Total Hardness	(mg/l)	223	275	328	292	200	600
5.	Calcium Hardness	(mg/l)	126	143	159	197	75	200
6.	Magnesium Hardness	(mg/l)	72	91	97	88	30	100
7.	TDS	(mg/l)	505	548	630	570	250	2000
8.	TSS	(mg/l)	25	32	45	38	100	100
9.	Alkalinity	(mg/l)	109	152	138	120	200	600
10.	Chlorides	(mg/l)	60	69	85	71	250	1000
11.	Fluorides	(mg/l)	0.65	0.75	0.80	0.68	0.5	1.5

Analyzed Signature
(Adesh Chaudhary)
Sr Chemist

xxii.	The project proponent shall take appropriate mitigative measures to prevent pollutions of nearby River and other surface water body, if any.	Not applicable, as no Waste Water generated in our process/plant & mines. Zero discharge is adopted.

<table>
<tr><td>xiii.</td><td>Deep hole wet drilling sequential blasting method shall be adopted and provision for the control air emissions during blasting using dust collectors/ extractors etc. shall be made. Blasting operation shall be carried out during the daytime only and one bench at a time shall be blasted. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders shall be implemented. 'No objection certificate' from the Chief Controller of Explosives shall be obtained.</td><td>We are adopted wet drilling and dust collection system in drilling machine.
Sequential blasting methods are using to control the charge per hole/delay and to minimize the ground vibration, control of fly rocks, and to minimize the formation of boulders.

We are monitoring the Ground vibration and air over pressure (Noise) with the help of 'Minimate' instrument and keeping the records of the same.

The results are well within the permissible limits specified by DGMS.

We have obtained no objection certificate from Chief controller of explosives, in form LE-3 for Explosive Possession and Use. License No:E/HQ/AP/22/93 (E1673)dt.10.08.2020 validity up to dt.31.03.2025.</td></tr>
<tr><td>xiv.</td><td>Out of total 141.574 hectare, Green belt shall be developed in at least 36 ha. (25 %) in and around the cement plant as per the CPCB guidelines to mitigate the effects of air emissions in consultation with local DFO. In mining, out of 170.22 hectare plantation shall be raised in an area of 46.72 ha. By planting the native species around mining lease area, over burden dumps, around water body, roads etc. in consultation with the local DFO / Agriculture Department. At least, 1,500 trees per year shall be planted with a tree density of 2,000 trees per ha. An action plan shall be submitted in this regard.</td><td>Cement plant have 49.01 ha of green belt and additional area is being covered.
Our endeavor to complete the plantation programme in mine lease area is affected due to:-
1) Rocky area
2) Limestone outcrops all over the mine lease area.
3) Availability of very little area with top soil. Top soil is available as a thin layer in parts of the lease area.
However, the greenbelt developed in mine lease area during the reporting period is tabulated below;
<table>
<tr><th colspan="4">Status of Existing Mine Green Belt of Mines</th></tr>
<tr><td>Total Mines area (Hectares)</td><td>Total Plantation (Nos.)</td><td>Total Plantation area (Hectares)</td><td>Tree Species Planted</td></tr>
<tr><td>170.22</td><td>28834</td><td>35.10</td><td>Rain Trees, Ganuga , Punnaga, Teak Wood, Seetaphalam, Neem , Banyan Trees</td></tr>
</table>
Period : April, 2020 to September, 2020
Tree Plantation (Nos.) : 500</td></tr>
<tr><td>xv.</td><td>The void left unfilled shall be converted into water body. The higher benches of excavated void/Mining pit shall be terraced and plantation done to stabilize the slopes. The slope of higher benches shall be made gentler for easy accessibility by local people to use the water body. Peripheral fencing shall be carried out along the excavated area.</td><td>Shall be complied, in accordance of the mine closure plan, after completion of mining operation.</td></tr>
<tr><td>xvi.</td><td>The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. Necessary allocation of funds for implementation of the conservation plan shall be made</td><td>On our request, Forest department, Government of Andhra Pradesh has studied the impact of our Cement plant and Mines activities on the surrounding reserve forests and have certified vide their letter no 1510/2015/TO dated 18-12-2015 that there is no effect on the existing Flora and Fauna due to existence of M/s Andhra Cements Ltd .</td></tr>
</table>

	and the funds so allocated shall be included in the project cost. Copy of action plan may be submitted to the Ministry and its Regional office within 3 months from the date of issue of this letter.	
xvii.	A final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure for approval.	Agreed. Shall be complied.
xviii.	Mechanized open casting shall be adopted and no change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment & Forests.	Agreed. Mechanized open cast mining is adopted and we will take prior approval of MOEF&CC for any change in technology or scope.
xix.	Consent to Operate shall be obtained from APPCB before starting enhanced production from the mine.	Noted & Agreed.
xx.	'Permission' of the State Forest Department shall be obtained regarding impact of cement plant and mining activities on the surrounding 6 reserve forests viz. Gamalapadu RF (0.1-0.4 km.), Madinapadu RF (1.2-1.8 km.), Daida RF (4.7-4.9 km.), Saidulnam RF (3.8-5.0 km.). Ravipahad RF (5.3-6.6 km.) and Warivabad RF(6.2-6.8 km) and all the recommendations shall be followed.	The Cement plant and Mines have been running since 1984.There is no report of any adverse impact of cement plant operation and mining activities on the surrounding 6 reserve forests. All the air-monitoring reports are submitted to APPCB, CPCB, MoEF&CC regularly & emissions are within stipulated norms. .
xxi.	The company shall obtain necessary clearances / approval from the concerned Departments i.e. Indian Bureau of Mines, State Government, MoEF etc. for the linked mining component before undertaking any construction activity at the project site.	Necessary permissions obtained from IBM. **Ref: Letter No.** AP /KNL/MP/Lst 9/Hyd. Dt:18.09.2017
xxii.	Rehabilitation and Resettlement Plan for the project-affected population as per the policy of the State Govt. shall be prepared and implemented.	This is an old plant working since 1984, hence no Rehabilitation and Resettlement involved in this Project.
xxiii.	Acoustic enclosures shall be provided to control noise wherever necessary. Mine machine shall be provided with silencers. Noise shall also be controlled from cooler fans, compressor house, cement mill and raw mill, cement plant and drilling machines, excavator, blasting at mine site using appropriate noise control measures.	All Mining equipments provided with silencers to control noise emissions. Sharp bits is using with wet drilling to reduce noise of drilling machine. Industry has been provided earplug to drill operators. Bottom initiation with the help of shock tubes and use millisecond delay detonators to reduce noise by blasting. Acoustic enclosures provided in the plant area wherever applicable.

xiv.	All the safety norms stipulated by the Director General, Mine & Safety (DGMS) should be implemented.	We are implementing all the safety norms stipulated by DGMS.
B. General Conditions :		
i.	The project authority shall adhere to the stipulations made by Andhra Pradesh Pollution Control Board (APPCB) and State Government.	Noted and Agreed.
ii.	No further expansion or modification of the plant shall be carried out without prior approval of this Ministry.	Noted and Agreed.
iii.	The gaseous and particulate matter emissions from various units shall conform to the standards prescribed by the A.P. Pollution Control Board. At no time, the particulate emissions from the cement plant shall exceed APPCB limit. Interlocking facility shall be provided in the pollution control equipment so that in the event of the pollution control equipment not working, the respective unit(s) is shut down automatically.	Being complied Stack emissions are within the norms and inter locking facility also provided.
iv.	On-line Ambient Air Quality Monitoring station shall be installed in downwind direction. Ambient Air Quality including Ambient Noise Levels shall not exceed the standards stipulated under EPA or by the State authorities. Monitoring of Ambient Air Quality and Stack Emissions shall be carried out regularly in consultation with APPCB and report submitted to the APPCB quarterly and to the Ministry's Regional Office at Bangalore half-yearly.	Three (3) nos. On-line Real Time CAAQM stations have been installed in upwind, downwind and crosswind directions. Monitoring data is being transmitted to APPCB & CPCB server & display board at factory gate continuously. Ambient Air, Stack Emission & Noise Level Monitoring data is being regularly submitted to APPCB, CPCB & MoEF. Monitoring data are within the stipulated norms of MoEF, CPCB & APPCB. Report submitted with our ref. Ref.: Letter No.: ACL/DCW/MOEF/2019-20 Date: 15.05.2020. • Plant is not in Operation since February 2020
v.	The company must harvest the rainwater from the rooftops and storm water drains to recharge the ground water and use the same water for the various activities of the project to conserve fresh water.	All the water from the rooftops, storm water drains lead to main drains connecting to the mines water reservoir. The water thus collected and utilized for sprinkling and greenbelt development.
vi.	The company shall undertake eco development measures including community welfare measures in the project area.	We have taken following initiative for Eco development measures including community welfare: 1. **Green Belt Development:** (a) Green belt developed in Plant area, Mines area, colony, plant boundary and both side of all the roads area. 2. **Water Conservation:** (a) Construction of Sewage Treatment Plant for Maintain **Zero Waste Water Discharge.** Treated water is being

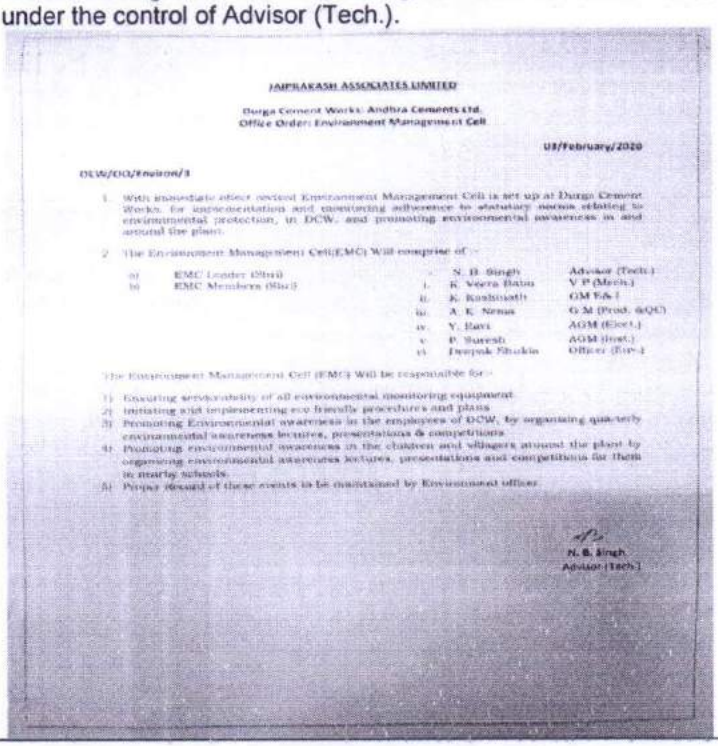
		utilized for specific purposes such as Plantation, dust suppression etc. (b) Installation air-cooled condenser for Captive Power plant, instead of conventional large size Cooling tower. (c) Rain water harvesting done in Mine Pits. 3. **Solid Waste Management :** (a) Practicing principle of 2 R's i.e., Reduce & Reuse (b) All the waste is segregated & kept on the basis on degradability/recyclability, than accordingly is disposed. Bio -degradable waste collected from township & plant area and composted and the manure utilized for horticulture purpose. (c) All the hazarded waste is disposed through the authorized recyclers. (d) Maximum possible utilization of Fly ash to manufacture Portland Pozzolona Cement 4. **Soil Conservation:** Entire cement plant has been constructed on infertile land purchased from "patta lands" of the nearby residents, which is outside the reserved forest. For construction of plant and facilities in no case top fertile soil has been scarified. Rocky terrain had been leveled off for foundations for P & M, Offices & Buildings without any extraneous matter, with the help of excavator /grader only. 5. **Socio-Economic Benefits:** (a) Indirect employment to entrepreneurs (b) Direct employment to local resident (c) Growth of local market in terms of consumables (Domestic & Industrial) (d) Fulfilling CSR & commitment made. (e) Preference to local people for employment (f) Rise in living standards
VII.	The overall noise levels in and around the plant area shall be kept well within the standards (85dBA) 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 Environmental (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	Noise control measures including acoustic hoods, silencers. Enclosures have been provided and Ambient Noise Level Monitoring Report furnished as underneath:

Durga Cement Works (Cement Plant)
Ambient Noise Level Monitoring Report
April, 2020 to September, 2020

Location	**1. Colony area**		**2. Near Time Office**	
Time	Day	Night	Day	Night
Concentration	dB(A)Leq			
Maximum	40.2	31.2	36.8	29.6
Minimum	30.5	28.6	29.6	27.2
Average	35.2	29.5	33.4	28.0
Location	**3. Crusher area**		**4. Raw Mill area**	
Time	Day	Night	Day	Night
Concentration	dB(A)Leq			
Maximum	32.3	28.5	31.8	29.2
Minimum	30.4	26.2	30.1	28.4
Average	31.1	26.8	30.5	28.1
Location	**5. Kiln & Cooler area**		**6. Coal Mill area**	
Time	Day	Night	Day	Night
Concentration	dB(A)Leq			
Maximum	35.8	32.7	30.5	27.6
Minimum	30.1	30.5	26.7	25.4
Average	32.4	30.8	27.9	26.2

Location	7. Cement Mill area		8. Packing Plant area	
Time	Day	Night	Day	Night
Concentration	dB(A)Leq			
Maximum	35.5	31.8	36.2	32.6
Minimum	31.2	28.6	30.8	29.7
Average	32.7	30.0	32.5	30.6

Durga Cement Works (Limestone Mines)				
Ambient Noise Level Monitoring Report				
April, 2020 to September, 2020				
Location	**1. Haulage Road**		**2. Drilling Point**	
Time	Day	Night	Day	Night
Concentration	dB(A)Leq			
Maximum	40.2	36.8	38.8	35.2
Minimum	38.2	34.5	35.6	33.6
Average	38.8	35.1	36.8	34.1
Location	**3. Loading Point**		**4. Mines Office**	
Time	Day	Night	Day	Night
Concentration	dB(A)Leq			
Maximum	36.8	31.4	39.6	35.6
Minimum	30.9	28.6	35.5	32.1
Average	33.6	30.7	37.9	33.7

VII.	All recommendations made in the Corporate Responsibility for Environment Protection (CREP) for cement plants shall be implemented.	Being Complied.
IX.	Proper housekeeping shall be taken up. Regular annual medical examination of all the employees shall be carried out from the occupational health point of view and records maintained.	Proper housekeeping all around the plant area have taken up. Annual Occupational health checkup of the employees regularly carried out and records maintained.
X.	A separate environmental management cell to carry out various management and monitoring functions shall be set up under the control of Senior Executive.	Environment management cell to carry out various Environment related management and monitoring functions has been set up under the control of Advisor (Tech.). 

JAIPRAKASH ASSOCIATES LIMITED

Durga Cement Works: Andhra Cements Ltd.
Office Order: Environment Management Cell

08/February/2020

DCW/EIO/Environ/3

1. With immediate effect revised Environment Management Cell is set up at Durga Cement Works, for implementation and monitoring adherence to statutory norms relating to environmental protection, in DCW, and promoting environmental awareness in and around the plant.

2. The Environment Management Cell(EMC) Will comprise of :-

a)	EMC Leader (Head)	- N. B. Singh	Advisor (Tech.)
b)	EMC Members (Six)	i. K. Veera Datta	V P (Mech.)
		ii. K. Kashinath	GM (QA)
		iii. A. K. Nema	G M (Prod. &QC)
		iv. Y. Ravi	AGM (Elect.)
		v. P. Suresh	AGM (Inst.)
		vi. Deepak Shukla	Officer (Env.)

3. The Environment Management Cell (EMC) Will be responsible for :-

1) Ensuring serviceability of all environmental monitoring equipment
2) Initiating and implementing eco friendly procedures and plans
3) Promoting Environmental awareness in the employees of DCW, by organising quarterly environmental awareness lectures, presentations & competitions.
4) Promoting environmental awareness in the children and villagers around the plant by organising environmental awareness lectures, presentations and competitions for them in nearby schools.
5) Proper record of these events is to be maintained by Environment officer.

N. B. Singh
Advisor (Tech.)

XII.	As proposed in EIA/EMP. Rs. 28.00 Crores and Rs. 0.95 Crores earmarked towards the capital cost and recurring cost/annum respectively for environment pollution control measures for the cement plant and Rs. 35.00 Lakhs and Rs. 1.5 Lakhs earmarked towards the capital cost and recurring cost/annum respectively for environment pollution control measures for the mine shall be suitably used to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. The funds so provided shall not be diverted for any other purpose.	As on date, about Rs. 52.44 crores already invested on the air pollution equipments (ie RABH, ESP, Bag House and nuisance bag filters). Funds provided for the maintenance of the above equipment shall not be diverted for any other purpose.
XIII.	The Regional Office of this Ministry at Bangalore / CPCB / APPCB shall monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical Interpretation shall be submitted to them regularly.	Six monthly compliance reports are being submitted regularly recent report submitted with ref. Letter No. ACL/DCW/MOEF/2019-20 Date:15.05.2020
XIV.	The 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.	Already Complied.
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 A. P. Pollution Control Board / Committee and may also be seen at Website of the Ministry of Environment and Forests at http:/envfor.nic.in. This should 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 shall be forwarded to the Regional office at Bangalore.	Already Complied.