

REGISTERED POST

ACL/DCW/CFO/PLANT/2014-15/

Date: 29.12.2014

To
The Member Secretary,
A.P. Pollution Control Board
Paryavaran Bhavan A-III, IE, Sanath Nagar
Hyderabad-500018

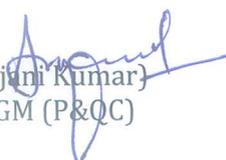
Sub: Half yearly CFO Compliance report of Durga Cement works (Cement Plant), granted by A.P Pollution Control Board Vide Consent Order No: APPCB/VJA/GTR/10023/HO/CFO/2014-Dated: 23.01.2014.

Dear Sir,

With reference to above, please find enclosed half yearly compliance report for Consent for Operation (CFO) of Durga Cement works (Cement Plant), a unit of Andhra Cements Limited, Durgapuram(V), Dachehalli(M), Guntur- Dist(AP) for the period from April 2014 to September 2014 for your kind information and record please.

Thanking you.

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


(Anjani Kumar)
Sr. GM (P&QC)

Encl: As above

Copy to:
The Environmental Engineer
Regional Office, A.P Pollution Control Board
102 Raghava Apartment, Brundavan garden
Guntur, Andhra Pradesh
Pin-522007

DURGA CEMENT WORKS

A Unit of Andhra Cements Limited

(CEMENT PLANT)

Durgapuram Village, Dachepalli Mandal

Guntur District-522414 (A.P)

HALF YEARLY COMPLIANCE REPORT OF CONSENT FOR OPERATION (CFO) OF DURGA CEMENT WORKS FROM APRIL 2014 TO SEPTEMBER 2014

CONSENT ORDER NO. APPCB/VJA/GTR/10023/HO/CFO/2014: DATED: 23.01.2014

SCHEDULE-A		
S. N	CONSENT ORDER CONDITIONS	COMPLIANCE STATUS
1	The applicant shall make applications online for renewal of Consent (under Water and Air acts) and Authorization under HWM Rules at least 120 days before the date of expiry of this order , along with prescribed fee under Water and Air Acts for obtaining Consent & HW Authorization of the Board and detailed compliance report.	Agreed.
2	Any person aggrieved by an order made by the State Board under Section 25,Section 26,Section 27 of Water Act,1974 or Section 21 of Air Act,1981 may within thirty days from the date on which the order is communicated to him, prefer an appeal as per Andhra Pradesh Water Rules,1976 and Air Rules 1982, to such authority (hereinafter referred to as the Appellate Authority) constituted under Section 28 of the Water (Prevention and Control of Pollution) Act,1974 and Section 31 of the Air (Prevention and Control of pollution) Act 1981.	Agreed.
3	All other conditions stipulated in the schedule –A of the earlier combined CFO&HWA order No. Consent Order No. APPCB/VJA/GTR/534/HO/2012-2449 dated 01.09.2012 remain same. The industry shall ensure consistent compliance of each condition of Schedule-A	All other conditions stipulated in Consent Order dated 01-09-2012 are being complied.
4	The industry may explore the possibility of tapping the solar energy for their energy requirements.	Possibility of solar energy is being explored.

SCHEDULE B

1	The effluents discharged shall not contain constituents in excess of the tolerance limits mention below:			There are no effluents generated from the plant. However the effluent (STP) discharged will not contain constituents in excess of the prescribed tolerance limits.
	Outlet	Parameter	Limiting Standards	
	1	pH	5.50-9.0	
		TSS(103-105 ⁰ C)	200 mg/l	
		TDS	2100 mg/l	
		Oil & Grease	10 mg/lit	
BOD (at 27 ⁰ C)		100 mg/l		
2	The industry shall take steps to reduce water consumption to the extant possible and consumption shall NOT exceed the quantities mentioned below:			<p>Following Initiatives are being taken to reduce water consumption:</p> <ol style="list-style-type: none"> 1. Dry Cement manufacturing process. 2. Construction of STP to maintain Zero Waste water discharge. Treated water is being reused in dust suppression & green belt development. 3. Installation of air cooled condenser in place of conventional large size cooling towers. 4. All the drainage leading to mine pit to conserve the rain water. <p>Water consumption shall not exceed the allowed quantity.</p>
	S. No	Effluents	Quantity in KLD	
	1	Process (in Raw mil & Cement Mill)	172	
	2	Cooling make up	228	
	3	Domestic including plant and township	250	
		Total	650	
The industry shall maintain separate water meters for the above areas and maintain records.				Separate water meters provided for industrial & domestic water consumption and records are maintained. Photographs are attached as per Annexure-1 .
3	The Industry shall file the water cess returns in Form-1 as required under section (5) of Water (Prevention and Control of Pollution) Cess Act,1977 on or before the 5 th of every calendar month, showing the quantity of water consumed in the previous month along with water meter reading. The industry shall remit water cess as per the assessment orders as and when issued by Board.			Being complied. Regular water Cess returns in Form-1 submitted to APPCB Hyderabad and APPCB Regional office, Guntur on monthly basis as per Annexure-2
4	<p>The Industry shall provide separate water meters with necessary pipeline for assessing the quantity of water used for each of the purposes mentioned below.</p> <ol style="list-style-type: none"> a. Industrial Cooling ,boiler feed b. Domestic Purposes c. Processing, whereby water gets polluted and pollutants are easily biodegradable. d. Processing, whereby water gets polluted and pollutants are not easily biodegradable. 			Complied with. Separate water meter provided for Industrial & domestic use as shown above.
5	The emissions shall not contain constituents in excess of the prescribed limits mentioned below:			Being complied. On line Continuous monitoring system to monitor stack emissions has been working and data are being transmitted to APPCB Server and Display board at factory gate. Photographs attached as per Annexure-3 . Air pollution control equipments like RABH installed in Kiln & raw mill, ESP provided in Cooler section, Bag filter provided in coal mills, Cement mills and packing plant. The above pollution control equipments are capable to control the PM within 50 mg/Nm ³ .
	Chimney No.	Parameter	Emission Standards	
	1 to 10	Particulate Matter	50 mg/Nm ³	

6	The industry shall comply with emission limits for DG sets of capacity upto 800 KW as per the Notification G.S.R.520 (E),dated 01.07.2003 under the Environment (Protection) Amendment Rule 2003 and G.S.R. 448 (E),dated 12.07.2004 under the Environment (Protection) Second Amendment Rule,2004 , In case of DG sets of capacity more than 800 KW shall comply with emission limits as per the Notification G.S.R.489(E),Dated 09.07.2002 at serial no,96 under the Environment (Protection) Act,1986	Being complied within the norms.
7	The industry shall comply with ambient air quality standards of PM ₁₀ (Particulate Matter size less than 10µm)-100 µg/m ³ , PM _{2.5} (Particulate Matter size less than 2.5µm)-60 µg/m ³ ,SO ₂ -80 µg/m ³ ,NO _x -80 µg/m ³ ,outside the factory premises at the periphery of the industry. Standard for other parameters as mentioned in the National Ambient Air Quality Standards CPCB Notification No.B-29016/20/90/PCL-1,dated 18.11.2009. Noise Levels: Day time (6 AM to 10 PM)-75 dB(A) Night time (10 PM to 6 AM)-70 dB(A)	Being complied. On line Continuous Ambient Air Quality Monitoring is being done at 2 nos of Stations. Real time CAAQM data is being transmitted to APPCB Server and to the Display Board at factory gate .In addition to CAAQMS , 4 nos of manual AAQMS have also been working. Noise level is also being monitored. Parameters are within the prescribed limits. Ambient Air, Stack emission & Noise level report attached as per Annexure- 4 .
8	The Industry shall not manufacture any product, other than those mentioned in this order, without CFE&CFO of the Board. The industry shall not increase the capacity beyond the permitted capacity mentioned in this order, without obtaining CFE&CFO of the Board.	Agreed, We shall not manufacture any other product, nor increase the capacity beyond the permitted capacity mentioned in this order, without obtaining CFE & CFO of the Board
9	The STP under construction shall be commissioned by March, 2014 for treatment and use of treated domestic waste water for recycling and for green belt, etc and report the status to regional office, Guntur.	Complied with. STP construction work completed of 300 KLD and STP is in working condition. Treated water well within the norms of AP Pollution Control Board. Treated waste water is being used in green belt development and dust suppress in plant area .STP photographs and Analysis test results attached as per Annxure-5 .
10	The industry shall submit action plan for installing 3 rd CAAQM station in cross wind direction of mines area to regional office, Guntur.	3 rd CAAQM station room construction work is under progress Photographs attached as per Annexure -6 and also work order have been placed on M/s Environnement SA India Pvt. Limited, Mumbai for installation of 3 rd CAAQM station which shall be installed at the cross wind direction of the Mines, with the consultation of Regional office AP Pollution Control Board Guntur.The system will be commissioned within 6 months time. Work order copy attached as per Annexure-7 .
11	The industry shall earmark an amount of Rs.125.0 lakhs per annum for 10 years towards the Enterprise Social Responsibility (ESR) activities. The industries shall earmark amount towards the Enterprise Social Responsibility (ESR) activities and spend the amount under ESR activities through ESR/CSR cell in the office of the district collector.	CSR/ESR activities being taken by the company. CSR report for the year of 2014-15 attached as per Annexure-8 .
12	The Industry shall maintain online monitoring equipments for the major stacks i.e Raw mill /Kiln/clinker cooler etc.	Being complied. Details given above.
13	The applicant shall maintain THREE Ambient Air Quality monitoring stations for monitoring of relevant critical parameters mentioned as per the CPCB guidelines and submit monthly reports.	Being Complied. Photographs are attached as per Annexure -9
14	The industry shall maintain closed storage facilities in respect of Fly Ash, coal, clinker gypsum, additives, etc.	Silos provided for the storage of fly ash & clinker. Covered sheds provided for the storage of Coal,

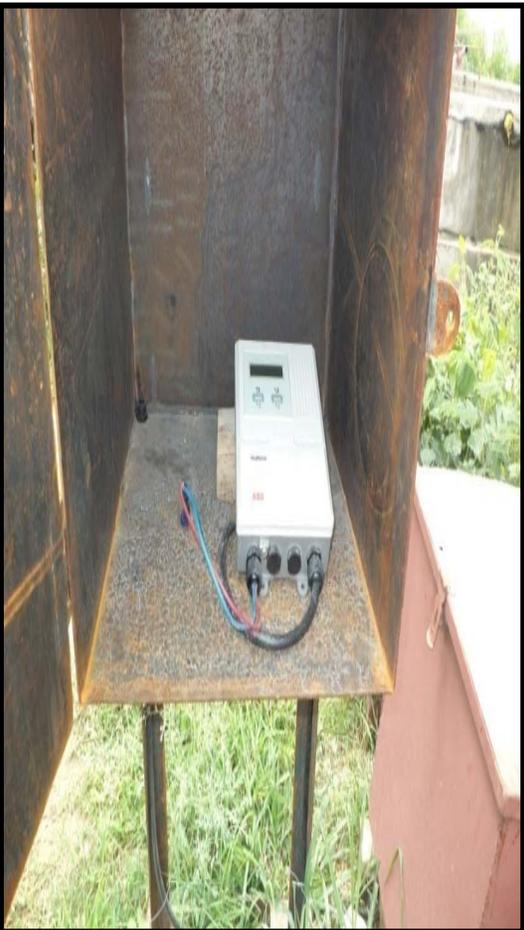
	and shall maintained good house keeping.	Gypsum, and other Additives. Good house keeping maintained all around the plant. Photographs are attached as per Annexure-10
15	The Industry shall control fugitive emissions generated due to handling, conveyance and storage of crushed limestone, additives, coal, clinker and gypsum with required water spraying systems and dust suppression system.	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 lime stone, laterite, coal, gypsum. Cement and clinker are stored in silos. Fly ash silo with pneumatic system for fly ash handling. List of the APCDs are given in Annexure-11 . Regular water sprinkling is being carried out using water tankers at all pollution prone areas, conforming the air quality norms.
16	The industry shall maintain the records on captive consumption of clinker produced, fly ash utilization & cement production etc. and the consolidated record shall be furnished to R.O Guntur.	Being complied. The consolidated record of captive consumption of clinker produced, fly ash utilization & cement production etc. is being maintained & regularly submitted to APPCB on monthly basis.
17	The industry shall maintain inter locking system for air pollution control equipments provided with raw materials feeding system so that the feeding of raw materials stopped incase the air pollution control equipments fails.	Air Pollution control equipments Bag House, ESP and Bag filters is a part of Pyro processing systems. Feeding Systems are Interlocked with the Air Pollution Control equipments. Equipments automatically stopped when pollution control equipments fails. Interlocking system with APCD flow sheet attached as per Annexure- 12 .
18	All the roads in the plant area shall be asphalted /concreted and water shall be sprayed to reduce fugitive dust emission	Complied with. Plant roads photographs are attached as per Annexure-13 .
19	The Industry shall maintain and submit the records of daily operating hours of kiln, ESP and reasons for ESP tripping to RO, Guntur on monthly basis.	Being complied. Kiln & ESP daily running hours reports regularly submitted to APPCB on monthly basis
20	The industry before commencing the operation of the plant, ensure that the APC system (Bag Filter) to the primary & Secondary coal crushers are provided.	Complied with. Bag house provide in Coal mill-1 & 2. Photographs are attached as per Annexure-14 .
21	Green belt of adequate width and density shall be maintained along the boundary of the industry with minimum area of 33% of total area.	Complied with. Thick Green belt developed at the boundary of the industry. Total green belt in the plant area more than 33%. Tree plantation report attached as per Annexure-15 .
22	The industry shall comply with the directions of the Board issued from time to time.	Agreed.
23	The industry shall establish appropriate RWH structure on the available up-stream portion of the plant site.	Shall be complied.
24	The applicant shall submit Environment statement in Form V before 30 th September of every year as per rule No.14 of E(P) Rule,1986 & amendments.	Complied with. Last Environment Statement in Form-V sent vide our letter no. ACL/DCW/ENV/2014/4023 dated 20-09-2014.
25	The conditions are without prejudice to the rights and contentions of this Board in any Hon,ble court of law.	Agreed.

SCHEDULE –C**[See rule 5(4)]****CONDITIONS OF AUTHORISATION FOR OCCUPIER OR OPERATOR HANDLING HAZARDOUS WASTE]**

1	The Industry shall give top priority for waste minimization and cleaner production practices.	Complied with. All the waste being segregated on the basis on degradability/recyclability and accordingly disposed. Bio degradable waste from township & plant area is being composted and the manure is used for horticulture purpose. All the hazarded waste will be disposed through the authorized recycler. Fly ash shall be used in cement manufacturing.
2	The industry shall not store hazardous waste for more than 90 days as per the Hazardous Waste (Management Handling and Transboundary Movement) Rules, 2008 and amendments thereof.	Agreed.
3	The industry shall store Used /Waste oil and Used Lead Acid Batteries in a secured way in their premises till its dispose.	Hazardous waste store provided for storage of hazardous waste and used led acid batteries in secured way.
4	The industry shall not dispose Waste oils to the traders and the same shall be disposed to the authorized Reprocessors / Recyclers	Agreed
5	The industry shall dispose Used Lead Acid Batteries to the manufacturers /dealers only.	Noted for compliance.
6	The industry shall take necessary practical steps for prevention of oil spillages and carry over of oil from the premises.	All necessary precautions are being taken.
7	The Industry shall maintain 6 copy manifest system for transportation of waste generated and a copy shall be submitted to the Board office and concern Regional office.	Noted for compliance
8	The industry shall maintain good house keeping & maintain proper record for Hazardous waste stated in authorization.	Noted for compliance
9	The industry shall maintain proper records for hazardous waste stated in authorization in form-3 i.e, quantity of incinerable waste, land disposal waste, recyclable waste etc, and file annual return in Form-4 as per Rule 22(2) of the Hazardous Wastes (Management, Handling &Transboundary Movement) Rule, 2008 and amendment thereof.	Being complied. Last annual return in Form -4 as per Rule of Hazardous waste (Management, Handling & Transbounday Movement) Rule 2008 Sent vide our letter no, ACL/DCW/ENV/HW/3412 dated 25.06.2014.
10	The industry shall submit the condition wise compliance report of the conditions stipulated in Schedule B&C of this Order on half yearly basis to Board office, Hyderabad and concerned Regional Office.	Being complied. Half yearly CFO compliance report is being regularly submitted to AP Pollution Control Board Hyderabad and its regional office AP Pollution Control Board Guntur. Last CFO Compliance report sent vide our letter no ACL/DCW/CFO/PLANT/2014-15/3365 dated 17.06.2014.
11	The industry shall dispose of e-waste to the authorized recycler only.	Agreed.
12	The industry shall conform to the co-processing guidelines of CPCB in sending waste to co-processing for cement plants.	Noted for compliance



Colony Water meter,



Industrial Water meter

REGISTERED POST

DCW/P&QC/ENV/09-14/ 4141

Date:06.10.2014

The Member Secretary,
AP Pollution Control Board
Paryavaran Bhavan
A-III, I.E., Sanath Nagar
HYDERABAD- 500 018

Dear Sir,

Subject: Monthly Monitoring Report for the Cement Plant of M/s Andhra Cements Limited at village Durgapuram, Mandal- Dachepalli, Dist-Guntur, (AP)

Ref: CFO vide order no: APPCB/VJA/GTR/10023/HO/CFO/2014,Dt.23.01.2014

Dear Sir,

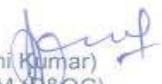
Please find enclosed following reports of Durga Cement Works of Cement Plant, a unit of Andhra Cements limited for the month of September 2014.

1. Monthly water consumption report of Plant.
2. Kiln, RABH & ESP Running Hours report.
3. Ambient air quality monitoring report.
4. Stack emission report.
5. Noise level report.
6. Raw material consumption report.

This is for your kind information and records.

Thanking You

Yours faithfully,
For **Durga Cement Works**
(A unit of Andhra Cements Limited)

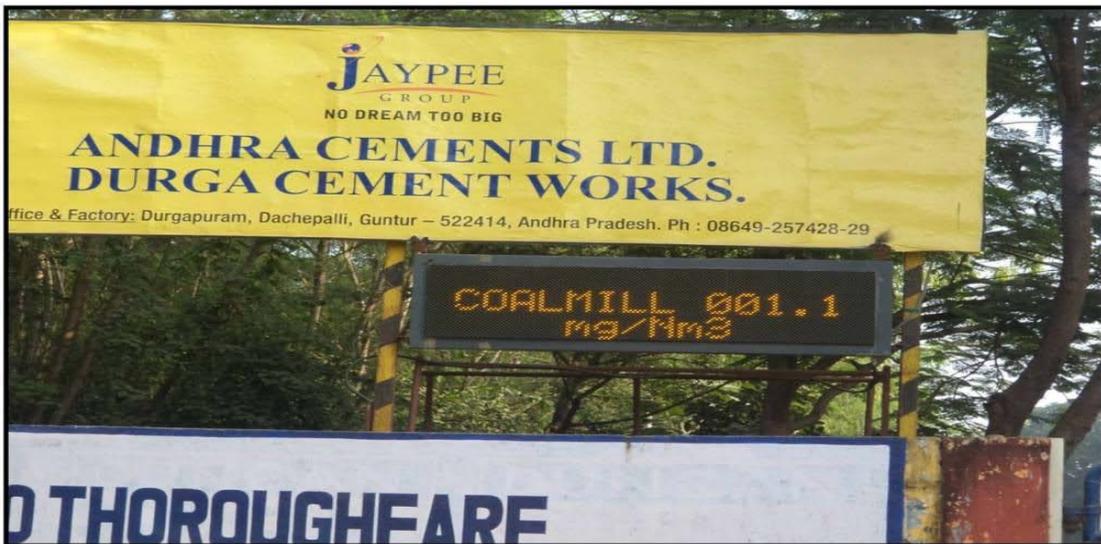
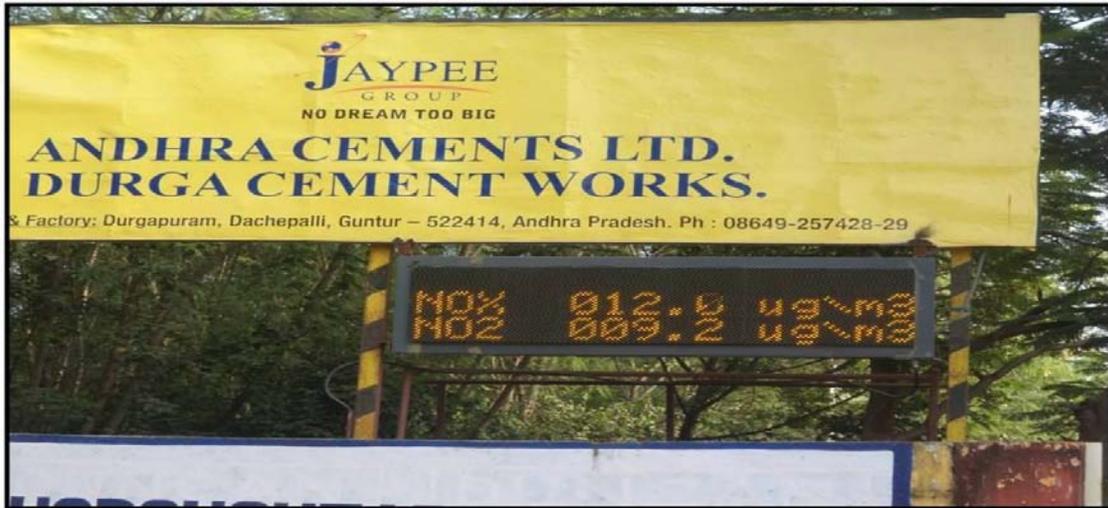

Anjani Kumar)
Sr.GM (P&QC)

Encl: a/a

CC: The Environmental Engineer
AP Pollution Control Board, Regional Office
102, Raghava Apartments, Brundavan Gardane,
GUNTUR - 522 007

o/c

Emission data displayed at factory main gate



DURGA CEMENT WORKS

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

AMBIENT AIR QUALITY MONITORING REPORT APRIL 2014 TO SEPTEMBER 2014

LOCATION -1 NEAR MINE PIT-1, (CROSS WIND)

S.N		PM-2.5 $\mu\text{g}/\text{m}^3$	PM-10 $\mu\text{g}/\text{m}^3$	SO ₂ $\mu\text{g}/\text{m}^3$	NO ₂ $\mu\text{g}/\text{m}^3$
1	MAX.	32.25	62.09	8.83	15.45
2	MIN.	12.72	41.5	3.19	4.93
3	AVG.	23.08	50.32	6.43	10.31
4	STD DEV.	3.85	4.83	1.21	1.83
5	COFF. OF VARIATION	0.17	0.10	0.19	0.18
6	98 PERCENTILE	31.77	59.83	8.48	14.97

LOCATION -2 NEAR NAGULERU RIVER PUMP HOUSE, (CROSS WIND)

S.N		PM-2.5 $\mu\text{g}/\text{m}^3$	PM-10 $\mu\text{g}/\text{m}^3$	SO ₂ $\mu\text{g}/\text{m}^3$	NO ₂ $\mu\text{g}/\text{m}^3$
1	MAX.	27.85	49.64	8.22	14.44
2	MIN.	10.27	34.62	2.96	5.39
3	AVG.	19.64	42.34	5.59	9.07
4	STD DEV.	3.66	3.63	1.49	2.12
5	COFF. OF VARIATION	0.19	0.09	0.27	0.23
6	98 PERCENTILE	27.01	49.06	8.11	13.48

LOCATION -3 NEAR CPP (TOWARDS GAMALAPADU VILLAGE), (UP WIND)

S.N		PM-2.5 $\mu\text{g}/\text{m}^3$	PM-10 $\mu\text{g}/\text{m}^3$	SO ₂ $\mu\text{g}/\text{m}^3$	NO ₂ $\mu\text{g}/\text{m}^3$
1	MAX.	34.69	64.96	8.86	14.89
2	MIN.	17.80	40.23	4.01	6.71
3	AVG.	25.40	52.10	6.57	10.62
4	STD DEV.	3.63	4.59	1.28	1.98
5	COFF. OF VARIATION	0.14	0.09	0.19	0.19
6	98 PERCENTILE	33.18	60.92	8.69	14.48

LOCATION -4 COLONY AREA (TOWARDS SRI NAGAR VILLAGE),(DOWN WIND)

S.N		PM-2.5 $\mu\text{g}/\text{m}^3$	PM-10 $\mu\text{g}/\text{m}^3$	SO ₂ $\mu\text{g}/\text{m}^3$	NO ₂ $\mu\text{g}/\text{m}^3$
1	MAX.	28.49	47.94	8.90	14.98
2	MIN.	12.97	33.25	2.96	5.66
3	AVG.	19.29	41.73	5.36	8.72
4	STD DEV.	3.19	3.89	1.74	2.30
5	COFF. OF VARIATION	0.17	0.09	0.32	0.26
6	98 PERCENTILE	24.81	47.74	8.69	14.48

STACK MONITORING REPORT

(APRIL 2014 TO SEPTEMBER 2014)

	RABH mg/Nm ³	COOLER mg/Nm ³	COAL MILL mg/Nm ³	CEMENT MILL-1 mg/Nm ³	CEMENT MILL-2 mg/Nm ³
MIN	7.29	10.17	5.83	6.44	8.22
MAX	18.92	29.17	22.87	16.74	22.65
AVERAGE	13.33	16.84	12.76	10.89	14.13
STD.DEV	3.55	4.98	4.03	3.37	4.25
COFF.OF VARIATION	0.27	0.30	0.32	0.31	0.30
98 PERCENTILE	18.88	27.19	21.45	16.22	21.73

DURGA CEMENTS WORKS

A Unit of Andhra Cements Limited

Dugapuram,P.O- Srinagar, Dachepalli (M), dist- Guntur,(A.P)

NOISE LEVEL REPORT

(April-2014 to September 2014)

1. Colony area

	Day Time dBA	Night Time dBA
MAX	45.6	43.6
MIN	41.5	40.5
AVG	43.48	42.28
STD DEV.	1.19	0.94
COFF. OF VARIATION	0.03	0.02
98 PERCENTILE	45.6	43.6

2.Near Time Office

	Day Time dBA	Night Time dBA
MAX	55.30	53.70
MIN	45.60	44.80
AVG	51.55	49.87
STD DEV.	2.46	2.26
COFF. OF VARIATION	0.05	0.05
98 PERCENTILE	55.02	53.22

3.Near Mine Office

	Day Time dBA	Night Time dBA
MAX	55.80	53.80
MIN	44.50	42.10
AVG	52.43	50.53
STD DEV.	2.32	3.15
COFF. OF VARIATION	0.04	0.06
98 PERCENTILE	55.40	53.72

STP OF 300 KLD INSTTALED AT DCW COLONY



STP WATER TESTING REPORT



Sree Mahendra
ANALYTICAL SERVICES
Genuine Quality Assurance
A.P Govt Regd No 591/12
ISO 9001:2008 Certified Laboratory

REGD. Off: 1-7-292, Chaitanyapur,
Opp: Geetha Hospital, Dilukhnagar,
Hyderabad-500035
Ph: 040-64609596, Cell: 9866669596
E-mail: mail@smasquality@gmail.com
Web site: www.smaslabs.com

CERTIFICATE OF ANALYSIS

Test Report
Report Ref: SMAS/WA/33-09-029/14

In accordance with the order of M/s. Revolve Engineers Pvt.Ltd, Hyderabad we carried out the following analysis for the given sample.

SAMPLE DETAILS:	
Sample lab code	: 1807
Name of the Site	: Andhra cements
Date of Receipt	: 29.09.2014
Job Ref No	: SMAS/WA/33-09-029/14
Date of Issue	: 06.10.2014
Sample Particulars	: COLLECTION WATER (Code No:367), FINAL WATER (Code No:359)
Sampling	: By Client
Tests Required	: As per mail
Analysis Started on	: 29.09.2014
Analysis Completion Date	: 06.10.2014
Sample Condition	: Intact

SAMPLE ANALYSED AS RECEIVED BASIS

TEST RESULTS

The above sample was analysed by us and the results are as follows:

S.No	TEST PARAMETERS	UNITS	RESULTS		APPCB STANDARDS
			In let-367	Our let-369	
1.	pH	--	7.22	7.60	> 6.5 - 9.0
2.	Total Dissolved Solids (@ 180°C)	ppm	1516	1042	< 2100
3.	Total Suspended Solids (@ 105°C)	ppm	38	02	< 200
4.	Chemical oxygen demand	ppm	190	24	< 250
5.	Biological oxygen demand (5 day @ 27°C)	ppm	36	Nil	< 100
6.	Chlorides as Cl	ppm	369.2	284.0	< 600
7.	Sulphates as SO ₄	ppm	< 1.1	102.0	< 1000
8.	Oil & Grease	ppm	< 1.00	< 1.00	< 10.0
9.	Total hardness as CaCO ₃	ppm	488	384	Not Specified
10.	Calcium as Ca	ppm	141.0	118.4	Not Specified
11.	Total Alkalinity as CaCO ₃	ppm	410.0	270.0	Not Specified
12.	Nitrates as NO ₃	ppm	2.86	0.01	Not Specified
13.	Color	--	Colorless	Colorless	Not Specified
14.	Odour	--	Agrasable	Agrasable	Not Specified
15.	Turbidity	NTU	22.1	1.10	Not Specified
MICROBIOLOGICAL PARAMETERS					
16.	Coliform Bacteria		36	Nil	500MPN/100ml
17.	E.coli		Absent	Absent	Not Specified

Note: 1. The sample is analyzed as per APHA & CPCB Manual.
2. The certificate relates only to the sample tested.



M. Akhal
Authorized Signatory

TESTING SERVICES

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Soil, Chemicals, Metals, Ores, Industrial effluents
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**3rd CAAQM STATION ROOM CONSTRUCTION WORK UNDER
PROGRESS AT CROSS WIND DIRECTION IN DCW MINES AREA**



PURCHASED ORDER FOR CAAQM SYSTEM

DURGA CEMENT WORKS
A UNIT OF ANDHRA CEMENTS LIMITED

ANDHRA CEMENTS LIMITED

Ref: ACL/DCW/Additional AAQMS/204/2014
Dated: 04th April, 2014

PURCHASE ORDER

M/s Environnement S.A India Pvt Ltd
C-387, TTC Industrial Area,
Pawane M.I.D.C., Pfizer Road, Turbhe,
Navi Mumbai 400 705, India
Tel: +91 22 2767 1916/17, Fax: +91 22 2763 1086
Email id: prasad@environnement-sa.com

K/A: Shri. Prasad Krishnamurthy (Director - Sales) - Mob: 9930697410
Shri A.K. Srivastava (D.G.M) - Mob: 9311103004

Sub: Purchase Order for supply, Installation & commissioning and maintenance of Pollution Monitoring Equipments (AAQMS-1 No) along with related accessories for online monitoring for Durga Cement Works, Durgapuram, Srinagar (P.O.) Dachehalli - 522414, Guntur District, Andhra Pradesh.

Ref: (1) Our PO Ref: JPVL/Nigri/Environ/Poll-Ctr/012/2012 dated 10.04.2012
(2) Our Amndt Ref: JPVL/Nigri/Environ/Poll-Ctr/012/204/2014/Amndt-1 dtd 04.04.12

Dear Sir,

In continuation to above references, we are pleased to issue this Purchase order on you for supply, installation & commissioning and maintenance of 1 No AAQMS (PM10, PM2.5) which is being cancelled from Nigri as per referred amendment dated 04.04.14 and is being separately ordered vide this order for our subject DCW project with same prices as Nigri on following terms & conditions:-

1.0 SCOPE OF SUPPLY

- 1.1 Scope of Supply per station-wise for Ambient Air Quality Monitoring Station (PM10 & PM2.5), shall be as per Scope of Supply/BOQ given in Annexure-I.
- 1.2 Proper training of our personals for 3-4 days at your workshop in India and at our site shall be provided and the price of same is included in the Contract Price.
- 1.3 You shall strictly follow the Guidelines for Measurement of Ambient Air Pollutants without any deviation, issued in May, 2011, by CPCB.
- 1.4 System availability shall be more than 90%.
- 1.5 PACKAGING
 - 1.5.1 The Supplier shall include and provide for securely protecting and packing the equipment in accordance with the best established practices so as to protect the contents from damage during transit from point of manufacture until after arrival at the erection site under conditions, which may involve multiple handling, transport by ship, rail and road, storage, exposure to heat, moisture, rain etc and possibility of pilferage. The packing standards shall be approved by the Purchaser/Consultant and wherever considered necessary, the purchaser/consultant may check the packing before despatch and may ask for modifications to the extent considered necessary to be carried out in the packing and the Supplier shall carry out the same at no extra cost to the Purchaser. Special precautions as found necessary shall be taken into account by the Supplier.



Page 1 of 5

Regd. Office & Factory : Durga Cement Works, Durgapuram, Post Office - Srinagar
: Dachehalli - 522414, District Guntur, Andhra Pradesh
Ph.: +91-8649-257428-29, Fax: + 91-8649-257449

- 1.5.2 Fragile items shall be wrapped in crepe-cellulose wadding or some equally efficient cushioning material and floored in excelsior and packed in substantial wooden covers with special precaution against risk of breakage.
- 1.5.3 Supplier shall be entirely responsible for loss, damage or deterioration to any equipment and parts thereof occasioned by faulty, defective or insecure packing, or due to improper or insufficient protective measures or due to non-compliances of carriers stipulated packing conditions.

2.0 DELIVERY

- 2.1 GA drawings shall be submitted to Holtec for approval within 1 week of this PO.
- 2.2 Complete equipment with accessories and spares required for commissioning will be delivered at site within 2 months and Installation & Commissioning shall be within 1 month thereafter from the date of issuance of this Purchase Order.

3.0 CONTRACT PRICE

- 3.1 The Total Contract Price inclusive of packing & forwarding charges at **FOR site basis** shall be **Rs 9,54,633/- (Rupees Nine Lacs Fifty Four Thousand Six Hundred & Thirty Three Only)**. The detailed Price Break up is given in Annexure-II:
- 3.2 Excise duty, sales tax and any other local taxes & duties levied at the time of despatch shall be payable extra, on presentation of supporting documents.
- 3.3 The total Contract Price for the equipment includes commissioning spares and includes charges for Installation & Commissioning.
- 3.4 Boarding and lodging and local conveyance at site will be provided by Purchaser, free of charge at actuals.
- 3.5 The total Contract Price for the equipment also includes
- Maintenance up to warranty period
 - Consumables up to warranty period
 - Spares, calibration up to warranty period
 - 4 visits per year of 3-4 days maximum up to 60 days.
- 3.6 Above price shall remain firm and fixed throughout the period of order and no escalation shall be allowed on any account.

4.0 PERFORMANCE BANK GUARANTEE (PBG)

You shall submit a Performance Bank Guarantee (PBG) equivalent to 10% of the Contract Price valid up to one month beyond the warranty period. PBG shall be valid upto warranty period, but keeping in view of your current banking procedure, you may initially submit the PBG with a validity of 24 months which shall be extended further for next 24 months (i.e. 6 months prior to the expiry of the PBG). Such Extension shall be made till expiry of the warranty period.



5.0 PAYMENT TERMS

- (a) 100% of the Contract Price along with all taxes & duties shall be paid through P.I. Cheque shall be released on submission of dispatch document & 10% PBG valid till 1 months beyond the warranty period.

6.0 OPERABILITY OF B.G.'S AT DELHI:

Bank Guarantee(s) shall be issued from a scheduled bank located at New Delhi/Delhi or alternatively if guarantee issuing bank is located outside New Delhi/Delhi, then such bank guarantee(s) should have a provision for its operability at a branch of the same bank at New Delhi/Delhi.

7.0 WARRANTY

The Equipment shall carry warranty for a period of **48 (Forty Eight) months** from the date of commissioning, towards all defects not limiting to material defects, manufacturing defects and performance of the equipment.

8.0 MAINTENANCE

- 8.1 During the entire warranty period [i.e for the period of 48 months from the date of commissioning] you shall provide adequate maintenance, necessary consumables and spare parts, periodic calibration of the equipment for its proper performance and working. You shall provide at least 4 visits per year of 3-4 days at site.
- 8.2 After expiry of Warranty Period i.e 5th year, 6th year & 7th year following Annual Maintenance Charges (AMC) excluding consumables & spare parts shall be applicable.
- Rs 0.40 Lakh per year per station for CEMS.

9.0 LIQUIDATED DAMAGES FOR DELAY/NON-PERFORMANCE:

- 9.1 In the event of any delay in supply of the drawings beyond the stipulated delivery dates, liquidated damages @ 0.5% of the value of the Contract per week subject to a total maximum of 2.0% of the Contract price.
- 9.2 In the event of delay in supply of equipment (including spare parts) beyond the stipulated delivery dates, you shall pay liquidated damages @ 0.5% (half percent) of the Contract Price as per week or part thereof subject to a maximum of 5% (five percent) of the Contract Price.
- 9.3 The Performance of Analyzers, Data Loggers, Calibrator and Data Processing System shall be as per specifications given by you and agreed upon. Total liquidated damages on account of Supplies, Performance & Services shall not exceed 10% of the Contract Price beyond which the system shall be replaced.

10.0 INSPECTION & TESTING

Supplier shall submit Quality Plan for Purchaser's approval within 2 weeks of date of this Purchase Order. Representative of Purchaser shall carry out inspection of The Supplier's works.



11.0 PROGRESS REPORTS

- 11.1 Within 15 days of the receipt of the Purchase Order, The Supplier shall furnish to us an activity chart, showing various activities involved in the manufacture and supply of Equipment including preparation of all design/drawings, procurement of Bought Outs, Testing, Inspection, Packing and Despatch activities. The Supplier are requested to review this chart regularly (once a month) with us and submit an updated chart bringing out the latest status. The progress report shall be submitted by 7th of the following month to JAL, on a prescribed format indicating the progress up to 30th day of previous month.
- 11.2 Representative of Purchaser's shall visit your works and engineering office from time to time to check on the progress and The Supplier shall extend all assistance and facilities to them to check on progress and give them all the required information.

12.0 INVOICE/DESPATCH

Commercial Details of the Project shall be informed later on by site incharge.

- 12.1 The advance set of following documents shall be submitted in three sets for each dispatch :
- a) Invoice giving details of items dispatched with price along with copy of L.R. The Purchase Order number and date are to be clearly indicated.
 - b) Separate packing lists for main equipment, commissioning spares, operation spares, and other items.
 - c) Test certificates, inspection certificates or waiver issued by us.
 - d) Excise Invoices
 - e) Intimation letter to Insurance Company
 - f) Despatch Clearance Certificate
 - g) Any other documents considered necessary during transit
- 12.2 These documents shall be couriered so as to reach the destination within 48 hours of dispatch.

13.0 CORRESPONDENCE

- 13.1 The correspondence address of Durga Cement Works is as follows:
Durga Cement Works,
Durgapuram, Srinagar(PO)
Dachepalli- 522414,
Guntur District,
Andhra Pradesh.
TIN No: 28660126822
ECC No./ Central Excise Regn. No. AA8CA9263DXM002
- 13.2 All correspondence in relation to this Purchase Order shall be addressed to Shri. Ashok Kumar Ji, Jt. President, JA Annexe, ,Sector-134,Wajidpur, Dist: Noida - 201 304 (UP), tel: 0120 4516600, 45 6300, 451600, fax-0120-4516101 and e mail: ashok1.kumar@jalindia.co.in.
- 13.4 All correspondence in relation to technical matters shall be addressed to Shri S. K. Gupta, M/s Holtec Consulting Pvt. Ltd., A Block, Sushant Lok, Gurgaon -



- 122001, e mail: skg@hollteconet.com, with intimation to the Project Co-ordinator of Andhra Cements Limited.

You are requested to please sign and copy of this Purchase Order as token of your acceptance and send it back to us within three days of receipt.

Thanking you,
Yours faithfully,
for **ANDHRA CEMENTS LIMITED**



(G.P. GAUR)
AUTHORIZED SIGNATORY



Encl:

1. Scope of Supply/BOQ
2. Complete Price Break

: Annexure-I,
: Annexure-II,



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.

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
	TOTAL EXPENDITURE	Rs.86.90 Lac

DCW CSR ACTIVITIES



RO Water Plant Provided in Srinagar village



Street light & Water supply pipe line provided in Srinagar Village

SUBJECT: MEDICAL HELTH CHECKUP AT DCW DSPENCERY



Annexure-9

THREE NOS. AAQM MONITORING STATION & 2 NOS.CAAQMS



Near CPP



Nagularu River Pump House



Colony area

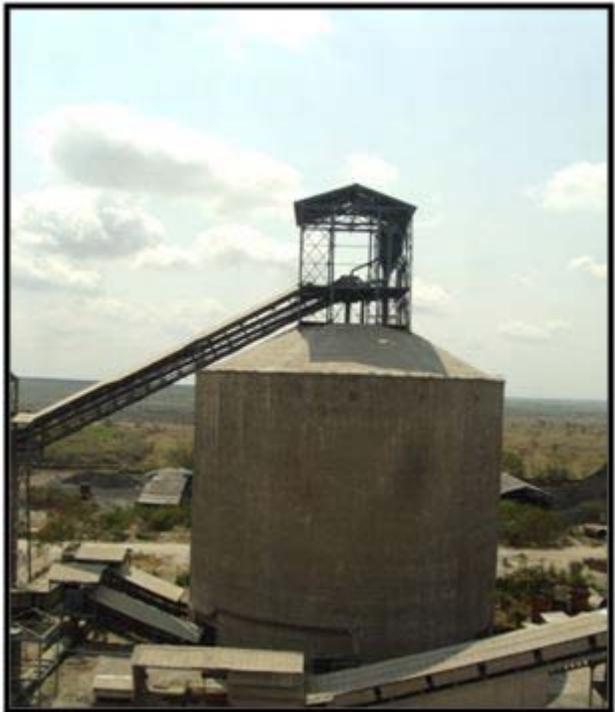


2. Nos CAAQMS Up wind & Down wind Direction

FUGITIVE EMISSION CONTROL WITH PROPER MEASURES



Raw meal Silo

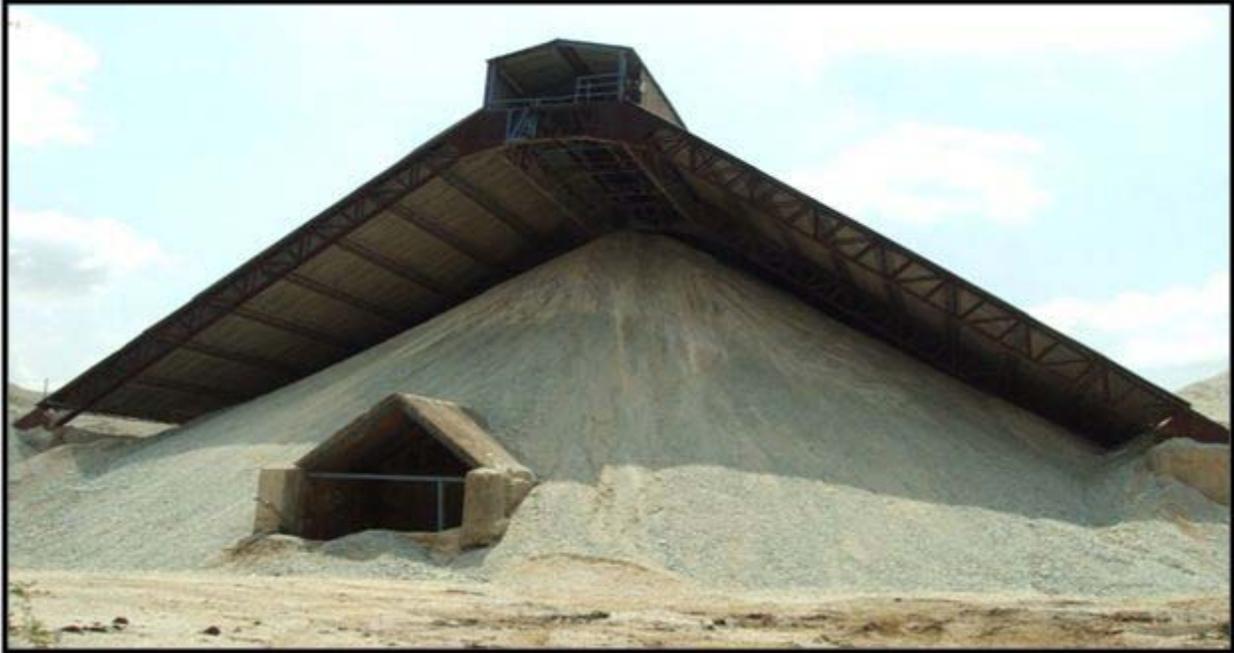


Clinker Silo along with bag filter



fly ash silo

FUGITIVE EMISSION CONTROL WITH PROPER MEASURES



Crushed lime stone yard



Coverd Gypsum yard



Covered Laterite yard



Covered Coal yard

FUGITIVE EMISSION CONTROL WITH PROPER MEASURES



Covered belt conveyores



Covered belt conveyores

FUGITIVE EMISSION CONTROL WITH PROPER MEASURES



Water sprinkling by water tanker



Water spry system installed in crusher

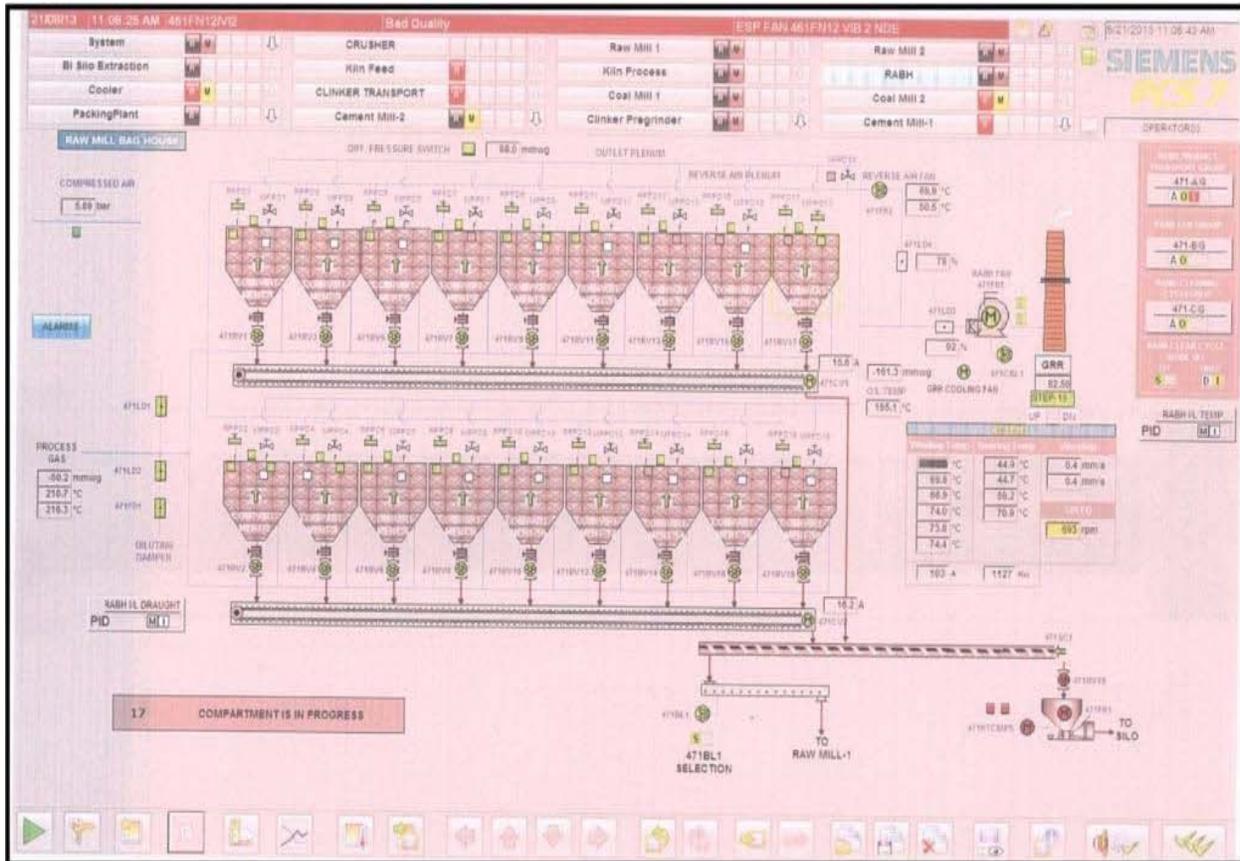
Annexure-11

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-02-040x3.6	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 point (cooler DPC)	CE-02-030 FM X 3.6	4000	30	5	5.5/1450	Clair
22	Clinker storage & transportation	491BF2	Clinker Silo	AJ-168-360	25000	168	16	30/1450	Thermax

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 separator 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	

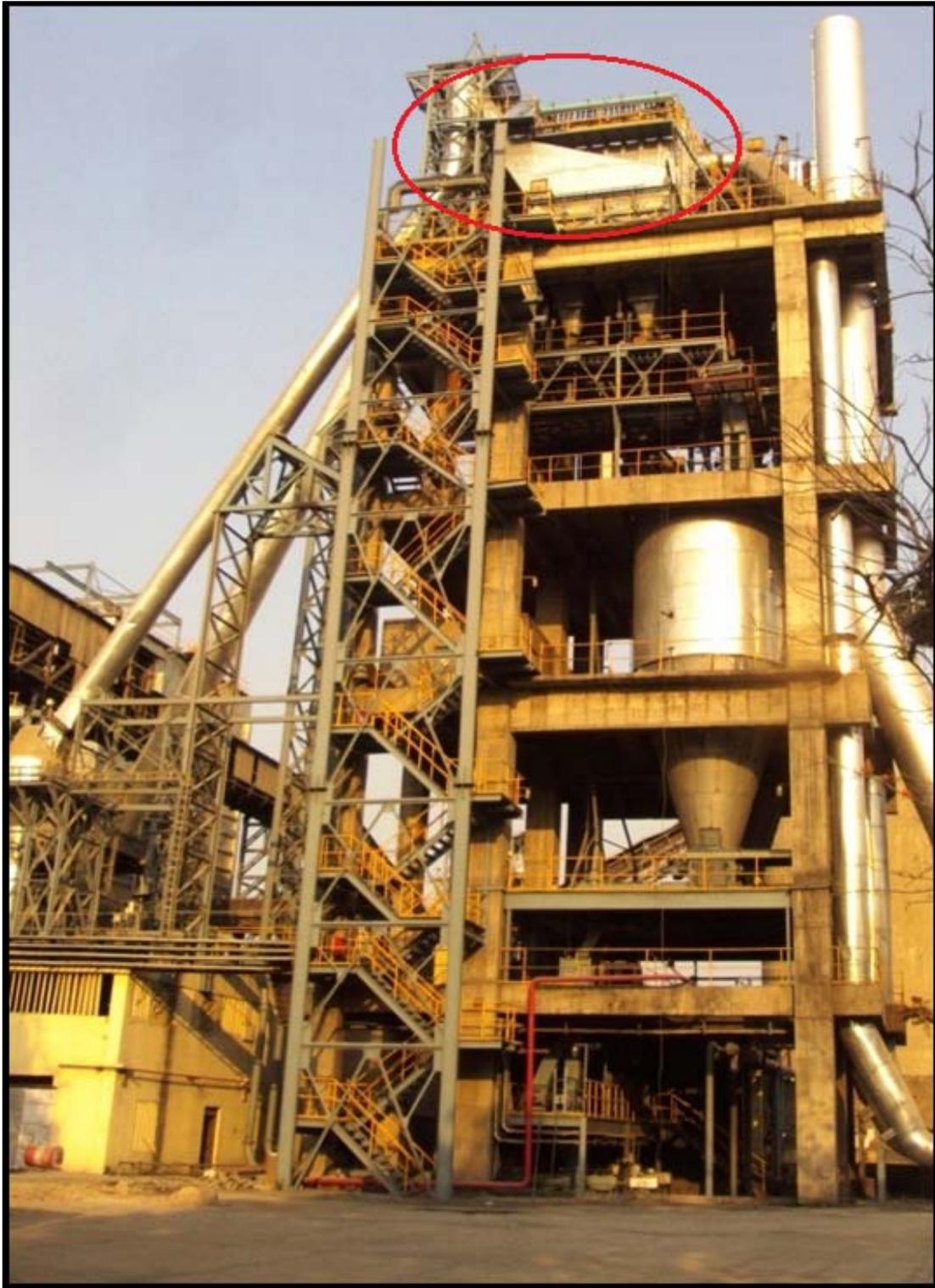
Interlocking system provided with APCD



Plant roads concreted and maintained

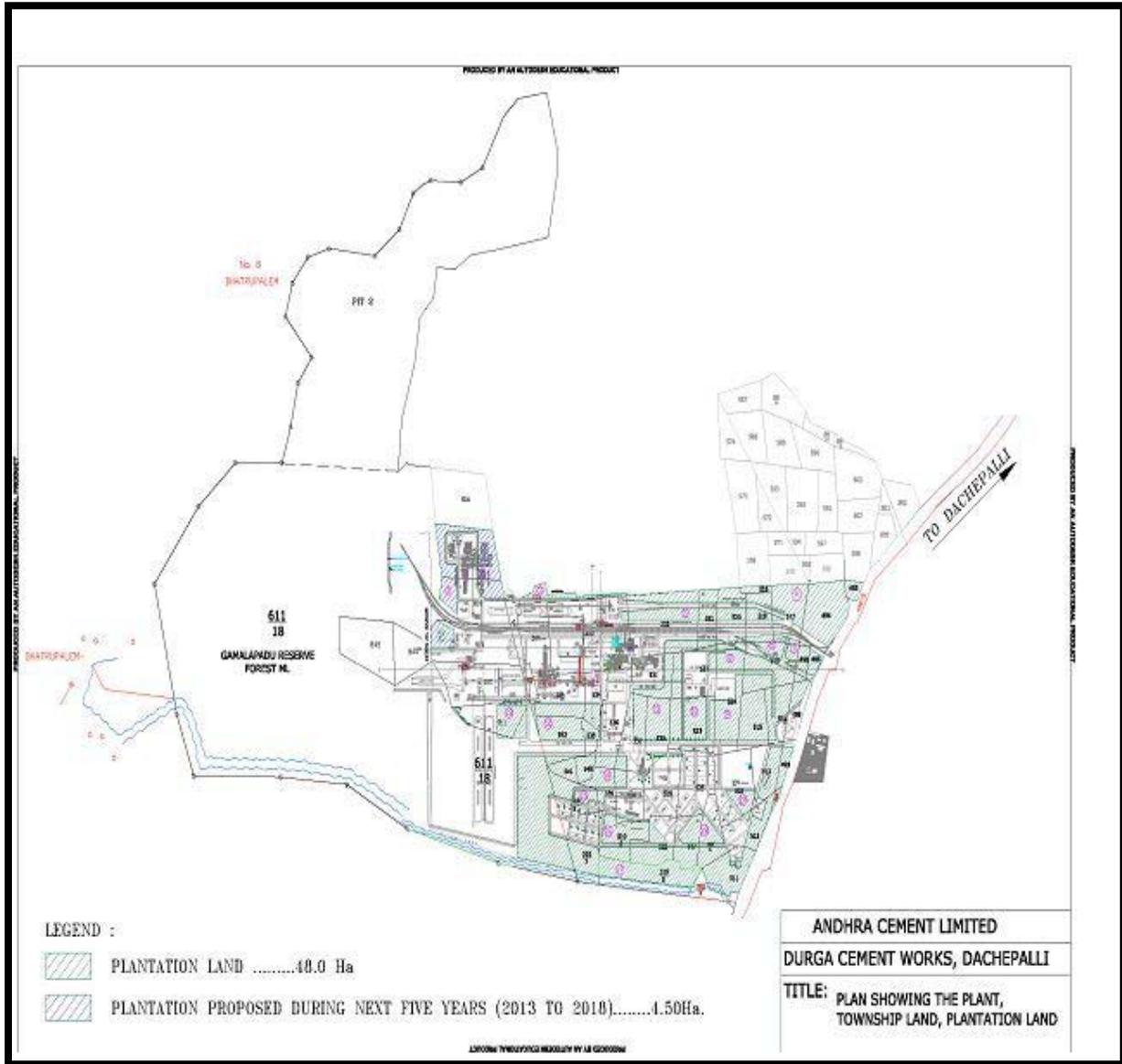


COAL MILL BAG HOUSE



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