REGISTERED POST

ANDHRA CEMENTS LIMITED
DURGA CEMENT WORKS

ACL/DCW/MoEF/EC/2015-16/

Date: 01.06.2015

The Additional Principal Chief Conservator of Forest
Ministry of Environment, Forest and Climate Change
Regional Office –South Eastern Zone
1st and 2nd floor, HEPC Building
34, Cathedral Garden Road
Nungambakkam, Chennai-600034

Sub: Six monthly Environment Clearance Compliance report (October 2014 to March 2015), EC 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, please find enclosed half yearly Environment Clearance compliance report of Durga Cement Works, a unit of Andhra Cements Limited for the period of October 2014 to March 2015 for your kind information and record please.

Thanking You

Yours faithfully
For **DURGA CEMENT WORKS**
A unit of Andhra Cement Limited

(Anjani Kumar)
Sr GM (P&QC)
Enc: As above
Copy to:

1) The Member secretary,
AP Pollution Control Board
Paryavaran Bhavan, A-III, IE, Sanath Nagar,
Hyderabad-500018

2) The Director,
Regional Office (South Zone)
MoEF ,Govt of India ,Kendriya Sadan,4th Floor ,E&F Wing
2nd Block,Kormangala
Bengaluru-560034,Karnataka

3) Scientist & Incharge
Central Pollution Control Board, 1st & 2nd Floor,Nisarga Bhavan
A-Block,Thimmaiah Main Road,7th D Cross,Shivanagar
Opp Pushpanjali Theatre, Bengalure, Karnataka

4)The Environmental Engineer
Regional Office, AP Pollution Control Board
102 Raghava Apartment, Brundavan garden
GUNTUR-522007, Andhra Pradesh

JAYPEE GROUP

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DURGA CEMENT WORKS

A Unit of Andhra Cements Limited
Gamalapadu (V), Dachepalli (M)
Guntur District, Andhra Pradesh.

Six monthly compliance report for the period October 2014 to March 2015 to the conditions specified in Environment Clearance granted by MoEF Vide letter no. J-11011/719/2007-IA II (I) dated 2012.2007.

Sl.No.	Condition	Compliance
A.	**Specific Conditions:**	
i	Continuous monitoring system to monitor gaseous emissions shall be provided and limit of SPM shall be controlled within 50 mg/Nm^3 by installing adequate air pollution control system and data submitted to the Ministry's Regional Office at Bangalore, A.P. Pollution Control Board (APPCB) 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 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. PM level is maintained below 30 mg/Nm^3. Data is being submitted to Ministry's Regional Office at Chennai, A.P. Pollution Control Board (APPCB) and CPCB regularly. Stack emission report is attached as **Annexure-A(i).** CEMS installed at all majar stacks exhibit at **Annexure-A(ii)** Photographs of the APCDs are also attached as **Annexure-A(iii)**
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.	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. Crusher has been provided with high efficiency bag filters. All conveyers are covered. Covered sheds are provided for storage of raw material such as laterite, coal, gypsum. Cement, Clinker and Fly ash are stored in silos. Pneumatic system shall be used for fly ash handling. List of the APCDs are given in **Annexure-A(iv)**.Fugitive control measures exhibit at **Annexure-A(v)**
iii	Secondary fugitive emissions shall be controlled within the latest permissible limits issued by the Ministry and regularly monitored. Guidelines / Code of Practice	The secondary fugitive emission is being controlled by providing dust collectors at transfer points, water spray, covered storage and silo etc as

	issued by the CPCB shall be followed and data submitted to the Ministry's Regional Office at Bangalore, CPCB and APPCB.	per the guidelines of CPCB and is being regularly monitored. The ambient air monitoring data is being submitted to APPCB, CPCB and MOEF regularly.
iv	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.	IBM (Regional Office) and State Mining department have been approached for the details and they have been requested to forward us the name of the approved agencies who have been conducting Digital processing of Mining area using remote sensing technique. We are committed for compliance.
v	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.	Regular water sprinkling is being carried out at all pollution prone areas, conforming the air quality norms as prescribed by the CPCB. Ambient Air Monitoring data are enclosed as per **Annexure-A(vi)**
vi	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.	Being complied by taking suitable measures for maintenance of Mine's vehicles. The vehicles are not overloaded and are covered with tarpaulin as at **Annexure-A (vii).**
vii	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.	Being complied. Photographs are attached at **Annexure-A(viii).**
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 waste water is 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. Copy of the letter is provided at **Annexure-A (ix)**. Mined area have been developed as artificial water reservoir as per **Annexure-A (x).** Water collected in artificial reservoir in the mine 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 into 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 installed 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. Bio-degradable and non bio-degradable waste is being treated as directed. STP Photographs attached as per **Annexure- A(xi)**
xi	The project proponent shall ensure that no natural watercourse shall be obstructed due to any mining operations.	It is ensured that no natural course of water get 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.	Systems have been designed and installed for recycling and re-use of the dust collected through pollution control devices. Similarly sludge from domestic sources is being used for green belt development. Waste oil shall be sold to authorized recyclers / pre-processors
xiii	An effort shall be made to use of high calorific hazardous waste in the cement kiln and necessary provision shall be made accordingly.	System shall be made to use high calorific hazardous waste in cement kiln.
xiv	Efforts shall be made to use low grade lime, more fly ash and solid waste in the cement manufacturing.	We are mixing low and high grade Limestone to conserve the natural resources. Fly ash will be used 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.	There is no overburden present in our mine, as 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.	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	There is no overburden, inter burden and other waste generated in our mine.100% limestone being used for cement manufacturing.

	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.	
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°.	Noted, however 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 for watering the mine area, haul roads, green belt development etc. The drains shall be regularly de-silted and maintained properly.	Noted, however there is no wastes dump generated in our mine.
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.	Rain water is being collected into Mine's pit for further use in the plant.
xxi	Regular monitoring of ground water level and quality shall be carried out by establishing a network of existing wells and new peizometers 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 been regularly carried out 4 times in a year and water quality analyzed. Abstract of the same is given at **Annexure-A (xii).** Peizometer is also being installed.
xxii	The project proponent shall take appropriate mitigative measures to prevent pollutions of nearby River and other surface water body, if any.	No waste water generated in our process/plant & mines. Zero discharge is adopted.

xxiii	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.	Wet drilling and sequential blasting methods are being applied. The charge per hole is also adjusted to minimize ground vibration and to control fly rocks. We are monitoring Ground vibration and air blast with the help of 'Minimate' instrument and keeping 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. Enclosed copy of License No.E/HQ/AP/22/93(E1673) as **Annexure –A(xiii)**
xxiv	Out of total 141.574 ha., 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 ha., 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.	Cement plant area has already 48 ha of green belt. Tree plantation work in additional area including Mines is under progress. An action plan for green belt development of Plant and Mines area is given at **Annexure –A (xiv)** , photographs of tree plantation enclosed as per **annexure-A(xv)**
xxv	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.	Our Mine is running mine which will be converted into water body after completion of life. The maximum bench height is 8 m which is as per Mining plan approved by IBM.
xxvi	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 and the	As per the study made, there is no endangered fauna around the Plant and Mines area. State Forest and Wild life department, Guntur have been requested as per **Annexure –A (xvi)** to kindly issue a Certificate mentioning that there is no endanger to fauna due to our Cement plant and Mining

	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.	activities.
xxvii	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.
xxviii	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 for any change in technology or scope.
xxix	Consent to Operate shall be obtained from APPCB before starting enhanced production from the mine.	Consent to Operate the mining operation for enhanced production has been obtained & renewed. Mines CFO validity is up to 30 June 2016. Renewed copy of CFO enclosed as **Annexure- A (xvii)**
xxx	'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.	There is no adverse impact of cement plant operation and mining activities on the surrounding 6 reserve forests. The plant and Mines have been running since 1984. State Forest department have been requested to kindly issue NOC as per **Annexure A (xviii)** .
xxxi	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. Letter from IBM enclosed as **Annexure – A (xix).**
xxxii	Rehabilitation and Resettlement Plan for the project affected population as per the policy of the State Govt. shall be prepared and implemented.	There is 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 machineries provided with silencers. Sharp bits are being used with wet drilling to reduce noise of drilling machine. Drill operators are provided ear plug. Bottom initiation with the help of shock tubes and use of millisecond delay to reduce noise by blasting. Acoustic enclosures in the plant area are used where ever

		applicable.
xxxiv	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.	Agreed.
ii	No further expansion or modification of the plant shall be carried out without prior approval of this Ministry.	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	One 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. 3rd CAAQM Station is at Mines area, Online real time monitoring data is transmitted to APPCB server & display board at factory gate continuously. Four (4) nos AAQM stations installed at different locations & regular ambient air quality monitoring done. 3 nos On line real time CAAQM stations exhibited as per **Annexure-B (i).** Ambient air, Stack emission level monitoring data is regularly submitted to APPCB, CPCB & MoEF.
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 roof tops, storm water drains lead to main drains connecting to the mines water reservoir. Photographs of Rain water harvested at mine pit enclosed **Annexure-B(ii)**
vi	The company shall undertake eco development measures including community welfare measures in the project area.	A list of eco development measures including community welfare measures in the project area is given at **Annexure B (iii).**
vii	The overall noise levels in and around the plant area shall be kept well within the	Noise control measures including acoustic hoods, silencers. Enclosures

	standards (85 dBA) 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 Ruies, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	have been provided. Noise level monitoring data enclosed as **Annexure –B(iv)**
viii.	All recommendations made in the Corporate Responsibility for Environment Protection (CREP) for cement plants shall be implemented.	Compliance report of CREP is given at **Annexure B (v)**
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.	Medical checkup camp was organized in January'15 & February'2015. Photographs enclosed at **Annexure-B(vi)**
x.	A separate environmental management cell to carry out various management and monitoring functions shall be set up under the control of Senior Executive.	An organization chart of the Environmental Management Cell is given at **Annexure B (vii).**
xi.	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. 23.2 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. 52.11 crores already invested on the air pollution equipments which were installed for expansion (ie RABH, ESP, Bag House and nuisance bag filters).Capital cost & Recurring cost data of Plant and Mines from October 2014 to March 2015 are attached as **Annexure-B (viii)** Funds provided for the maintenance of the above equipment shall not be diverted for any other purpose.
xii.	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.	Agreed. Six monthly compliance reports are regularly being submitted.
xiii.	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.	Complied.
xiv.	The Project Proponent shall inform the public that the project has been accorded	Complied.

	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.	

ANNEXURE-A(i)
(SPACIFIC CONDITION)

DURGA CEMENT WORKS

A Unit of Andhra Cements Limited
Gamalapadu(V), Dechepalli(M),Dist- Guntur
Andhra Pradesh

STACK MONITORING REPORT FROM OCTOBER 2014 TO MARCH 2015

S.N		RABH mg/Nm^3	COOLER ESP mg/Nm^3	COAL MILL mg/Nm^3	CEMENT MILL- 1 mg/Nm^3	CEMENT MILL- 2 mg/Nm^3
1	MAX.	16.60	19.23	16.04	17.7	15.53
2	MIN.	6.05	3.50	4.16	2.23	2.73
3	AVG.	10.81	7.28	7.68	5.93	6.01
4	STD DEV.	2.87	3.49	2.93	4.39	3.70
5	COFF. OF VARIATION.	0.27	0.48	0.38	0.74	0.61
6	98 PERCENTILE	15.84	16.92	15.02	16.50	14.86

Annexure-A (ii)

(SPACIFIC CONDITION)

Continuous Emission monitoring system installed at all major stacks

Continuous Emission monitoring Analyzer on Coal mill stack

Cooler ESP Stack

Continuous Emission monitoring Analyzer (RABH)

CEMS Analyzer on the Cement Mill-2 Stack

Annexure-A (iii)

(SPACIFIC CONDITION)

Air pollution control equipments

Reverse Air Bag House (RABH) Installed in Kiln & Raw mill section

Cooler ESP

Cement Mill-2 Bag filter

Bag Filter Installed for limestone Crusher

Annexure-(iv)

(SPACIFIC CONDITION)

DCW- LIST OF BAG FILTERS

S.No	Department	Eqpt No.	Description	Model	Volume (m^3/h)	No.of bags	No.of solenoid valves	Kw/rpm	Supplier
1	LS Crusher	211BF1	211BC-1 discharge venting	AJ-120-360	17500	120	12	37/1470	Thermax
2	LS Crusher	211BF2	211BC-2 discharge venting (Secondary crusher Bulding top)	AJ-120-360	17500	120	12	22/1470	Thermax
3	Pregrinder,RM-1	361BF3	RM-1 (VRPM) venting	AJ-360-360	39600	360	30	45/1470	Thermax
4	Pregrinder,RM-1	361BF4	RM-1 venting (Ball mill vent bag filter)	CE-02-330x3.6	50000	330	22	55/985	Clair
5	Pregrinder,RM-1	361BF5	Pregrinder department (361BC1,361BE3, 361BC4) venting.	AJ-120-360	17500	120	12	37/1470	Thermax
6	Pregrinder,RM-1	391BF1	Raw Meal Silo & Feed Elevator Venting	CE-02-064x3.6	10000	64	8	15/1450	Clair
7	Pregrinder,RM-1	391BF2	Raw Meal Silo-1 top			120	12		
8	Silo extraction & kiln feed	393BF1	Raw meal Silo discharge enmass conveyor	CE-02-036x3.6	3000	36	6	5.5/2905	IKN
9	Silo extraction & kiln feed	393BF2	Raw meal Silo discharge enmass conveyor	CE-02-036x3.6	3000	36	6	5.5/2905	IKN
10	Silo extraction & kiln feed	393BF3	Kiln feed Bin venting	CE-02-100x3.6	9500	100	10	15/1450	IKN
11	Silo extraction & kiln feed	393BF4	Kiln feed Bin venting	CE-02-100x3.6	9500	100	10	15/1450	IKN
12	Silo extraction & kiln feed	393BF5	PH bucket elevator air slide venting	CE-02-100x3.6	9500	100	10	15/1450	IKN
13	Silo extraction & kiln feed	393BF6	PH bucket elevator air slide venting	CE-02-100x3.6	9500	100	10	15/1450	IKN
14	Silo extraction & kiln feed	393BF7	PH Top Bucket elevator venting	CE-02-100x3.6	9500	100	10	15/1450	IKN
15	Silo extraction & kiln feed	393BF8	Raw meal Recirculation venting	CE-02-100x3.6	9500	100	10	15/1450	IKN
16	RABH	471BF1	Kiln/RM exhaust gases	CE-RABH-18 x 204	1317000	3672	-		Clair
17	Coal Mill-1	421BF1	Coal Mill-1 Vent bag house	TP-336-360	34650	336	24	75/1450	Thermax
18	Coal Mill-1	431BF1	Coal mill department venting bag filter	CE-02-040x 3.6	6000	40	5	5.5	Clair
19	Coal Mill-2	422BF1	Coal Mill-2 VRM Vent bag house	CE-02-3x300x3.6	90000	900	60	360/780	Clair
20	Coal Crusher		Coal Crusher vent bag filter		6600	132	12	9.3/1455	Clair
21	Clinker storage & transportation	491BF1	491DP1 discharge transfer piont (cooler DPC)	CE-02-030 FM X 3.6	4000	30	5	5.5/1450	Clair
22	Clinker storage &	491BF2	Clnker Silo	AJ-168-360	25000	168	16	30/1450	Thermax

	transportation								
23	Clinker storage & transportation	511BF1	Clinker silo discharge DPC transfer point (511DPC3)	CE-02-030 FM X 3.6	4000	14	3	3.7/2850	Clair
24	Clinker storage & transportation	511BF2	Clinker silo discharge belt conveyor transfer point (511BC4)	CE-02-030 FM X 3.6	4000	30	5	30/1475	Clair
25	Clinker Pregrinder	561BF1	Transfer points	CE-02-030 FM X 3.6	4000	30			Clair
26	Clinker Pregrinder	561BF2	Clinker Pregrinder Venting (VRPM)	TP-588-360	59400	588	42		Thermax
27	Clinker Pregrinder	561BF3	Clinker Pregrinder Separator Venting (VRPM)	TP-798-360	82460	798	57		Thermax
28	Cement Mill-1	562BF1	Cement Mill-1 Mill Venting	TP-420-360	42650	420	30	75/986	Thermax
29	Cement Mill-1	562BF2	Cement Mill-1 Separator Venting	TP-420-360	42400	420	30		Thermax
30	Cement Mill-2	563BF1	Cement Mill-2 Mill Venting	TP-462-360	47400	462	33	75/986	Thermax
31	Cement Mill-2	563BF2	Cement Mill-2 sepaarator venting	TP-588-360	60000	588	42		Thermax
32	Cement Mill	591BF1	Cement Silo 1&2 feed bucket elevator boot venting.			30	5		
33	Cement Mill	592BF1	Cement mill silo-1 top (flush mounted)				5	5.5/1455	Clair
34	Cement Mill	592BF2	Cement mill silo-2 top (flush mounted)				5	5.5/1455	Clair
35	Packing Plant	612 BF1	Packer 1 venting			195	15	30/1475	
36	Packing Plant	612 BF2	Packer 2 venting			180	15		Thermax
37	Packing Plant	612 BF2A	Packer 2 Bucket elevator venting			180	15		Thermax
38	Packing Plant	612BF3	Packer 3 venting	256-TA 12(6)		256	16	55/1485	
39	Packing Plant	612BF4	Packer 3 venting	121-TA 12(6)		121	11	30/1475	

ANNEXURE-(V)
(SPACIFIC ONDITION)

FUGITIVE EMISSION CONTROL WITH PROPER MEASURES

Covered belt conveyors

FUGITIVE EMISSION CONTROL WITH PROPER MEASURES

Water sprinkling by water tanker

fly ash silo

FUGITIVE EMISSION CONTROL WITH PROPER MEASURES

Covered Coal yard

Annexure-A (vi)
(SPACIFIC CONDITION)

DURGA CEMENT WORKS

A Unit of Andhra Cements Limited
Gamalapadu(V), Dechepalli(M),Dist- Guntur
Andhra Pradesh

AMBIENT AIR QUALITY MONITORING REPORT OF DCW PLANT
OCTOBER 2014 TO MARCH 2015

LOCATION -1 NEAR MINE PIT-1, (CROSS WIND)					
S.N		**PM-2.5 µg/m^3**	**PM-10 µg/m^3**	**SO_2 µg/m^3**	**NO_2 µg/m^3**
1	MAX.	30.04	58.62	9.52	14.70
2	MIN.	17.09	39.40	4.17	6.94
3	AVG.	23.74	47.35	6.63	10.95
4	STD DEV.	2.83	4.64	1.14	1.59
5	COFF. OF VARIATION	0.12	0.10	0.17	0.15
6	98 PERCENTILE	28.62	56.46	8.46	14.40
LOCATION -2 NEAR NAGULERU RIVER PUMP HOUSE, (CROSS WIND)					
S.N		**PM-2.5 µg/m^3**	**PM-10 µg/m^3**	**SO_2 µg/m^3**	**NO_2 µg/m^3**
1	MAX.	25.68	54.60	9.27	12.83
2	MIN.	16.49	37.64	4.00	7.19
3	AVG.	21.13	45.03	6.35	10.47
4	STD DEV.	2.23	3.74	1.15	1.43
5	COFF. OF VARIATION	0.11	0.08	0.18	0.14
6	98 PERCENTILE	25.04	52.84	8.45	12.71
LOCATION -3 NEAR CPP (TOWARDS GAMALAPADU VILLAGE), (UP WIND)					
S.N		**PM-2.5 µg/m^3**	**PM-10 µg/m^3**	**SO_2 µg/m^3**	**NO_2 µg/m^3**
1	MAX.	30.26	61.34	8.81	15.88
2	MIN.	16.45	40.00	5.07	9.00
3	AVG.	25.85	49.98	7.09	11.92
4	STD DEV.	2.96	5.01	0.98	1.76
5	COFF. OF VARIATION	0.11	0.10	0.14	0.15
6	98 PERCENTILE	29.91	60.32	8.53	15.24
LOCATION -4 COLONY AREA (TOWARDS SRI NAGAR VILLAGE),(DOWN WIND)					
S.N		**PM-2.5 µg/m^3**	**PM-10 µg/m^3**	**SO_2 µg/m^3**	**NO_2 µg/m^3**
1	MAX.	24.56	56.32	8.63	14.46
2	MIN.	15.26	36.23	3.37	5.89
3	AVG.	19.43	42.83	6.09	9.85
4	STD DEV.	2.52	3.69	1.11	1.77
5	COFF. OF VARIATION	0.13	0.09	0.18	0.18
6	98 PERCENTILE	24.50	49.75	8.48	14.18

Annexure-A(vii)
(SPACIFIC CONDITION)

Tarpauline covered transportation

Annexure-A(viii)

(SPACIFIC CONDITION)

Concreted roads provided and maintained

ANNEXURE – A (IX)

(SPACIFIC CONDITION)

'Permission' for the drawl of ground water from SGWB / CGWA

Sep 01 07 01:25p Deputy Director 1 8688822250930

GOVERNMENT OF ANDHRA PRADESH
GROUND WATER DEPARTMENT

FROM

Sri B. Nagarajeswara Rao,
M.Sc.,M.Sc.(Tech.)
Deputy Director
Ground Water Department
¼ Ramannapet
GUNTUR – 7

TO

The Senior Vice President (Projects)
Andhra Cements Limited
2nd floor, Chandralok complex
111, S.D. Road
SECUNDERABAD-500 003.

Lr.No.2/ACL/Hg/2007/ Dated:01.09.2007

Sir,

Sub: Ground Water Department, Guntur—Report on Ground Water Investigations conducted for M/s. Andhra Cements Limited, Durga Cement works, Dachepally (v) & (M), Guntur District—Communication of Recommendations—Regarding.

Ref: 1. This office Lr.No.2/ACL/Hg/2007/390/dt.27.8.07.
2. Director, GWD, Hyderabad memo No.6818/Hg.II(1)/07,dt.31.8.07.

--o0o--

With reference to the above subject, the recommendations are approved by the Director, GWD, Hyderabad through reference 2nd cited are as follows:

S. No	VES No.	Type of well recommended	Depth in m.	Dia in mm	Expected yield in lph	Remarks
1	5	Bore well	80.0	165	7,000	Expected yields from the existing 5 bore wells are between 5000 to 7000 lph.
2	7	Bore well	80.0	165	7,000	
3	9	Bore well	80.0	165	5,000	
4	5 existing bore wells				30,000	Recommended for 10 hours of pumping/day only

The total quantum of water available from the existing 5 wells and recommended 3 wells will be in the order of 490m³/day and the balance requirement can be met from the de-watering of mines.

The recommended well site locations are shown in the enclosed map. Further, it is to inform that the recommendations are made in the light of APWALTA and further procedure under APWALTA may be followed during execution from your end.

Yours faithfully,

DEPUTY DIRECTOR

Encls: As above.

Copy submitted to the Director, GWD, Hyderabad for favour of information.

ANNEXURE – A (X)

(SPACIFIC CONDITION)

Mine out area used as a water reservoir

Annexure-A (xi)

(SPACIFIC CONDITION)

STP OF 300 KLD INSTTALED AT DCW COLONY

STP WATER TESTING REPORT

Vimta Labs Limited
Registered Office
142, IDA Phase II, Cherlapally
Hyderabad-500 051, India
T : +91 40 2726 4141
F : +91 40 2726 3657

Vimta
Driven by Quality. Inspired by Science.

ISSUED TO:
M/S DURGA CEMENT WORKS
DACHEPALLI,
GUNTUR DISTRICT
ANDHRA PRADESH

Report Number : 10404/14-15/VLL/000/01
Issue Date : 2015-01-20
Your Ref : TRF

KIND.ATTN:- Sanjay Singh

Sample Particulars: STP Outlet

Sample Registration Date: 2015-01-07 Sampling Date : 2015-01-06
Analysis starting Date : 2015-01-08 Analysis Completion : 2015-01-19
Tests required:- pH, Total Suspended Solid, Total Dissolved Solids Chlorides,Sulphates Fluorides, Oil & Grease, Chemical Oxygen Demand, Biological Oxygen Demand, Chromium as Cr , Copper as Cu, Hexavalent Chromium as Cr^{6+}, Lead as Pb, Nickel as Ni, Pherolic Compound, Zinc as Zn , Boron as B, Arsenic as As, Cadmium as Cd, Selenium as Se, Mercury as Hg.

SAMPLE COLLECTED BY VIMTA LABS LTD

TEST RESULTS

Sl. No.	PARAMETER	UOM	RESULT
1	pH	--	7.09
2	Total Suspended Solids	mg/L	48.0
3	Total Dissolved Solids	mg/L	1652.0
4	Chlorides	mg/L	185.0
5	Sulphates	mg/L	45.8
6	Fluorides	mg/L	0.4
7	Oil & Grease	mg/L	1.0
8	COD	mg/L	32.0
9	BOD	mg/L	6.8
10	Chromium as Cr	mg/L	<0.01
11	Copper as Cu	mg/L	0.14
12	Hexavalent Chromium as Cr^{6+}	mg/L	<0.05
13	Lead as Pb	mg/L	<0.01
14	Nickel as Ni	mg/L	<0.01
15	Phenolic Compound as C_6H_5OH	mg/L	<0.01
16	Zinc as Zn	mg/L	0.28
17	Boron as B	mg/L	<0.01
18	Arsenic as As	mg/L	<0.01
19	Cadmium as Cd	mg/L	<0.01
20	Selenium as Se	mg/L	<0.01
21	Mercury as Hg	mg/L	<0.001

Method of Testing: As per APHA 22nd edition.
Instrument Used: ICP - AES (Agilent)

Dr.Subba Reddy Mallampati
Sr.Scientist - Environment

Annexure-A (xii)
(SPACIFIC CONDITION)

GROUND WATER LEVEL REPORT

POST MONSOON SEASON

13.11.2014

S.N	Location	Direction	Distance from Plant	Bore Well/Open well	Depth of Water from ground Level (Meter)
1.	Plant site (Near Security man Gate)	S	-	Bore Well	12.0
2.	Srinagar Village	SW	1.5 Km	Bore Well	18.5
3.	Ramapuram Village	NW	6.0 KM	Bore Well	22.0
4.	Gamalapadu Village	SE	5.0 KM	Bore Well	6.0

GROUND WATER LEVEL REPORT

WINTER SEASON

16.01.2015

S.N	Location	Direction	Distance from Plant	Bore Well/Open well	Depth of Water from ground Level (Meter)
1.	Plant site (Near Security man Gate)	S	-	Bore Well	12.5
2.	Srinagar Village	SW	1.5 Km	Bore Well	19.0
3.	Ramapuram Village	NW	6.0 KM	Open Well	23.0
4.	Gamalapadu Village	SE	5.0 KM	Bore Well	6.0

WATER TESTING REPORT OF DURGA CEMENT WORKS

A Unit of Andhra Cements Limited

Sample received: 21.11. 2014
Sample analyzed by: Environment Lab JBCP

S.N	Parameter	Location	Sri nagar Village	Gamalapadu Village	Colony	Club	Krishnan	DCW	**IS 10500 Drinking Water standers Limit**	
		Type of Water	Bore				River	Drinking Water	**Desirable Limit**	**Permissible limit**
1.	pH		8.0	8.25	7.82	8.56	8.05	7.37	**6.5 to 8.5**	**6.5 to 8.5**
2.	Conductivity (µs)		1578	1723	1382	1526	457	57.5	**NA**	**NA**
3.	Turbidity(NTU)		1.2	1.5	2.0	1.9	1.32	0.72	**5-10**	**5-10**
4.	Total Hardness (mg/l)		577	562	595	561	174	74	**300**	**600**
5.	Calcium Hardness (mg/l)		514	525	523	514	157	64	**75**	**200**
6.	Magnesium Hardness (mg/l)		63	37	72	47	17	10	**30**	**100**
7.	TDS (mg/l)		1230	1347	1392	1225	269	72.5	**200**	**2000**
8.	TSS (mg/l)		-	-	-	-	15	-	**100**	**100**
9.	Alkalinity (mg/l)		162	174	201	171	71	42	**200**	**600**
10.	Chlorides(mg/l)		38	47	48	51	62	25	**250**	**1000**
11.	Fluorides (mg/l)		0.1	0.2	0.3	0.2	0.3	0.2	**0.5**	**1.5**
12.	Arsenic (mg/l)		0.001	0.002	0.003	0.002	0.002	<0.005	**0.05**	**0.05**

WATER TESTING REPORT OF DURGA CEMENT WORKS

A Unit of Andhra Cements Limited

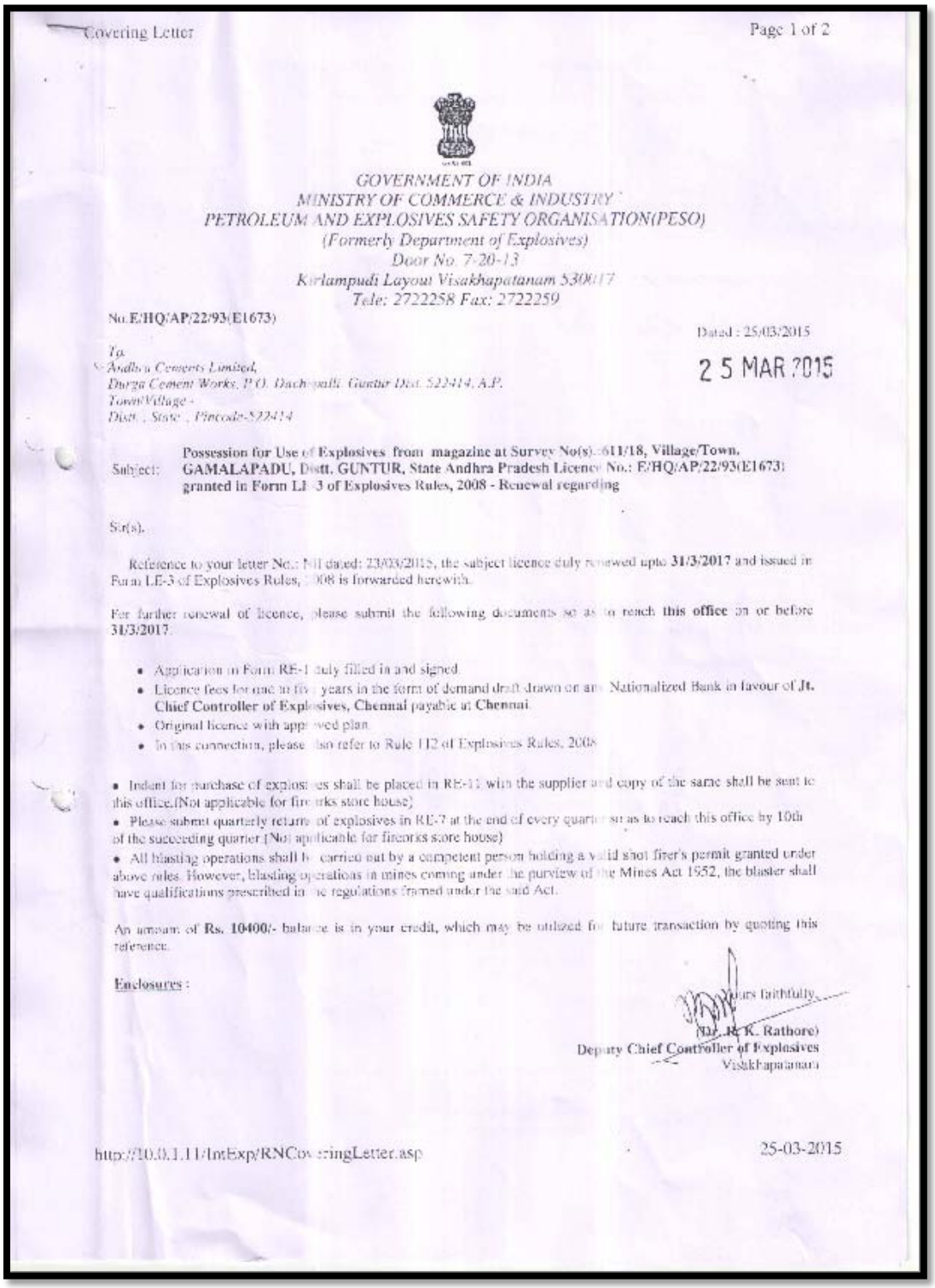
Sample received: 11.02. 2015
Sample analyzed by: Environment Lab JBCP

S.N	Parameter	Location	Sri nagar Village	Gamalapadu Village	Colony	Club	Krishnan	DCW	IS 10500 Drinking Water standers Limit	
		Type of Water	Bore				River	Drinking Water	**Desirable Limit**	**Permissible limit**
1.	pH		8.12	8.43	8.46	8.24	8.25	7.46	**6.5 to 8.5**	**6.5 to 8.5**
2.	Conductivity (µs)		1463	1578	1472	1416	429	62.4	**NA**	**NA**
3.	Turbidity(NTU)		1.3	1.4	1.8	1.2	1.6	0.78	**5-10**	**5-10**
4.	Total Hardness (mg/l)		470	510	475	364	177	62	**300**	**600**
5.	Calcium Hardness (mg/l)		416	463	415	332	162	54	**75**	**200**
6.	Magnesium Hardness (mg/l)		54	47	60	32	15	8	**30**	**100**
7.	TDS (mg/l)		1101	1201	1052	1205	0	65	**200**	**2000**
8.	TSS (mg/l)		-	-	-	-	15	-	**100**	**100**
9.	Alkalinity (mg/l)		152	162	147	163	62	37	**200**	**600**
10.	Chlorides(mg/l)		42	46	32	43	50	15	**250**	**1000**
11.	Fluorides (mg/l)		0.2	0.1	0.2	0.3	0.4	0.3	**0.5**	**1.5**
12.	Arsenic (mg/l)		0.002	0.003	0.001	0.002	0.001	<0.005	**0.05**	**0.05**

Annexure –A (xiii)

(SPACIFIC CONDITION)

License from chief controller of Explosives



Covering Letter

Page 1 of 2

GOVERNMENT OF INDIA
MINISTRY OF COMMERCE & INDUSTRY
PETROLEUM AND EXPLOSIVES SAFETY ORGANISATION(PESO)
(Formerly Department of Explosives)
Door No. 7-20-13
Kirlampudi Layout Visakhapatanam 530017
Tele: 2722258 Fax: 2722259

No.E/HQ/AP/22/93(E1673)

Dated : 25/03/2015

25 MAR 2015

To
Andhra Cements Limited,
Durga Cement Works, P.O. Dachepalli, Guntur Dist. 522414, A.P.
Town/Village -
Distt. , State , Pincode-522414

Subject: **Possession for Use of Explosives from magazine at Survey No(s).-611/18, Village/Town, GAMALAPADU, Distt. GUNTUR, State Andhra Pradesh Licence No.: E/HQ/AP/22/93(E1673) granted in Form LE-3 of Explosives Rules, 2008 - Renewal regarding**

Sir(s),

Reference to your letter No.: Nil dated: 23/03/2015, the subject licence duly renewed upto **31/3/2017** and issued in Form LE-3 of Explosives Rules, 2008 is forwarded herewith.

For further renewal of licence, please submit the following documents so as to reach **this office** on or before **31/3/2017**.

- Application in Form RE-1 duly filled in and signed.
- Licence fees for one or five years in the form of demand draft drawn on any Nationalized Bank in favour of **Jt. Chief Controller of Explosives, Chennai** payable at **Chennai**.
- Original licence with approved plan.
- In this connection, please also refer to Rule 112 of Explosives Rules, 2008.

- Indent for purchase of explosives shall be placed in RE-11 with the supplier and copy of the same shall be sent to this office.(Not applicable for fireworks store house)
- Please submit quarterly returns of explosives in RE-7 at the end of every quarter so as to reach this office by 10th of the succeeding quarter.(Not applicable for fireworks store house)
- All blasting operations shall be carried out by a competent person holding a valid shot firer's permit granted under above rules. However, blasting operations in mines coming under the purview of the Mines Act 1952, the blaster shall have qualifications prescribed in the regulations framed under the said Act.

An amount of **Rs. 10400/-** balance is in your credit, which may be utilized for future transaction by quoting this reference.

Enclosures :

Yours faithfully,

(Dr. R. K. Rathore)
Deputy Chief Controller of Explosives
Visakhapatanam

http://10.0.1.11/IntExp/RNCoveringLetter.asp

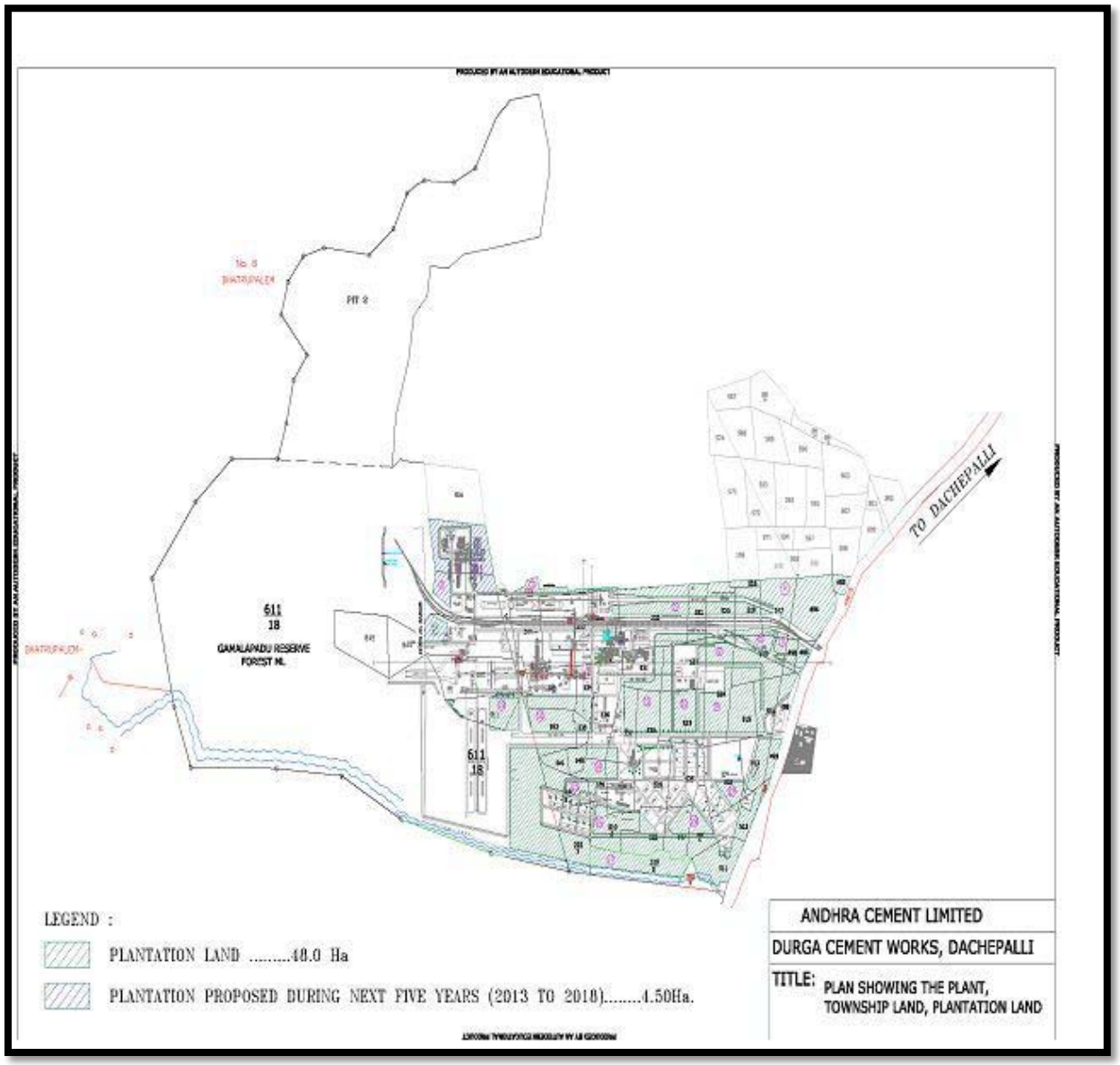
25-03-2015

Annexure –A (xiv)

(SPACIFIC CONDITION)

Status of Green belt development (Plant & Colony)

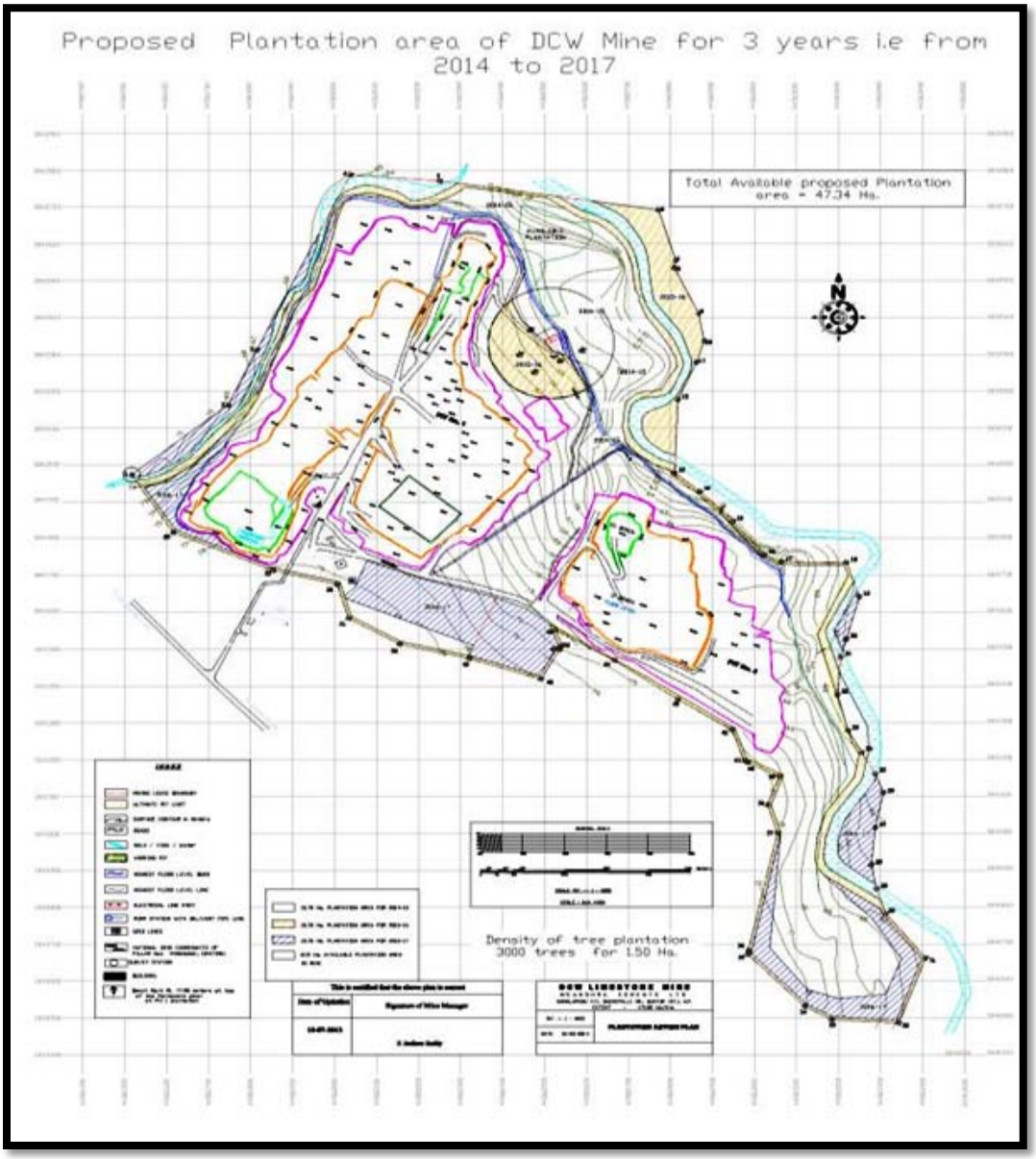
Total Industrial Land area: - 141.574 Ha.
Existing green belt area in plant area - 48.5 Ha



Tree Plantation DCW plant area

Status of Green belt development (Mines)

Total mine lease area:	-	170.22 Ha
Green belt up to September 2014	-	7.16 Ha.
Tree plantation from October 2014 to March 2014	-	0.75 Ha.
Existing green belt area up to March 2015	-	7.91 Ha.
Name of tree planted	-	Neem, Canuga , Dubai Plant
No. of tree planted	-	550 nos.



Tree Plantation at mines area

Annexure –A (xv)
(SPACIFIC CONDITION)

Greeb belt development

Tree Plantation inside the factory premises

Tree Plantation in colony area

DCW/P&QC/2015/ 5440 Dt.20-05-2015

To
The District Forest Officer
Guntur

Sir,

Sub : Impact of Cement Plant and Mining Activities on the surrounding Reserve Forests – Permission from State Forest Dept. – Reg.
Ref : Environmental Clearance obtained from MOEF, Govt.of India vide F.No.J-11011/719/2007-1A II (I), dt.20-12-2007.

We, Durga Cement Works, A unit of Andhra Cements Limited, had obtained environmental clearance from MOEF, Govt.of India vide letter under reference with special conditions (xvi) which reads as follows :

(xxvi) "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 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."

30 MW Captive Power Plant is under construction for which a detailed EIA & EMP were prepared and environmental clearance was obtained from MOEF, Government of India.

From the above report, fauna recorded from the Core zone is enclosed (table 3.9.5 and table 2 of Annexure of 8) for your kind perusal.

You are requested to kindly issue a Certificate mentioning that there is no endanger to fauna due to our Cement Plant and Mining Activity.

Thanking you,

Yours faithfully,
for ANDHRA CEMENTS LIMITED
DURGA CEMENT WORKS

(G.VENU GOPAL)
Sr.GENERAL MANAGER (P&A)

Encl : a/a

ANDHRA CEMENTS LTD DURGA CEMENT WORKS JAPEE GROUP

Table:3.9.5

FAUNA RECORDED FROM CORE ZONE

Extensive field studies were conducted in pre-monsoon season to know the present status of fauna of the area .Apart from that; secondary data was collected by mode of interaction of local elderly people and forest working plans of Guntur dist.

Technical Name	English Name /Local Name	Conservation status as per Wild Life protection Act 1972
Mammals		
Lapus nigricollis	Indian Hare	Sch-IV
Funumbuls Palmarum	Squirrel	Sch-IV
Hystrix indica	Porcupine	Sch-IV
Birds		
Milyus migrans	Common Kite	Sch-IV
Corvus corvus	Jungle crow	Sch-IV
Corvus splendens	House Crow	Sch-V
Aegithina tiphia	Iora	Sch-IV
Pycnonotus cafer	Red vented bulbul	Sch-IV
Columbus livibus	Rock pigeon	Sch-IV
Lalage sykesi	Black headed cochoo Shrike	Sch-IV
Dicrurus macrocerus	Black Drongo	Sch-IV
Oriolus oriolus	Indian Oriole	Sch-IV
Acridotheres tristics	Common myna	Sch-IV
Ploceus philippines	Weaver bird	Sch-IV
Uroloncha striata	Spotted munia	Sch-IV
Passer domisticus	House Sparrow	Sch-IV
Megalaima merulinus	Indian Cuckoo	Sch-IV
Eudynamis Scolopaceus	Koel	Sch-IV
Psittacula Krammeri	Rose ringed parakeet	Sch-IV
Alcedo atthis	Common King fisher	Sch-IV
Tylo alba	Barn Owl	Sch-IV
Astur badius	Shikra	Sch-IV
Lobvanella indicus	Redwattled Lapwing	Sch-IV
Bubulcus ibis	Cattle Egret	Sc-IV
Gallinula Chlorpus	Moore hen	Sc-IV
Reptiles		
Chameleon Zeylanicus	Lizard	Sc-IV
Ptyas mucosus	Rat snake	Sc-III
Naja naja	Cobra	Sc-IV
Bungarus candidus	Krait	Sc-IV
Vipera russeli Viper	Viper	Part-II of Sch-II
Butterflies		
Euploca cora	-	Sc-IV
Euploca crassa	-	Sc-IV
0euploca dicciotianua	-	Sc-IV
Graphium agamemnos	Tailed jay	Sc-IV
Papilo polymnstor		Sc-IV
Junonia atlites	Grey Pansey	Sc-IV

Annexure- A(xvii)
(SPACIFIC CONDITION)

CFO Mines from APPCB

ANDHRA PRADESH POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN, A-3, INDUSTRIAL ESTATE,
SANATHNAGAR, HYDERABAD - 500 018.

Phone: 040-23887500
Fax: 040- 23815631
Grams : Kalusya Nivarana
Website : appcb.ap.nic.in

RED CATEGORY
RENEWAL OF CONSENT ORDER
BY REGISTERED POST WITH ACKNOWLEDGEMENT DUE

Consent Order No : APPCB/VJA/GTR/16829/HO/CFO/2014- **Date : 23.01.2014**

(Consent Order for Existing/New or altered discharge of sewage and/or trade effluents/outlet under Section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and amendments thereof, Operation of the plant under section 21 of Air (Prevention & Control of Pollution) Act 1981 and amendments thereof.

CONSENT is hereby renewed under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974, under section 21 of Air (Prevention & Control of Pollution) Act 1981 and the rules and orders made thereunder to:

M/s. Andhra Cements Limited,
(Mines Division)
Gampalapadu(V),
Dachepalli (M),
Guntur District-522414
E-mail: sastry.akella@jalindia.co.in
(Hereinafter referred to as 'the Applicant') authorizing to operate the industrial plant to discharge the effluents from the outlets and the quantity of emissions per hour from the chimneys as detailed below:

I. Outlets for discharge of effluents:

Outlet No.	Outlet Description	Max Daily Discharge	Point of Disposal
1	Domestic Effluents	4.0 KLD	Septic Tank followed by soak pit.

This order is subject to the provisions of the Acts and orders made there under and further subject to the terms and conditions incorporated in the schedule A and B enclosed to this order.

This consent order is valid for Mining of Limestone to the quantities indicated below only:

S.No	Product	Quantity
1	Lime Stone mining	3.0 Million Tons Per Annum

The consent shall be valid for a period ending with the **30th Day of June 2016.**

Sd/-
MEMBER SECRETARY

To
M/s. Andhra Cements Limited,
(Mines Division)
Gampalapadu(V),
Dachepalli (M),
Guntur District-522414

//T.C.F.B.O//

JOINT CHIEF ENVIRONMENTAL ENGINEER
(UNIT - IV)

Page 1 of 3

Annexure – A (xviii)

(SPACIFIC CONDITION)

ANDHRA CEMENTS LIMITED
DURGA CEMENT WORKS

DCW/P&QC/2015/ 5573 Dt.23-04-2015

To
The District Forest Officer
Guntur

Sir,

Sub : Impact of Cement Plant and Mining Activities on the surrounding Reserve Forests – Permission from State Forest Dept. – Reg.
Ref : Environmental Clearance obtained from MOEF, Govt.of India vide F.No.J-11011/713/2007-1A II (I), dt.20-12-2007.

We, Durga Cement Works, A unit of Andhra Cements Limited, had obtained environmental clearance from MOEF, Govt.of India vide letter under reference with special conditions (xxx) which reads as follows :

(xxx) "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 ARF (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 Wariyabad RF (6.2-6.8 km) and all the recommendations shall be followed"

For compliance of the above cited MOEF condition, we request your goodself to depute the concerned officer to our Plant for identifying the impact, if any, of our cement plant and mining acuvity on surrounding Reserve Forests as stated above and remedial course of action suggested for reducing the impact on surrounding Reserve Forests.

We assure that we will abide to implement the suggestion and recommendations made by your good offices in this regard.

Thanking you,

27 APR 2015

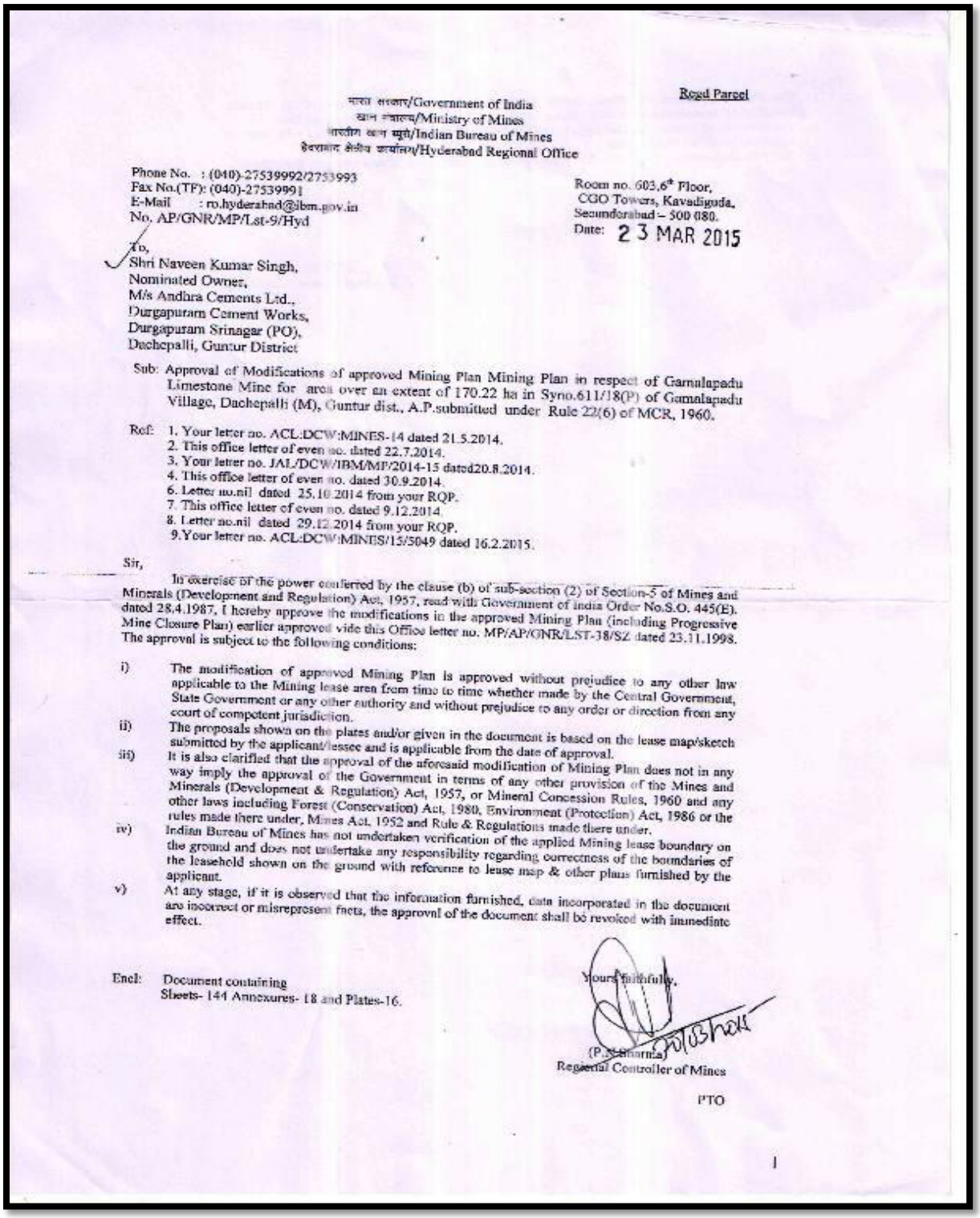
Yours faithfully,
for ANDHRA CEMENTS LIMITED
DURGA CEMENT WORKS

(R.K.DOODA)
Sr.VICE PRESIDENT (PROJECTS)

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

Annexure – A (xix)
(SPACIFIC CONDITION)



Regd Parcel

भारत सरकार/Government of India
खान मंत्रालय/Ministry of Mines
भारतीय खान ब्यूरो/Indian Bureau of Mines
हैदराबाद क्षेत्रीय कार्यालय/Hyderabad Regional Office

Phone No. : (040)-27539992/2753993
Fax No.(TF): (040)-2753999]
E-Mail : ro.hyderabad@ibm.gov.in
No. AP/GNR/MP/Lst-9/Hyd

Room no. 603,6th Floor,
CGO Towers, Kavadiguda,
Secunderabad – 500 080.
Date: 23 MAR 2015

To,
Shri Naveen Kumar Singh,
Nominated Owner,
M/s Andhra Cements Ltd.,
Durgapuram Cement Works,
Durgapuram Srinagar (PO),
Dachepalli, Guntur District

Sub: Approval of Modifications of approved Mining Plan Mining Plan in respect of Gamalapadu Limestone Mine for area over an extent of 170.22 ha in Syno.611/18(P) of Gamalapadu Village, Dachepalli (M), Guntur dist., A.P.submitted under Rule 22(6) of MCR, 1960.

Ref: 1. Your letter no. ACL:DCW:MINES-14 dated 21.5.2014.
2. This office letter of even no. dated 22.7.2014.
3. Your letter no. JAL/DCW/IBM/MP/2014-15 dated20.8.2014.
4. This office letter of even no. dated 30.9.2014.
6. Letter no.nil dated 25.10.2014 from your RQP.
7. This office letter of even no. dated 9.12.2014
8. Letter no.nil dated 29.12.2014 from your RQP.
9.Your letter no. ACL:DCW:MINES/15/5049 dated 16.2.2015.

Sir,

In exercise of the power conferred by the clause (b) of sub-section (2) of Section-5 of Mines and Minerals (Development and Regulation) Act, 1957, read with Government of India Order No.S.O. 445(E). dated 28.4.1987, I hereby approve the modifications in the approved Mining Plan (including Progressive Mine Closure Plan) earlier approved vide this Office letter no. MP/AP/GNR/LST-38/SZ dated 23.11.1998. The approval is subject to the following conditions:

i) The modification of approved Mining Plan is approved without prejudice to any other law applicable to the Mining lease area from time to time whether made by the Central Government, State Government or any other authority and without prejudice to any order or direction from any court of competent jurisdiction.

ii) The proposals shown on the plates and/or given in the document is based on the lease map/sketch submitted by the applicant/lessee and is applicable from the date of approval.

iii) It is also clarified that the approval of the aforesaid modification of Mining Plan does not in any way imply the approval of the Government in terms of any other provision of the Mines and Minerals (Development & Regulation) Act, 1957, or Mineral Concession Rules, 1960 and any other laws including Forest (Conservation) Act, 1980, Environment (Protection) Act, 1986 or the rules made there under, Mines Act, 1952 and Rule & Regulations made there under.

iv) Indian Bureau of Mines has not undertaken verification of the applied Mining lease boundary on the ground and does not undertake any responsibility regarding correctness of the boundaries of the leasehold shown on the ground with reference to lease map & other plans furnished by the applicant.

v) At any stage, if it is observed that the information furnished, data incorporated in the document are incorrect or misrepresent facts, the approval of the document shall be revoked with immediate effect.

Encl: Document containing
Sheets- 144 Annexures- 18 and Plates-16.

Yours faithfully,

(P. Sharma)
Regional Controller of Mines

PTO

Annexure: B (i)

(General Condition)

3 nos. On line Ambient Air Quality Monitoring System installed

CAAQM Station -1(Towards Srinagar Village) CAAQM Station -2 (Towards Gamalpadu village)

CAAQMS Station-3 installed at Mines area

Annexure:- B(ii)
(General Condition)

Rain Water Harvesting Measures

Rain water collected in Mines pit

Annexure:- B(iii)
(General Condition)

Eco Development measures

Andhra Cements Limited
Durga Cement Works
Durgapuram, Srinagar(Po),Dachepalli-522414,
Guntur District,Andhra Pradesh.

ECO DEVELOPMENT MEASURES TO BE TAKEN BY DCW

Jaypee group believes that harmony between the man and his environment is the prime essence of healthy life and living. The sustenance of our ecological balance is therefore of paramount importance. The Group recognizes its joint responsibility with the Government and the Citizens to protect and preserve the environment.

Practicing the principle of "Inclusive Growth", following eco-development measures are being implemented or at various stages of implementation

1. 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.

2. GREEN BELT DEVELOPMENT.

Plantation is being developed in following manner:

S.No.	Form of Plantation	Description
i	Shelter Belt plantation	All around the project boundary 3 rows of saplings is being planted to form a greenbelt, Preference is being given to fast growing species including locally dominant species such as Neem, Pongamia, Alstronia etc
ii	Avenue plantation	Parks of township, adm. Building, temple area, either side of internal roads
iii	Block plantation	Vacant land around facilities being developed

Greenbelt development in the form of above described manner will serve following purposes:

i. Increase in fresh Oxygen supply and
ii. Acting as carbon sink thereby combating global warming through reduction in CO_2 emissions.
iii. Improving microclimate, contributing to cooling effect and improve green Cover in the surrounding areas improving QOL (Quality of Life) with increase in lung space and promoting healthy lifestyle.

Additionally these tree groves will reduce soil erosion, help in enhancing groundwater recharge and create a sound barrier between plant and surrounding areas.

3. **WATER CONSERVATION**

To put least thrust on natural sources of Water, Company is adopting best possible approaches to conserve water, which can be witnessed as:

i. Construction of STP to Maintain **Zero Waste Water Discharge**- all type of treated water is being utilized for specific purposes such as plantation, dust suppression etc.
ii. Installation of air cooled condenser for CPP, in place of conventional large size Cooling towers.
iii. Rain water harvesting is proposed to be implemented for the Township as well as Plant area.

4. SOLID WASTE MANAGEMENT

Following strategy is being implemented to handle solid waste of all kinds either it may be hazardous or non hazardous:

- Practicing principle of 2Rs i.e. Reduce & Reuse
- All the waste will be segregated on the basis on degradability/recyclability, than accordingly they will be disposed. Bio degradable waste from township & plant area will be composted and the manure will be used for horticulture purpose.
- All the hazarded waste will be disposed through the authorized recyclers.
- Maximum possible utilization of Fly ash

5. USE OF ALTERNAVITE FUEL

- Provision is being made for use of PET Coke in the Cement Production, which is otherwise waste end product for refineries

6. ENERGY CONSERVATION

- Use of CFL in all building and offices
- Installation energy star rated ACs for offices and load centers
- Use of VFD in place of conventional one
- 5-stage pre heater itself is energy saving effort
- Utilization of hot air gases released from kiln
- Installation of VRMs for raw mill & coal mill

7. SOCIO-ECONOMIC BENEFITS

A Development of any kind is said to be biased, if its benefits doesn't passes to rock bottom strata of the society. In this regard DCW has contributed in following manner:

- Indirect employment to entrepreneurs
- Direct employment to local residents
- Growth of local market in terms of consumables(Domestic & Industrial)
- Fulfilling CSR & commitment made during public hearing.
- Preference to local people for employment.
- Rise in living standards

J

Andhra Cements Limited
Durga Cement Works

Summarised CSR Activities of DCW Plant 2015-16

Various Measures of CSR Activities being done in the surrounding villages

1. Education.
2. Filter Water supply. Maintenance and Support.
3. Dandivagu Lift Irrigation Scheme. Maintenance and Support.
4. Health & Hygiene.
5. Medical Camps.
6. Street lights illumination.
7. Cutting and cleaning bushes.
8. Financial Assistance for maintenance of Religious places.
9. Contribution for Annadanam in a Temple procession.
10. White-washing & colouring of Religious places.
11. Supporting for Athletic Champion Sports meet in the District.
12. Providing Tricycles for the physically challenged persons.
13. Providing Aggregate chips for construction of church etc.
14. Laying water pipe line in Srinagar village.
15. Providing Aggregate chips for filling the pit holes of the Road connecting Ramapuram village to State High Way.
16. Repairs and Reconstruction of School compound wall & Grampanchayat office compound wall.
17. Providing Medical check ups to all students with free medical help and energy food to Junior Class students (weekly twice) at Durga Public School.
18. Construction of Kalyana Mandapam.
19. Road repair work / Cementing of road.
20. Provided R.O.Plant at Srinagar Village under NTR SUJALA PATHAKAM and inaugurated by Shri Yarapathineni Srinivasa Rao, MLA on 02-10-2014.
21. Providing free R.O. Drinking water.
22. Providing Free Medical facilities, Ambulance and Fire services in Emergencies to the neighbouring villages.
23. Sri Sitaramala Swamy & Venugopala Swamy temple complex colouring on the occasion of Sriramanavami Festival (28-03-2015).
24. Flooring & Colouring of Srinagar Grampanchayat Office.

SUMMARISED CSR ACTIVITIES & EXPENSES PLANNED FOR 2014-15 & 2015-16

S.No.	Item	Amount (Rs.in Lakhs)
1	Provided R.O.Plant at Srinagar village under NTR SUJALA PATHAKAM, inaugurated by Shri Yarapathineni Srinivasa Rao, MLA on 02-10-2014	2.70
2	Extension of water pipe line in one of wards in Srinagar Village	4.00
3	a) Drinking water supply scheme b) Pump house repairs are to be carried out as the pipeline system was introduced in 1995 and rusted	2.40 4.00
4	Dandivagu Lift Irrigation Scheme	1.60
5	Improving Health & Hygiene in surrounding villages	10.00
6	Aggregate chips for filling pit holes of the Road connecting Ramapuram village to State High way – 2.5 Kms	11.00
7	a) Repairs to the construction of School compound wall in Gamalapadu village – 350 Mtrs with main gate. b) Grampanchayat Office compound wall repairing (collapsed wall) and gate	6.00 2.50
8	Financial assistance for maintenance religious places in surrounding villages	1.00
9	Construction of Kalyana Mandapam in Ramapuram Village	10.00
10	Laboratory and Library renovation in Durga Public School	5.00
11	White-washing & colouring of Siva Temple in Ramapuram in connection with Mahasivaratri	0.10
12	Cutting & Cleaning bushes in Srinagar village	0.60
13	Road repair work / Cementing of road work in Ramapuram & Gamalapadu villages together = 500 Metres	15.00
14	Compassionate grounds subsidized / free education to poor / suffering / deserved people	3.00
15	Providing medical check ups to all students at DPS with free medical help and energy food to lower class (weekly twice)	1.50
16	Providing free R.O. water (including supply of regular water in times of power/water supply failure), emergency medical services and ambulance and fire services	4.00
17	**Providing Free Medical facilities, Ambulance and Fire services in Emergencies to the neighbouring villages.**	2.50
18	Sri Sitaramula Swamy & Venugopala Swamy temple complex colouring on the occasion of Sriramanavami Festival (28-03-2015).	0.70
19	Flooring & colouring of Srinagar Gram panchayat Office.	0.72
	TOTAL EXPENDITURE	Rs.88.32 Lac

DCW CSR ACTIVITIES

RO Water Plant Provided in Srinagar village

Street light & Water supply pipe line provided in Srinagar Village

Durga Public School at NADIKUDI

Annexure-B(iv)
(General Condition)

DURGA CEMENT WORKS

A unit of Andhra Cements Limited
Gamalapadu (V), Dechepalli(M),Dist- Guntur
Andhra Pradesh- 522414

NOISE LEVEL REPORT OF DCW MINES

OCTOBER 2014 TO MARCH 2015

	1.Haulage road		2.Drilling point	
	Day Time dBA (6AM-10PM)	Night Time dBA (10PM-6AM)	Day Time dBA (6AM-10PM)	Night Time dBA (10PM-6AM)
Max.	68.6	51.4	74.8	46.7
Min.	46.3	41.5	67.3	42.3
Avg.	59.7	44.2	71.3	43.7
Std.Dev	4.99	1.88	2.10	1.05
Coff.of Variation	0.08	0.04	0.03	0.02
98 percentile	68.5	49.2	74.5	46.1
	3.Loading Point		**4.Mines office**	
Max.	71.5	53.4	64.3	45.8
Min.	64.7	42.3	43.5	41.5
Avg.	68.1	44.7	52.4	43.3
Std.Dev.	1.49	3.08	4.33	1.04
Coff.of Variation	0.02	0.07	0.08	0.02
98 percentile	70.9	52.2	60.8	45.2

Annexure B (v)
(General Condition)

COMPLIANCE TO CREP

S. NO.	CREP CONDITION	COMPLIANCE
1	Cement Plants, which are not complying* with notified standards, shall do the following to meet the standards: • Augmentation of existing Air Pollution Control Devices — by July 2003 • Replacement of existing Air Pollution Control Devices — by July 2004	. Complied
2	Cement Plants located in critically polluted or urban areas (including 5 km distance outside urban boundary) will meet 100 mg/Nm3 limit of particulate matter by December 2004 and continue working to reduce the emission of particulate matter to 50 mg/Nm3.	Complied
3	The new cement kilns to be accorded NOC/Environmental Clearance w. e. f. 01.04.2003 will meet the limit of 50 mg/Nm3 for particulate matter emissions.	The pollution control equipments are designed for emission of less than 50 mg/Nm3.
4	CPCB will evolve load based standards by December 2003.	____
5	CPCB and NCBM will evolve SO2 and NOx emission standards by June 2004.	____
6	The Cement industries will control fugitive emissions from all the raw material and products storage and transfer points by December 2003. However, the feasibility for the control of fugitive emissions from limestone and coal storage areas will be decided by the National Task Force (NTF). The NTF shall submit its recommendations within three months.	Cement Plant is implementing the following measures to control fugitive dust: 1. Installation of water sprinkling system in Coal & Lime stone stock pile. 2. Enclosure is provided to coal crusher 3. Enclosure is provided to all Conveyor belts. 4. Laying of Concrete roads for vehicle movement. 5. Installation of Dust collectors at all transfer points is completed. 6. Fly ash transportation by closed tankers

		7. Fly ash transfer by pneumatic transportation to Fly ash silo 8. Concrete silos for storage of Clinker and Fly ash
7	CPCB, NCBM, BIS and Oil refineries will jointly prepare the policy on use of petroleum coke as fuel in cement kiln by July 2003.	Not applicable
8	After performance evaluation of various types of continuous monitoring equipment and feedback from the industries and equipment manufacturers, NTF will decide feasible unit operations/sections for installation of continuous monitoring equipment. The industry will install the continuous monitoring systems (CMS) by December 2003.	Durga Cement works installed the Continuous Stack Emissions Monitoring System at following locations 1) Kiln / Raw mill 2) Coal mill stack 3) Clinker cooler stack 4) Cement mill stack Stacks emission data online transmitted to APPCB server.
9	Trippings in kiln ESP to be minimized by July 2003 as per the recommendation of NTF.	Kiln/Raw Mill is provided with Reverse Air Bag House (RABH).
10	Industries will submit the target date to enhance the utilization of waste material by April 2003.	Depending upon the available Quantity of waste, we shall explore its utilization after stabilization of plant.
11	NCBM will carry out a study on hazardous waste utilization in cement kiln by December 2003.	--
12	Cement industries will carry out feasibility study and submit target dates to CPCB for co-generation of power by July 2003.	Cement Plant is designed with 4-stage preheater with 5 stage Separate Line Calciner String.

Annexure-B (vi)

(General Condition)

SUBJECT: MEDICAL HELTH CHECKUP AT DCW DISPANSARY

Eye checkup camp organized in DCW dispensary on date: 06.01.2015

Swain flu drops vacination at Srinagar village school from 05.02.2015-15.02.2015

Annexure-B (vii)

(General Condition)

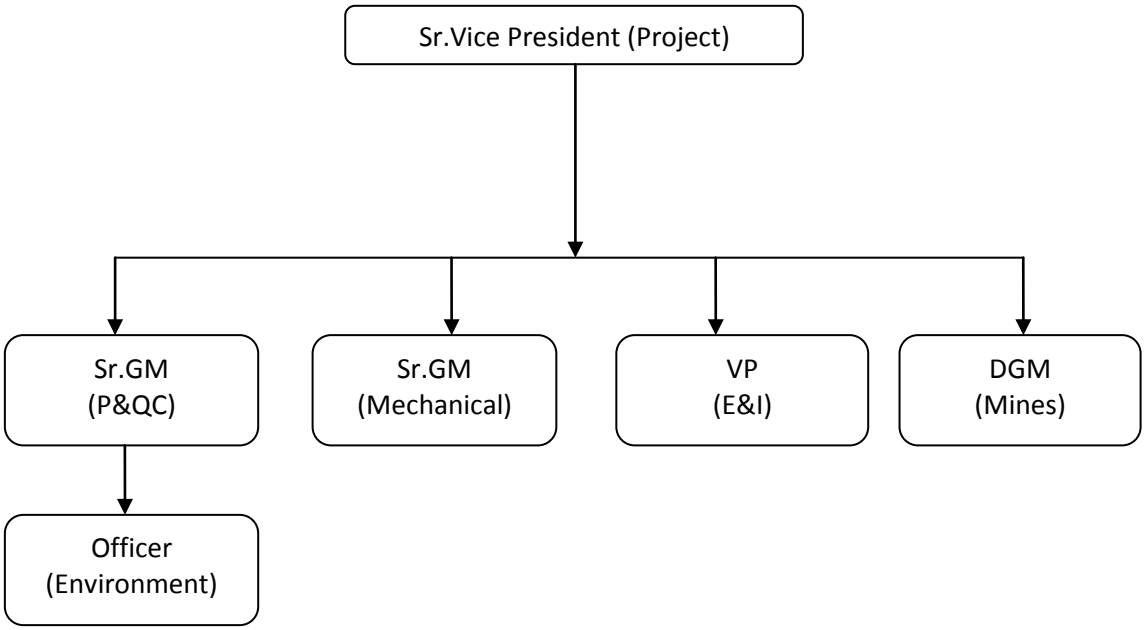
DURGA CEMENT WORKS

(A UNIT OF ANDHRA CEMENTS LIMITED)

GAMALAPADU (V), DECHEPALLI (M)

Dist. Guntur, AP

ORGANIZATION STRUCTURE OF ENVIRONMENT MAMNAGMENT CELL



Annexure-B (viii)

(General Condition)

DURGA CEMENT WORKS

A Unit of Andhra Cements Limited
Gamalapadu(V) Dachepalli (M)
Dist. Guntur (AP)

INVESTMENT ON POLLUTION CONTROL AT DCW PLANT
FROM OCTOBER 2014 to MARCH 2015

(A) CAPITAL COST INVESTMENT ON POLLUTION CONTROL MEASURES

S.N				Crores
1	**Capital cost Investment on pollution control measures up to September 2014**			**52.05**
2	**Capital cost invetment on pollution control measures from October 2014 to March 2015**			
	Location	**Work discription**	**Amount**	**Crores**
A	**Air Pollution control Measures**			
	Flyash Silo	Bag filter installation work	0.0059	
	Flyash Silo	Bag filter installation work	0.0022	
	Lime Stacker	Bag filter installation work	0.0025	
	Coal Stacker	Bag filter installation work	0.0030	
	Cement Mill(VRPM)	Thermal Insulation of Bag filter	0.0347	0.0484
B	**Fugitive Emission Control Measures**			
	Plant road concreated		0.0038	0.004
c				
c	**Water meter purchase**	Assess water consumption	0.0080	0.008
	Capital cost invetment on pollution control measures from October 2014 to		**0.0602**	
	Total Capital cost investment on pollution control upto March 2015			**52.11**

(B) RECURRNG COST INVESTMENT ON POLLUTION CONTROL MEASURES

S.N		Lakhs
1	Recurring cost investment on pollution control measures up to September 2014	**424.82**
2	Recurring Cost investment on pollution control measures from october 2014 to March 2015	

SN	Location	Work Discription	Amount	Lakhs
1	Cement Mill(VRPM)	Bag filter maintenance	0.3432	
2	Cement Mill(VRPM)	Bag filter maintenance	0.1289	
3	Cement Mill-1	Bag filter maintenance	0.1302	
4	STP	Civil Work	0.1938	
5	STP	Civil Work	0.0124	
6	Water Treatment Plant	Civil Work	0.0717	
7	All Bag filter power consumption	3720845 Units	223.2508	
8	Water Spray Tanker Expenses	Dust suppression on roads	4.8850	
9	Green belt Expenses	Tree Plant maintenance	1.0476	
	Recurring cost investment on pollution control equipments from		**230.064**	**230.06**
	Recurring cost investment on pollution control measures up to March 2015			**654.88**

DURGA CEMENT WORKS

A Unit of Andhra Cements Limited
Gamalapadu(V) Dachepalli (M)
Dist. Guntur (AP)

INVESTMENT ON POLLUTION CONTROL AT DCW MINES
FROM OCTOBER 2014 to MARCH 2015

(A) CAPITAL COST INVESTMENT ON POLLUTION CONTROL MEASURES

S.N				Lakhs
1	**Capital cost Investment on pollution control measures up to September 2014**			**35.56**
2	**Capital cost invetment on pollution control measures from October 2014 to March 2015**			
	Location	**Work discription**	**Amount**	
A	CAAQM System purchage (Environnement SA Mumbai)	Continuous ambient air quality monitoring	10.74019	
B	Civil Work	CAAQM room constructed	0.10133	
			10.84152	10.84
	Total Capital cost Investment on pollution control measures up to March 2015			**46.40**

(B) RECURRNG COST INVESTMENT ON POLLUTION CONTROL MEASURES

S.N				Lakhs
1	Recurring cost investment on pollution control measures up to September 2014			
2	Recurring Cost investment on pollution control measures from october 2014 to March 2015			**23.59**
SN	**Location**	**Work Discription**	**Amount**	
1	Water spray tanker expenses	Water spray on mines working area & Mines roads	2.12480	
2	Green belt expenses	Tree plant maintenance	1.25632	
	Recurring cost investment on pollution control equipments from October 2014 to March 2015		3.38112	3.38
	Recurring cost investment on pollution control measures up to March 2015			**26.97**