HALF YEARLY COMPLIANCE REPORT OF CONSENT FOR ESTABLISHMENT (CFE) OF 30 MW CPP OF M/S DURGA CEMENT WORKS, A UNIT OF ANDHRA CEMENTS LIMITED, GAMALAPADU (P) ,DURGA PURAM (V) DACHEPALLI(M) , GUNTUR – DISTRICT (AP) FOR THE PERIOD OF APRIL 2014 TO SEPTEMBER 2014

Consent Order No.335/PCB/CFE/RO-GNT/HO/2013,3133 Dt.08.08.2013

SCHED	ULE-A	
S.N	STIPULATED CONDITION	COMPLIANCE STATUS
1	Progress on implementation of the project shall be	Being complied. Progress on implementation of
	reported to the concerned regional office, A.P	CPP with photographs attached as per
	Pollution Control Board once in six months.	Annexure-1
2	Separate energy meters shall be provided for Effluent	Energy meters shall be installed during the
	Treatment Plant (ETP) and Air pollution control	commissioning of ETP and Air pollution control
	equipments to record energy consumption.	equipments.
3	The proponent shall obtain Consent for Operation	CFO will be obtained before commencement of
	(CFO) from APPCB, as required Under Sec.25/26 of the	commissioning activity of CPP under Air & Water
	Water (P&C of P) Act, 1974 and under sce.21/22 of	act.
	the Air (P&C of P) Act, 1981, before commencement	
	Of activity.	
4	Notwithstanding anything contained in this	Agreed.
	reserves its right and nower Under Sec 27(2) of Water	
	(Prevention and Control of Pollution) Act 1974 and	
	Under Sec 21(4) of Air (prevention and control of	
	Pollution) Act 1981 to review any or all the conditions	
	imposed herein and to make such alternation as	
	deemed fit and stipulated any additional conditions by	
	the Board	
5	The consent of the Board shall be exhibited in the	Complied. CFE of CPP 30 MW exhibited at the
	factory premises at a conspicuous place for the	Notice Board of the Company for Public
	information of the inspecting officers of different	information. Photographs are attached as per
	departments	Annexure-2
6.	Compensation is to be paid for any environmental	Agreed
	damage caused by it, as fixed by the Collector and	
	District Magistrate as civil Liability.	
7.	Floor washing shall be admitted into the effluent	Shall be complied. The industry shall maintain
	their way in storm drains or onen areas. The inductry	good nouse keeping in all surrounding area. All
	shall maintain a good housekeening. All nine values	leak proof during CPP establishment phase. Dyke
	sewers drains shall be leak proof. Dyke walls shall be	walls shall be constructed for storage of
	constructed around storage of chemicals	chemicals
8.	Rain Water Harvesting (RWH) structure(s) shall be	RWH structure shall be established. The effluent
5.	established on the plant site. The proponent shall be	shall not enter the rain water harvesting
	ensure that effluent shall not enter the Rain Water	structure.
	Harvesting structure.	
9.	The rules and regulations notified by Ministry of Law	Agreed
	and Justice, GOI regarding the Public Liability	

	Insurance Act, 1991 shall be followed					
10.	Thi	is orde	er is valid for	period of 5 ye	ars from the date	Agreed
	of	issue				
SCHE	SCHEDULE -B					
Wate	er					
1.	The s	source	e of water is	Rain water fro	om Mines Pit and	Agreed. The water consumption of CPP will be
	the n	naxim	um permitteo	l water consun	nption is 550 KLD.	within the limits as mentioned.
	SI.	Purp	ose		Ouantity	
	No					
	1.	Proc	ess/Boiler ma	keup	449.4 KLD	
	2.	Vent	ilation system	ı	6.1 KLD	
	3.	Pota	ble water in p	olant	17.6 KLD	
	4.	Wasl	ning & Sanitat	tion	20.9 KLD	
	5.	Gard	ening & Land	scaping	14.3 KLD	
	6.	Wate	er Treatment	losses	31.9 KLD	
	7.	Clari	fier Sludge		9.8 KLD	
		TOT	AL		550 KLD	
2.	The	Maxin	num waste w	ater generatio	on (KLD) shall not	The waste water generation will be within the
	exce	ed the	following			tolerance limits as mentioned.
	SI.	Purp	ose		Quantity	
	NO					
	1.	Proc	ess/Boller Blo	wdown	233.4 KLD	
	2.	Vent	he water in r	l	1.2 KLD	
	3. ⊿	POLd Wash	bie water in p	tion	14.2 KLD	
	4. 5	Gard	aning & Janid	scaping	10.0 KLD	
	5. 6	Wate	ering & Lanu	scaping	- -	
	0.	losse	s/Clarifier slu	døe	5.6 RED	
		Tota	l	680	275.4 KLD	
	Treat	tment	& Disposal			All waste water shall be treated and disposed as
	Sour	ce of	Treatment	Mode of	final disposal	mentioned.STP of capacity 300 KLD have
	Efflu	Jent	Facility	mode of		constructed for the domestic waste water
			,			treatment and treated water is being used in
	Proce	ess	ETP	Proposed to	be used in coal	green belt development and dust suppression on
	wate	er		handling p	lant (CHP),Ash	the roads. Treated water of STP well within the
	handling system, CPPand dust suppressionDomesticSTPProposed to be uplantation, ash con		em, CPP makeup	norms of AP Pollution Control Board.STP		
			oression	photographs of 300 KLD and analysis test results		
			be used for	attached as per Annexure:3		
				plantation,	ash conditioning	
				and gardenin	g purpose within	
2	Thar	Efflue	t Troatmant	Diant (ETD) abo	5.	Agrood
5.	and	comm	issioned along	ridiit (ETP) Sha with the com	missioning of the	Agreeu
	activ	itv Δl	the units of	the FTP shall	he impervious to	
	preve	ent gra	ound water n	ollution.		
4.	The	efflue	nts shall be	treated to	the on land for	Waste water shall be treated and treated water

	irrigation standards as stipulated under Schedule VI of			will conform as mentioned in irrigation Standard
	Envii	ronment (Protection)	Rules,1986,notified by	of Environment (Protection) Rules, 1986 notified
	Mini	stry of Environment and	Forests, Government of	by MoEF of GOI and its amendments thereof.
	India Vide,G.S.R.422(E)dt.19.05.1993 and its			
	amendments there of			
5.	Separate magnetic flow meters with totalisers to			Separate magnetic flow meters shall be installed
	nece	ssary pipe-line shall be pr	ovided for assessing the	in pipe lines for Industrial and domestic use for
	quar	itity of water used for	each of the purposes	accessing water consumption during
	men	tioned below.	с 1	establishment phase of CPP.
	á	a. Industrial cooling, boile	erfeed	
	ľ	D. Domestic purpose		
	0	c. Processing, whereby v	water gets polluted and	
		pollutants are easily bio	odegradable	
	0	a. Processing whereby w	vater gets polluted and	
A :		the pollutants are not	easily bio-degradable	
AIr:	The	Air pollution Control agui	mant chall be installed	Air pollution control equipments shall be
0	alon	Air pollution control equi	of the activity and chall	All pollution control equipments shall be
	along	g with the commissioning	or the activity and shall	instaneu.
	COIII	Dotails of Stack		
	3.14	Attached to	boiler	-
	a h	Capacity		-
	0	Euclouantity		-
	ر ط	Fuel qualitity	COdi-575.54 IPD	
	u	Stack neight	// III	
	e	control equipment	Electro Static	
	f	Conc. of Particulate	$< 50 \text{ mg/Nm}^3$	-
	1	matter		
7	The	Industry shall provide	adequate space for	Provision shall be made for the installation of
	insta	llation of flue gas des	sulphurization (FGO), if	flue gas desulphurization (FGO) unit, if required.
	requ	ired at later stage, as stipu	lated by MoEF, Gol	
8	Regu	llar monitoring of ground	d level concentration of	Complied. Regular monitoring is being done and
	SO ₂ ,	$NO_X, HG, PM_{10} \& PM_{2.5} $ sha	all be carried out in the	monitoring report is being regularly submitted to
	impa	ict and buffer Zone	and records shall be	APPCB regional office Guntur & APPCB
	mair	itained. If at any stage th	nese levels are found to	Hyderabad on monthly basis. Half yearly AAQM
	exce	ed the prescribed limit	s, requisite restorative	monitoring report attached as per Annexure-4
	mea	sures shall be fixed in	consultation with the	
	Regi	onal Officer of the Boa	ard. Consolidated daily	
	repo	rts shall be submitted to	te concerned Regional	
		e on montniy basis	all be previded for the	On Line stack meriter shall be installed 2 and
9	On i	Line stack monitoring sha	all be provided for the	On Line stack monitor shall be installed. 2 nos.
		er stack and the data shall	Ambient air and	Down wind direction Popular CAAOM data
	webs	site. I WO CONTINUOUS	Amplent air quality	bown wind direction. Regular CAAQIVI data is
		itoring (CAAQIVI) stations (data chall ha connected	Denig transmitted to APPCB Server.
		ard website	a uata shali be connected	
10		proponent chall oncure co	mpliance of the National	Ambient air quality shall be maintained as ner
10	Δmh	proponent snan ensure CO ient Δir Quality standard	Is notified by MOFF Goi	Standards Notification of MoFF Gol Vide
1	7.010	ichic run Quanty standard	is instituce by WIDEL, OUL	standards Notification of MoEr, Gol Vide

	vide notification No.GSR 826 (E),dated 16.11.2009 during construction and regular operational phase of the project	notification No GSR 826 (E) dated 16.11.2009 during construction phase of CPP as well as operation of CPP.
11	Adequate dust extraction system such as cyclones /Bag filters and water spray system in dusty areas such as surroundings of coal stacking area, coal crushing, transfer lines and other coal handling and ash handling points, transfer areas and other vulnerable dusty areas shall be provided.	Air pollution control equipments such as cyclone /Bag filters, water spray system shall be installed at all transfer points and other dust generating areas during CPP establishment phase.
12	Raw materials shall be transported in covered trucks. Raw material shall be stored under sheds. All the belt conveyors shall be covered with G.I sheets. Appropriate dust suppressions system shall be provided all around the stockpiles and conveyors system. All the roads in the plant area shall be asphalted/concreted and water shall be sprinkled to suppress the dust.	CPP Civil & Mechanical work construction work is under progress. Raw material storage sheds shall be constructed with GI sheets. Dust suppression system and bag filter will be installed. All belt conveyors will be covered with GI sheets for the control of pollution.
13	 The industry shall take following mitigation measures to control fugitive emissions during construction and operational state: Vehicles shall be managed to avoid traffic congestions and shall provide parking facilities. Automated mechanical water sprinkling shall be provided on roads and at dusty construction material storage areas, for suppression of dust Mechanized handling equipment shall be used for loading & unloading operations Vehicles shall comply with emission standards shall have valid PUC certification. 	All the mitigation measures will be followed as suggested during CPP establishment phase as well as in CPP operation for the control of fugitive emission.
14	A sampling port with removable dummy of not less than 15 cm diameter shall be provided in the stack at a distance of 8 times the diameter of the stack from the nearest constraints such as bends etc. A Plate form with suitable ladder shall be provided below 1 meter of sampling port to accommodate three persons with instruments. A 15 AMP 250 V plug point shall be provided on the platform.	All arrangement shall be made during stack construction for the purpose of stack monitoring and CEMS installation.
15	The generator shall be installed in a closed area with a silencer and suitable noise absorption system. The ambient noise level shall not exceed 75 dB (A during day time and 70 dB(A) during night time.	Shall be complied. Ambient noise level shall not exceed the norms at any time. Noise level report as per Annexure 5

SOLI	D WAS	TE			
16	The p	roponent shall	comply with th	ne following	Shall be complied during operation of CPP. All the
	S.N	S.N Solid waste Quantity Method of Disposal		Method of Disposal	fly ash generated in CPP will be consumed in
		generation			cement manufacturing process.
	1	Bottom Ash	51.78 TPA	Used for their own	
				Cement	
	2	Fly Ash	207.12 TPA	manufacturing i.e.	
				Portland Pozzolona	
				cement(PPC)	-
	3	ETP Sludge	30 TPA	Used as manure	
		·			
17	Fly as	h shall be colle	cted in dry fori	m and storage facility	Shall be complied. Fly ash storage facility will be
	(silos)) shall be provic	led. 100% fly a	sh utilization shall be	provided. All the fly ash generated in CPP shall be
	ensur	ed from 4 th yea	ir onwards.		consumed in Cement manufacturing process in
					our cement plant.
18	Adeq	uate safety m	easures shall	be provided in the	All the safety norms are being strictly followed.
	plant	area to check	minimize spor	itaneous fires in coal	PPEs are provided to workers. Fire Fighting
10	yard,	especially durin	ng summer sea	son.	systems are being installed in coal storage areas.
19	Stora	ge facilities fo	or auxiliary l	iquid fuel such as	Shall be complied
	LDO/I	HFO/LSHS shall	be made in t	he plant area where	Disaster management plan already prepared as
	risk i	is minimum to	o the storage	e facilities. Disaster	per Annexure 6
	Widfid	igement plan	shall be pre	taking place. Mack	Construction stage of CDD. Make drill report and
	drille	shall be condu	ucted regular	wand based on the	photograph attached as per Appevure: 7
	same	modification	s required.	if any shall he	
	incor	orated in the	Disaster Mana	ement Plan Sulphur	
	conte	nt in the liquid	fuel shall not e	exceed 0.5%.	
20	The f	following rules	and regulati	ons notified by the	All the rules and regulation notified by MoE&F.
	MoE8	kF, GoI shall be	implemented.	· · · · · · · · · · · · · · · · · · ·	GOI shall be followed and implemented.
	a.	. Hazardous V	Vaste (Manage	ement, Handling and	
		Transbounda	ary Movement	t Rules,2008)	
	b	. Manufacture	e, storage and	import of Hazardous	
		Chemicals Ru	ules 1989		
	c.	Fly ash notifi	ication S.O.280	4 (E),dt.3.11.2009	
	d	. Batteries (M	anagement & H	landling)Rule,2010	
	e	. E-waste (Ma	nagement & Ha	andling)Rule,2012	
OTH	OTHER CONDITION				
21	The p	proponent shall	l allocate a mi	nimum of 1.0%of its	CSR measures being taken in surrounding villages.
	proje	ct cost of Rs.14	41.02 crores to	owards CSR activities	Expenditure during year 2014-15 is attached as
	durin	g construction	period and C	0.20% of the project	Annexure-8.
	cost p	ber year during	operational pe	eriod for 10 years	
22	Greer	n belt of add	equate width	and density with	Green belt development already being started at
	minin	num area of 33	% of total are	a shall be developed	the boundary location. Iree plantation report
	along	the bounda	ry of the l	naustry green belt	attached as per Annexure -9.
	aevel	opment shall	be started	along with the	
	construction.				

23	The proponent shall achieve 100% disposal of fly ash and bottom ash as per Fly Ash notification issued by MoE&F, GOI vide S.O 2804 (E), dated 3.11.2009	All the fly ash generated in CCP as a waste material shall be consumed in cement manufacturing process in our cement plant.
24	The proponent shall ensure that there shall not be any change in the process technology and scope of working without prior approval from the Board.	No process technology shall be changed without the permission of AP Pollution Control Board.
25	The proponent shall comply with all the directions issued by the Board from time to time.	All the directions of APPCB shall be followed and implement from time to time.
26	Concealing the factual data or submission of false information/fabricated data and failure to comply with any of the conditions mentioned in this order and attract action under the provisions of relevant pollution control Acts.	Agreed.
27	The Board reserves its right to modify above conditions or stipulated new/ additional conditions and to take action including revoke of this order in the interest of environment protection.	Agreed.
28	The Board reserves its right to modify above conditions or stipulate any additional conditions including revocation of this order in the interest of environment protection.	Agreed.
29	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 Water (Prevention and Control of Pollution)Act,1974 and Section 31 of the Air (Prevention and Control of Pollution)Act,1981.	Agreed.

<u>Annexure-1</u>



CPP CONSTRUCTION WORK IS UNDER PROGRESS



Annexure-2

CFE of CPP 30 MW Exhibited at the Notice Board of the Company





<u>Annexure-3</u>

STP OF 300 KLD INSTTALED AT DCW COLONY





STP WATER TESTING REPORT

Sci and 2009 Centred Lationary E-mail : multipermanulity dentry Web site : www.strasslabs.com CERTIFICATE OF ANALYSIS Test Report Report Report Report PLLtd, Hyderahad, Wo carried on the following Single lab code Single lab code <td colsp<="" th=""><th>ANALYT Genuine</th><th>Mahendr</th><th>a</th><th>RE- 1-7 Op Hys Pb</th><th>GD. Off: 292, Chaithanya p: Geetha Hospit; derabad-500035 : 040-646(x)595</th><th>puri, al, Dilsukhnagar Coll: pressoore</th></td>	<th>ANALYT Genuine</th> <th>Mahendr</th> <th>a</th> <th>RE- 1-7 Op Hys Pb</th> <th>GD. Off: 292, Chaithanya p: Geetha Hospit; derabad-500035 : 040-646(x)595</th> <th>puri, al, Dilsukhnagar Coll: pressoore</th>	ANALYT Genuine	Mahendr	a	RE- 1-7 Op Hys Pb	GD. Off: 292, Chaithanya p: Geetha Hospit; derabad-500035 : 040-646(x)595	puri, al, Dilsukhnagar Coll: pressoore
CERTIFICATE OF ANALYSIS * Test Report Ref: SMAS/W033-09 020/14 The accordance with the order of M/s. Revolve Engineers Pvt. Ltd, Hyderalaad. We carried on the followin for the given sample. SMPLE DETAILS: Single lab code 1807 Date of Receipt 29.09.2014 Date of Receipt 29.09.2014 Date of Receipt 29.09.2014 Sumple Porticulars COLLECTION WATTER (Code No.367), FINAL WATER (Code No.359) Test Required 1.4.8 per mill Analysis Complexity Date 1.9.09.2.3 Sample Coldition Interact Test Negured 1.8.9 per mill Analysis Complexity Date of Sample Coldition Interact Test Negured 1.8.9 per mill Analysis Complexity Date of Sample Coldition Interact Test Negured 1.8.9 per mill Analysis Complexity Date of Sample Coldition Interact Test Negured 1.8.9 per mill Analysis Complexity Date 1.8.100 (Ordition) Test Resoluted Sample 1.8.101 (Ordition) Sample Coldition Interact Analysis Consolved Sample 1.8.102 (Dottion) Analysis Consolved Sample	ISG 9001 2	2008 Centified Laborato	9 0000 2000	E m We	tall : <u>mail2smasqu</u> b site : www.sma	ality@gmail.co slabs.com	
Test Report Ref: SMAS/W4033-00 029/14 In accordance with the order of Mis. Revolve Engineers Pvt.Ltd, Hyderalaad We carried out the followin for the aven surple. SMUPLE DTTAILS: Simple is cole Date of Keergin 29.09.2014 Date of Keergin 06.10.2014 Sample Farmalians COLLECTION WATER (Code No.367), FINAL WATER (Code No.359) Sample Farmalians COLLECTION WATER (Code No.367), FINAL WATER (Code No.359) Sample Condition 1 Analysis Stated on 3.09.09.2014 Analysis Stated on 1.09.09.2014 Analysis Stated on 10.18.20.3 Sample Condition Thest Test Report Parameter was analysed by Us and the results are in follows: S.No TEST PARAMETERS UNT IS RESCULTS A. Chemosal Solids C@ 189°C1 A. Chemosal Solids C@ 189°C2 S.No TEST PARAMETERS Unit Is RESCULTS A. Chemosal Solid		CERT	IFICATE C	F ANALYSIS			
Neptor Net: SMASW/003-00 A20:14 In accordance with the order of M's. Revolve Engineers Pvt. Ltd., Hyderabad. We carried out the followin for the given simple. SAMPLE DETAILS: Simple lab code: 1 1807 And/or ensents Date of Receipt 2000.2014 Tests Required Aspect on 1: 2000.2014 Analysis Completion Date 2006.110 20.3 Test Note to sample with analysed by us and the results are as follows: Test Deve to sample with analysed by us and the results are as follows: State on 1: 2000.2014 Date of State on 2: 2000.2014 Test Deve to sample with analysed by us and the results are as follows: State State on 1: 2000.2014 Date State on 2: 2000 feet 369 State On 1: 10: 0: 0: 10: 0: 0: 0: 0: 0: 0: 0: 0: 0: 0: 0: 0: 0	Test Report						
In accordance with the order of M/s. Revolve Engineers Pvt.Ltd. Hyderabad: We carried on the followin	Report Ker; SMAS/W/0	33-09-029/14	173 0	a 11216 - 12.8%			
Drift digited sumple. SAMPLE DETAILS: Sample boode 1807 Name of the Size Andhra cements Date of Recipit 29.09.2014 Job ReTNo SMAS/W0335.09-029/14 Date of Recipit 29.09.2014 Sample Name 06.10.2014 Sample Name 07.10.2014 Sample Conduction Due 00.11.2014 Analysis Statted on 29.09.2014 Analysis Statted on 29.09.2014 Analysis Statted on 29.09.2014 Analysis Statted on 29.09.2014 Analysis Complexion Due 00.11.2014 Sample Condition 10.2014 Analysis Statted on 12.09.09.2014 Analysis Complexion Due 00.11.2014 The shows sample was analysed by us and the results are as follows: S.No TEST PARAMETERS UNITS RESULTS A. Chemical oxygen demand Gay go27C ppm Job Biological oxygen demand 36.02 S.No Test Maximum discusses Biological oxygen demand 36.02 Job Biological oxygen demand 36.02 S.No Test Maximum discusses S.No Test PARAMETERS Unit anal Masaring 35.02.02 <td< td=""><td>In accordance with the on</td><td>der of M/s. Revolve E</td><td>ingineers Pyr</td><td>Ltd. Hyderahov</td><td>T this commind out of</td><td>C. 11.</td></td<>	In accordance with the on	der of M/s. Revolve E	ingineers Pyr	Ltd. Hyderahov	T this commind out of	C. 11.	
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Single lab code 1807 Name of the Site Andhra cements Date of Recipit 22.09.3014 Jab Ref No 1 Sample Porticulars COLLECTION WATER (Code No.367), FINAL WATER (Code No.359) Sample Porticulars COLLECTION WATER (Code No.367), FINAL WATER (Code No.359) Tests Required 1 Analysis Sante: on 1 20.09.2014 As per multi Analysis Sante: on 1 20.09.2014 Analysis Sante: on Analysis Sante: on 1 20.09.2014 Analysis Sante: on Analysis Sante: on 1 20.09.2014 Analysis Sante: on Analysis Sante: on 1 Sample Condition Irens The shows sample wits analysed by us and the results are as follows: S.No TEST PARAMETERS 1 PH 2 Total Supponded Solids 3 Total Supponded Solids 4 Chemised Solids 5 Biological coxygen demand 5 Biological coxygen demand 6 Chemised Solids 7 Sulphates 8 OL 9 Total Algo induced Solids 10 Calour 11 <t< td=""><td>IPLE DETAILS:</td><td>1945</td><td></td><td>1 N. 644 T. 1998</td><td></td><td></td></t<>	IPLE DETAILS:	1945		1 N. 644 T. 1998			
Name of the Site Andhra coments Date of Recipit 29.09.3014 Job Ref No SMA_SWADS 19-029714 Date of Recipit 20.09.3014 Sample Particulary COLLECTION WATER (Code No.367), FINAL WATER (Code No.369) Sample Particulary COLLECTION WATER (Code No.367), FINAL WATER (Code No.369) Tests Required As per mill Analysis Stated on 5.9.09.2014 Analysis Stated on 9.9.2014 Analysis Complexion Date 06.18.20.3 Sample Condition Inter. Tests Required SAMPLE ANALYSED AS RECEIV Testowe sample was analysed by us and the results are as follows: SAMPLE ANALYSED AS RECEIV S.No TEST PARAMETERS UNITS I. pH Inter.367 Our fet 369 3. Total Supponded Solids C20 190°C1 4. Chemical oxygen demand Feb (Solid) 5. Biological oxygen demand Feb (Solid) 6. Chemical oxygen demand Feb (Solid) 7. Sulphates as CaCO 8. Oll & Grease Biological oxygen demand 9. Total Autociess as CaCO 9. Total Autocies as CaCO <td>ple lab code</td> <td>: 1807 194</td> <td>1.5.1</td> <td></td> <td>-</td> <td></td>	ple lab code	: 1807 194	1.5.1		-		
Date of Receipt 29 00.3014 Job Rei No SMAS/W033.00-020714 Dute of Isaae 66.10.0014 Sampling Dy Flient Tests Required As per mult Analysis Statet on 29.99.2014 Analysis Completion Dute 06.10.20.3 Sampling Dy Flient Tests Required 1.29.90.2014 Analysis Completion Dute 06.10.20.3 Sample Condition Interast Tests Required 1.29.90.2014 Analysis Completion Dute 06.10.20.3 Sample Condition Interast Test PARAMETERS UNITS RESEULTS Test PARAMETERS 1. [P1] InterAMT 2. Total Supponder Solids (36.189°C) 3. Biological expgen demand Gday 927°C) 4. Chemical expgen demand Gday 927°C) 5. Biological expgen demand Gday 927°C) 6. CHonides as CI 90. Ppm 7. Sulphates 05.50, ppm 8. Ol & Greese ppm 9. Total Alkadin	e of the Site	: Andhra comer	uts 20	1. 11 St. 11		101-11	
Job Ref No I SMAS/W/035 09-029/14 Date of Tsame 06.10.2014 Sample Particulary COLLECTION WATER (Code No.367), FINAL WATER (Code No.359) Tests Required As per mult Analysis Stated on 12.9.09,2014 Analysis Completion Date 06.10.20.4 Sample Couldion Intests Tests Required Intests Tests Required Intests Sample Couldion Intests Tests Required Intests Sample Couldion Intests Tests Required Intests SAMPLE ARAMETERS UNITS Internation Intests SAND Tests Resources SAND Tests Resources SAND Tests Resources SAND Tests Resources SAND Tests Required Internation Internation SAND Tests Required Internation Internation Internation Internation Internation Internation Internation Internation Internation Internation	of Receipt	29.09.2014	245 D	1.0454			
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sample Particulars COLLECTION WATER (Code No.367), FINAL WATER (Code No.359) Sampling Dy Client Tests Required : Analysis Statter on : Sample Condition : Sumple Condition : Sample Condition :	of Essue	: 06.10.2014	764 0	104	2 8.575	Tel. Cs	
Samping Dy Client Tests Required : As per multiplication of the condition of the conditic of the condition of the conditio	ole Particulars	: COLLECTION	WATER (Co	de No:367), FINA	WATER (Code)	a: 3505	
Tests Roganed : As per multiplication Date :	sing	: By Client	790 - 190	1.14244 10.0871	States weaters	(9	
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Annexure -4

	Gamalapadu(V), Dechepalli(M), Dist- Guntur					
	Andhra Pradesh					
	AMBIENT AIR OUALITY MONITORING REPORT					
	ΔΡΒΙ	1 2014 TO SEPT	FMBFR 2014			
	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.	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 NA	GULERU RIVE	R PUMP HOUS	E, (CROSS W	IND)	
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.	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	
LC	OCATION -3 NEAR CPP (TOWARDS GAI	MALAPADU V	ILLAGE), (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.	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	
LOC	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	$NO_2 \mu g/m^3$	
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	

DURGA CEMENT WORKS

A Unit of Andhra Cements Limited

<u>Annexure-5</u>

DURGA CEMENTS WORKS

A Unit of Andhra Cements Limited

Durgapuram, 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	41.50	40.50			
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	55.3	53.7			
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	55.8	53.8			
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	55.4	53.7			
4.Near CPP					
Day Time dBA Night Time dBA					
MAX	54.6	51.8			
MIN	44.20	42.10			
AVG	48.64	46.23			
STD DEV.	3.44	3.16			
COFF. OF VARIATION	0.07	0.07			
98 PERCENTILE	54.2	51.6			

Disaster Management Plan

Introduction

Disaster Management Plan for an industrial unit is necessarily a combination of various actions which are to be taken in a very short time but in a pre-set sequence to deal effectively and efficiently with any disaster, emergency or major accident with an aim to keep the loss of men, material, plant/machinery etc., to the minimum.

Creation and establishment of a cell within the industrial unit is a pre-requisite for an effective implementation of any disaster management plan. The main functions of the Disaster Management Cell are to prepare a detailed disaster management plan, which includes : —

- Identification of various types of expected disasters depending upon the type of the industrial unit;
- Identification of various groups, agencies, departments etc. necessary for dealing with a specific disaster effectively;
- Preparation by intensive training of relevant teams/groups within the organization to deal with a specific disaster and keep them in readiness;
- Establishment of an early detection system for the disasters;
- Development of a reliable instant information/communication system; and
- Organization and mobilization of all the concerned departments/ organizations/ groups and agencies instantly when needed.

Major disaster that can occur in this Cement Plant / CPP may be due to fire. In the existing cement plant already having a good and well-maintained

Emergency Planning For Disaster due to Fire

Coal storage, cable rooms, transformer unit, auxiliary transformers, oil tanks, coal bunkers including all conveyor lines etc., within the plant are the likely areas for which plan is outlined to deal with any eventuality of fire. Stores, workshop, canteen and administration building have also been included.

Class	Explanation	Method of Fire	Fire Fighting
•	Solid- Carbonaceous	Fire involving wood, paper,	\M/ator
A	inflammable material	coal, cloth and other material	Water
р	Liquid	Fire involving oil, kerosene	Foam of dry chemical
D	Liquiu	etc.	power extinguisher
C	Special	Electrical Fire	DCP or CO ₂

CLASSES OF FIRE

	Extinguisher

Equipment System Dealing with Coal Handling

The whole system dealing with coal handling can be summarized as follows : --

- A wagon tripper for unloading transported coal from the racks/trucks;
- Coal is unloaded into ground level hopper(s) from where it is transported to preblending stock pile through belt conveyors;
- Coal is reclaimed for the above stock pile and is transported to the raw coal hopper for vertical mill by a set of belt conveyors;
- For collection of the pulverized fuel as well as venting the mill, a high efficiency bag filters will be provided; and
- The fine coal from the hoppers will be sent to kiln firing by a set of pumps.

Water sprinklers will be provided for the stockpile at the unloading point to prevent fire. Pull cords and emergency switches will be provided all along the conveyor belt to avoid the spreading of fire.

Need for a Fire Fighting Group

A small spark of fire may result into loss of machines and conveyors and the damage by fire may be of the order of few crores of Rupees. This type of losses can be avoided by preventing and controlling the fire instantly for which firefighting group shall be established.

Fire Fighting with Water

Adequate and reliable arrangement is required for fighting the fire with water such as:

- Identification of source of water and equipping with pumps,
- Arrangement of pipe lines along and around all vulnerable areas,
- Alternative water supply arrangements to divert the water from one set of pipe lines (connected to another source) or to connect to other source,
- Provisions of valves at appropriate points to enable supply of water at the required place/area or divert the same to another direction/pipe line, and
- Each source of water shall be equipped with one standby diesel driven pump to serve in case of power failure.
- Water Line Arrangement

Water lines shall be provided at coal handling area along the conveyors and around the stockyards, transformers, oil tanks, coal crusher house etc. Water lines shall also be provided around other infrastructures in the plant like administration building, canteen, stores and other plant equipment. The system shall be designed in conformity with the recommendations of the

NFPA of Insurance Association of India. A reserve water level shall be maintained in the sump as per NFPA requirements.

Hydrant system feed pressurized water to hydrant valves shall be located throughout the plant and also at strategic locations. The water pressure shall be maintained at 6 to 8 kg/cm₂ in these lines. By operating a few of the valves water pressure can be increased at one particular place. There are two types of valves. Non-return valves shall be provided to allow only unidirectional flow of water. Gate valves shall be provided for closing or opening the water supply. An adequate number of gate valves shall be provided at appropriate points to tap water to deal with fire if it breaks out at any point of the plant.

Fire Fighting with Fire Extinguishers

To deal with fires - other than carbonaceous fires, which can be dealt with by water - suitable fire extinguishers are required to do the job effectively. Adequate number of "Fire stations' are to be established with the following types of equipment and arrangements: —

- Soda Acid Fire Extinguishers;
- CO₂ Extinguishers;
- Dry Powder Chemical Extinguishers;
- Foam Extinguishers;
- Fire buckets; and
- ✤ 50-mm spray hoses up to 150-m length.

Appropriate types of fire extinguishers shall also be provided at conveyor drive heads, crusher house, control rooms, in machines like stacker and reclaimer, electrical yard, sub-station and other infrastructure facilities within the premises. In the transformer yard, automatic fire detecting and quenching system shall be provided for each transformer. This system comes into operation whenever the temperature of surrounding air exceeds 80°C and sprays water over the transformer to prevent spreading of fire and quenches the same. In order to avoid fire in cable galleries, all the power and control cables of FRLS type (Fire Resistant Low Smoke) shall be used. In addition, fire detecting and Fire Alarm Systems shall be installed in the cable galleries.

Inspection

- Fire alarm panel (electrical) shall cover the entire plant. Fire Extinguishers in Fire Stations and machines and other places shall be periodically inspected by the inspection group;
- The temperature of the coal stack shall be regularly measured and recorded. If the temperature exceeds 80°C, water quenching shall be carried out;
- Emergency telephone numbers shall be displayed at vital points by the groups; and
- General inspection for fire shall be regularly carried out by the group.

Procedure for Extinguishing Fire

The following steps shall be taken during a Fire Accident in the system : -

- As soon as the message is received about fire, one of the spray groups in the system shall be diverted to the place of the fire accident along with a staff member;
- Simultaneously plant Fire Station shall be informed by phone, walkie-talkie for fire brigades;
- Fire stations nearby also be informed by phone to be in readiness;
- In the meanwhile, the pipe system shall be operated to obtain maximum pressure and output;
- In case cables are within the reach of fire, power supply shall be tripped and the cables shifted;
- Further, other spray groups from the system shall be diverted to the spot;
- In case of fire in the belt, belt shall be cut near the burning portion, to save the remaining parts; and
- After extinguishing the fire, the area shall be well prepared for re-use.

Specific Emergencies Anticipated

Fire consequences can be disastrous, since they involve huge quantities of fuel either stored or in dynamic inventory in pipe lines or in nearby areas. Toxic releases can affect persons working around. Preliminary hazard Analysis has provided a basis for consequence estimation. Estimation can be made by using various pool fires, tank fire consequence calculations. During the study of Risk Assessment, the nature of damages is worked out and probability of occurrence of such hazards is also drawn up.

EMERGENCY ACTION PLAN

The emergency action plan consists of: -

- First information,
- Responsibilities of Work Incident Controller,
- Responsibilities of Chief Incident Controller,
- Responsibilities for Declaration of Emergency,
- Responsibilities for Emergency Communication Officer,
- Responsibilities of key personnel,
- Responsibilities and action to be taken by essential staff and various teams during emergency and
- Responsibilities for All Clear Signal.

First Information

The first person who observes/identities the emergencies shall inform by shouting and by telephone to the Shift Engineer and Fire Station about the hazard. The Shift Engineer will inform to Works Incident Controller, Chief Incident Controller and also telephone operator, who shall communicate it to all key personnel.

Responsibilities of Work Incident Controller (WIC)

The Work Incident Controller on knowing about an emergency immediately will rush to the incident site and take overall charge and inform the same to Chief Incident Controller (CIC). On arrival, he will assess the extent of emergency and decide if major emergency exists and inform the communication officer accordingly.

Responsibilities of Chief Incident Controller (CIC)

The Additional General Manager, who is also the Chief Incident Controller, will assume overall responsibilities for the factory/storage site and its personnel in case of any emergency. His responsibilities are to :—

- 1. Assess the magnitude of the situation and decide if staff needs to be evacuated from their assembly point to identified safer places. Declare onsite/offsite emergency;
- 2. Exercise direct operational control over areas other than those affected;
- 3. Undertake a continuous review of possible developments and assess in consultation with key personnel as to whether shutting down of the plant or any section of the plant and evacuation of personnel are required;
- 4. Laison with senior officials of Police, Fire Brigade, Medical and Factories Inspectorate and provide advice on possible effects on areas out side the factory premises;
- 5. Look after rehabilitation of affected persons on discontinuation of emergency; and

6. Issue authorized statements to news media, and ensures that evidence is preserved for enquiries to be conducted by the statutory authorities.

Responsibilities for Declaration of Major Emergency

It is important to make the emergencies known to every one in the plant. The major emergency will be made known to every one inside the plant by sounding the alarm. Separate alarms to warn different types of major emergencies such as fire and explosion or toxic gas escape are provided. Public address system is also available throughout the plant.

Announcement will be made by the concerned official/interpreter in local language. Similarly, announcement for termination of the emergency will also be announced.

Responsibilities of Emergency Communication Officer (ECO)

On hearing the emergency alarm he will proceed to Emergency Control Center.

He will Report to Chief Incident Controller and Work Incident Controller and maintain contact with them;

- 1. On information received from the WIC of the situation, recommending if necessary, evacuate the staff from the assembly points;
- 2. Identify suitable staff to act as runners or messengers who are listed in the
- 3. Essential staff, between him and the Works Incident Controller if the telephone and other system of communication fail due to any reason;
- 4. Maintain inventory of items in the emergency control center;
- 5. Contact local meteorological office to receive early notification of changes in weather condition in case of gas leak and prolonged action;
- 6. Maintain a log of incidents;
- 7. Keep in constant touch with happenings at the emergency site and with WIC;
- 8. Liaise with neighbor fire brigade, hospital, civil and police authorities on advice from CIC.

Key Personnel

Apart from Works Incident Controller and Chief Incident Controller, other works personnel will have key role to play in providing advice and in implementing the decisions made by the Chief Incident Controller. The key personnel include : -

A. Sr. Superintendents/Engineer-in-charge responsible for : -

- Operation;
- Electrical Maintenance;
- Mechanical maintenance;
- C&I; and
- Chemical.

B. Head of Personnel and Officers connected with IR and Labour Welfare

C. Head (Technical Service)

Responsibilities of Key Personnel

Department Heads

The departmental heads will provide assistance as required by the WIC. They will decide which members of their departments are required at the incident site.

Chief Personnel Manager

He will have following responsibilities : --

- a) Report to Work Incident Controller;
- b) Ensure that all non-essential workers in the affected areas are evacuated to assembly points in consultation with the Chief Incident Controller;
- c) Receive reports from nominated persons from assembly points, and pass on the absence information services;
- d) Keep liaison with other coordinators to meet the requirements of services such as materials, security management, transportation, medical, canteen facilities etc. as required during emergency;
- e) Be in constant touch with the Chief Incident Controller and feed him correct information of the situation;
- f) Give information to press, public and authorities concerned on instructions from the CIC/WIC;
- g) Ensure that casualties receive adequate attention at medical center and arrange required additional help and inform relatives of the injured;
- h) Arrange to inform public on Radio and TV about evacuation etc.; and
- i) Arrange TV coverage on handling emergency.

In-Charge (TS)

On knowing about an emergency, he will report to CIC and assist him in all activities. He will also liaison with all teams.

Medical Officer

Medical Officer will render medical treatment to the injured and if necessary will shift the injured to nearby Hospitals. He will mobilize extra medical help from outside if necessary.

Head of Safety

On hearing the emergency alarm, he will proceed to the site. He will : -

- a) Make sure that all safety equipment are made available to the emergency teams;
- b) Participate in rescue operations;
- c) Co-ordinate to transfer the injured persons to medical center and arrange for first aid; and
- d) Keep in contact with ECO and the WIC and advice them on the condition of injured persons

Security Officer

On hearing the Emergency alarm, he will proceed to main entrance/main gate. He will

- a) Arrange to control the traffic at the gate and the incident area;
- b) Direct the security staff to the incident site to take part in emergency operations under his guidance and supervision;
- c) Evacuate the persons in the plant or in the nearby areas as advised by WIC after arranging the transport through the Transport in-charge;
- d) Allow only those people who are associated with handling emergency;
- e) Maintain law and order in the area, if necessary seek the help of police; and
- f) Maintain communication with CIC/WIC and ECO.

Fire Officer

On hearing the emergency, he will reach the fire station and arrange to sound the alarm as per the type of emergency in consultation with WIC, He will : -

- a) Guide the fire fighting crew i.e. firemen and trained plant personnel and shift the fire fighting facilities to the emergency site. Adequate facilities will be made available;
- b) Take guidance of the WIC for fire fighting as well as assessing the requirement of outside help; and
- c) Maintain communication with WIC, CIC and ECO.

Transport Engineer-in-Charge

On hearing the emergency alarm, he will immediately report to Work Incident Controller. He will : —

- a) Ensure availability of auto base vehicles for evacuation or other duties, when asked for; and
- b) Make all arrangements regarding transportation.

General Responsibilities of Employees during an Emergency

During an emergency, it becomes more enhanced and pronounced when an emergency warning is raised, the workers if they are in charge of process equipment shall adopt safe and emergency shut down and attend any prescribed duty as essential employee. If no such responsibility is assigned, he shall adopt a safe course to assembly point and await instructions. He shall not resort to spread panic. On the other hand, he must assist emergency personnel towards objectives of DMP.

EMERGENCY FACILITIES

EMERGENCY CONTROL CENTER (ECC)

For the time being Office Block is identified as Emergency Control Center. It would have external Telephone, Fax, Telex facility. All the Site Controller/ Incident Controller Officers, Senior Personnel would be located here. Also, it would be an elevated place. The following information and equipment are to be provided at the Emergency Control Center (ECC).

- Intercom, telephone;
- P and T telephone;
- Safe contained breathing apparatus;
- Fire suit/gas tight goggles/gloves/helmets;
- Hand tools, wind direction/velocities indications;
- Public address megaphone, hand bell, telephone directories;
- (internal, P and T) factory layout, site plan;
- Emergency lamp/torch light/batteries;
- Plan indicating locations of hazard inventories, plant control room, sources of safety equipment, work road plan, assembly points, rescue location vulnerable zones, escape routes;
- Hazard chart;
- Emergency shut-down procedures;
- Nominal roll of employees;
- List of key personnel, list of essential employees, list of Emergency Coordinators;
- Duties of key personnel;
- Address with telephone numbers and key personnel, emergency coordinator, essential employees; and
- Important address and telephone numbers including Government agencies, neighboring industries and sources of help, out side experts, chemical fact sheets population details around the factory.

Assembly Point

Number of assembly depending upon the plant location would be identified wherein employees who are not directly connected with the disaster management would be assembled for safety and rescue. Emergency breathing apparatus, minimum facilities like water etc. would be organized. In view of the size of plant, different locations are ear marked as assembly points. Depending upon the location of hazard, the assembly points are to be used.

Emergency Power Supply

Plant facilities would be connected to Emergency Power supply units and would be placed in auto mode. Thus water pumps, plants lighting and emergency control center. Administrative building and other auxiliary services are connected to emergency power supply. In all the blocks, flame proof type emergency lamps would be provided.

Fire Fighting Facilities

First Aid Fire fighting equipment suitable for emergency shall be maintained in each section in the plant. This would be as per statutory requirements as well as per NFPA Regulations. However, fire hydrant line covering major areas would be laid. It would be maintained as 6 kg/sq.cm pressure. Fire alarms would be located in the bulk storage areas. On the top of the Administration block, top of each production blocks, wind socks would be installed to indicate direction of wind for emergency escape.

Emergency Medical Facilities

Stretchers, gas masks and general first aid materials for dealing with chemical burns, fire burns etc. would be maintained in the medical center as well as in the emergency control room. Private medical practitioners help would be sought. Government hospital would be approached for emergency help. Breathing apparatus and other emergency medical equipment would be provided and maintained. The help of near by industrial management's in this regard would taken on mutual support basis. An ambulance with driver availability in all the shifts, emergency shift vehicle would be ensured and maintained to transport injured or affected persons. Number of persons would be trained in first aid so that, in every shift first aid personnel would be available.

EMERGENCY ACTIONS

Emergency Warning

Communication of emergency would be made familiar to the personnel inside the plant and people outside. An emergency warning system would be established.

Emergency Shutdown

There are number of facilities which can be provided to help deal with hazardous conditions, fire breaks out. Under this situation the supply of the fuel will be disconnected immediately. Whether a given method is appropriate depends on the particular case. Cessation of agitation may be the best action in some instances but not in others. Stopping of the feed may require the provision of by pass arrangements. Methods of removing additional heat include removal through the normal cooling arrangements or use of an emergency cooling system. Cooling facilities, which use vapouring liquid, may be particularly effective, since a large increase in vaporization can be obtained by dropping pressure.

Evacuation of Personnel

There could be more number of persons in the storage area and other areas in the vicinity. The area would have adequate number of exits, stair cases. In the event of an emergency, unconnected personnel have to escape to assembly point. Operators have to take emergency shutdown procedure and escape. Time Office maintains a copy of deployment of employees in each shift, at ECC. If necessary, persons can be evacuated by rescue teams.

Also, at the end of an emergency, after discussing with Incident Controllers and Emergency Coordinators, the Site Controller orders an all clear signal. When it becomes essential, the Site Controller communicates to the District Emergency Authority, Police, and Fire Service personnel regarding help required or development of the situation into an Off-Site Emergency.

GENERAL

Employee Information

During an emergency, employees would be warned by raising siren in specific pattern. Employees would be given training of escape routes, taking shelter, protecting from toxic effects. Employees would be provided with information related to fire hazards, antidotes and first aid measures. Those who would be designated as key personnel and essential employees shall be given training to emergency response.

Public Information and Warning

The industrial disaster effects related to this plant may mostly be confined to the plant area. The detailed risk analysis has indicated that the effects would not be felt outside. However, as an abundant precaution, the information related to chemicals in use would be furnished to District Emergency Authority for necessary dissemination to general public and for any use during an off site emergency.

Co-ordination with Local Authorities

Keeping in view of the nature of emergency, two levels of coordination are proposed. In the case of an On Site Emergency, resources within the organization would be mobilized and in the event of extreme emergency local authorities help shall be sought. In the event of an emergency developing into an off site emergency, local authority and District Emergency Authority (normally the Collector) would be appraised and under his supervision, the Off Site Disaster Management Plan would be exercised. For this purpose, the facilities that are available locally, i.e. medical, transport, personnel, rescue accommodation, voluntary organizations etc. would be mustered. Necessary rehearsals and training in the form of mock drills shall be organized. Mutual aid in the form of technical personnel, runners, helpers, special protective equipment, transport vehicles, communication facility etc. shall be sought from the neighboring industrial management.

Mock Drills

Emergency preparedness is an important aspect in the planning of Industrial Disaster Management. Personnel would be trained suitably and prepared mentally and physically in emergency response through carefully planned, simulated procedures. Similarly, the key personnel and essential personnel shall be trained in the operations.

Important Information

Once the plant goes into stream, important information such names and addresses of key personnel, essential employees, medical personnel, out side the plant, transporters address, address of those connected with Off Site Emergency such as Police, Local Authorities, Fire Services, District Emergency Authority shall be prepared and maintained.

Annexure:7

Durga Cement Works

(A Unit of Jaiprakash Associates Limited)

MOCK DRILL REPORT

Date And Time of Drill: 11-07-2014 at 11:00 AM,

Area : DCW CPP Area,

Date of report : 12-07-2014,

Scenario : Fire on waste oil and clothes,

Summary :

Maintenance work was carried out in CPP Area where oil was spilled on floor and many oil / grease soaked clothes were also kept nearby. A scenario was depicted in the oil and cloth.

- **1.** Scenario was created at 11 AM by igniting fire in a pile of waste oil and cloth and smoke spread to other areas.
- **2.** 2 persons working nearby spotted the fire and informed the Site Engineer.

1 Foam type fire extinguisher also used.

- **3.** Immediate information was sent to Fire & Safety Department. Fire and Security personnel moved to the incident site.
- **4.** Persons in the area started reaching the assembly point.
- Meanwhile identification and head count done at assembly point. 1 person was found missing.
- **6.** Fire Tender Reached at 11:03 AM. Ambulance also reached at 11:03 AM.
- **7.** Fire Fighting started and meanwhile 1 person was rescued.
- 8. Plant Incharge and other officials also reached the place.
- **9.** Rescued person was taken to hospital where after formal inspection he was declared out of danger
- **10.**All of the employees were gathered and briefed upon safety and emergency response and fire fighting.

11.Emergency called off declared on 11: 15 AM.



Observations:

- 1. Employees to be regularly briefed the importance of housekeeping and fire prevention.
- 2. Fire fighting and assembly points to be briefed in tool box talks also.
- 3. People shall not panic in times of emergency.

Annexure-8

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	2.70
	PATHAKAM, inaugurated by Shri Yarapathineni Srinivasa Rao,	
	MLA on 02-10-2014	
2	Extension of water pipe line in one of wards in Srinagar	4.00
	Village	
3	a) Drinking water supply scheme	2.40
	b) Pump house repairs are to be carried out as the	4.00
	pipeline system was introduced in 1995 and rusted	
4	Dandivagu Lift Irrigation Scheme	1.60
5	Improving Health & Hygiene in surrounding villages	10.00
Ŭ	improving fically a rygicile in surrounding vinages	10.00
6	Aggregate chips for filling pit holes of the Road connecting	
	Ramapuram village to State High way – 2.5 Kms	11.00
		0.00
	a) Repairs to the construction of School	6.00
	compound wan in Gamaiapadu vinage – 550 mtrs with	
	b) Grampanchavat Office compound wall repairing	2 50
	(collapsed wall) and gate	2.00
8	Financial assistance for maintenance religious places in	1.00
	surrounding villages	
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	0.10
	connection with Mahasivaratri	
12	Cutting & Cleaning bushes in Srinagar village	0.60
13	Road repair work / Cementing of road work in Ramanuram &	15.00
	Gamalapadu villages together = 500 Metres	10100
14	Compassionate grounds subsidized / free education to poor /	3.00
	suffering / deserved people	
15	Providing medical check ups to all students at DPS with free	1.50
	medical help and energy food to lower class (weekly twice)	
16	Providing free R.O. water (including supply of regular water in	4.00
	times of power/water supply failure), emergency medical	
	services and ambulance and fire services	
17	Providing Free Medical facilities, Ambulance and Fire	2.50
	services in Emergencies to the neighbouring villages.	
	TOTAL EXPENDITURE	Rs.86.90 Lac

DCW CSR ACTIVITIES



RO Water Plant provided in Srinagar village



Street light & Water supply pipe line provided in nearby village

Annexure-9

CPP Green belt development Status

Total CPP area:
Proposed green belt development in five years
Green Belt development April 2014 to September 2014
Total area of Tree plantation up to September 2014
Name of tree planted
No. of trees planted

- 3 Ha.
- 33%
- 0.1 Ha
- 0.6 Ha
- Neem,
- 100 No.





Neem Trees plantation done near CPP



Tree Plantation in Boundary