# SAGAR CEMENTS LIMITED

Ref No: SCL/PQC/MOEF/ 67 /2016.

Date: 30.08.2016.

To, The Dy. Director, MOEF&CC, Regional Office (South Eastern Zone), 1<sup>st</sup> & 2<sup>nd</sup> Floor, HEPC Building, NO. 34, Cathedral Garden Road, <u>NUNGAMBAKKAM, CHENNAI</u> – 600 034.

Sir,

Ref:- MoEF vide letter No. MoEF No-J-11011/379/2006-IAII(I), Dated.02.04.2007 General Condition No. 10.

Sub:- Six months compliance report from January'16 to June 2016 reg.,

As per the above reference, we are here with enclosing six months Compliance report for the conditions stipulated in MOEF. This is for your kind information and records.

Thanking you.

Yours sincerely, For Sagar Cements Limited,

NON

(M.V. Ramana Murthy) Asst., Vice President (P&QC).

Encl: as above & soft copy in Compact Disk.



Factory : Mattampally (Village & Mandal) - 508 204, Nalgonda - District, Phone : 08683 - 247039 Registered Office : Plot No. 11, Road No. 10, Jubilee Hills, Hyderabad - 500 033 Phone :+91-40-23351571, 23356572 Fax :+91-40-23356573 info@sagarcements.in CIN-1256407C:1981P1 (2007887

# SIX MONTHLY COMPLIANCE REPORT OF ENVIRONMENTAL CLEARANCE (JANUARY, 2016 TO JUNE, 2016) OF

# SAGAR CEMENTS LIMITED (PLANT), MATTAMPALLY

(An ISO 9001:2008, ISO 14001:2004 & OHSAS 18001:2007 Certified Company)



SUBMITTED TO MINISTRY OF ENVIRONMENT & FORESTS & CLIMATE CHANGE STATUS OF COMPLIANCE FOR THE PERIOD JANUARY, 2016 - JUNE, 2016, TO THE CONDITIONS SPECIFIED IN THE ENVIRONMENTAL CLEARANCE GRANTED BY MOEF VIDE LETTER No.J-11011/379/2006 - IAII (I)dated 02.04.2007 FOR SAGAR CEMENTS LIMITED, AT MATTAMPALLY(V&PO), NALGONDA(DIST), TELANGANA STATE.

SL. NO	Compliance Conditions	Status of Compliance		
	A. <u>SPECIFIC C</u>	ONDITIONS		
i	The gaseous emissions from various units shall conform to the standards prescribed by the concerned State Pollution Control Board. Bag filters and Electrostatic Precipitator of Highest efficiency shall be installed and Particulate Emissions from plant shall less than 50 mg/ Nm3.	High efficiency Reverse Air Bag House, Bag filters & ESP's are installed in various locations and SPM maintained as per the PCB norms. Annexure - I		
ii	The height of stack with AFBC boiler shall be 67 m, with raw mill, it will be 110 m and other stacks will be of 30 – 40 m. the existing stacks in line – 1 will also increased from 73m – 103 m.	All stacks heights are maintained as per the Gide lines of MoEF. Line – 1 & Line- 2 including raw mill gasses are connected to line-2 RABH. So the existing line-1 stack height is no need to rise.		
111	Bag filters will be provided for all transfer points. In all 25 bag filters to ESPs and 1 bag house will be installed. ESP will also be designed to meet 50 mg/Nm3 for SPM stack emissions.	Electrostatic Precipitator is provided to clinker cooler. RABH is provided to handle the gases of Kiln – 1, Kiln - 2 and Raw mill. All transfer points are provided bag filters to control the particulate emission and emissions are maintained as per the PCB norms. Photos Enclosed		
iv	The predicted incremental values will be rechecked and submitted to the Ministry for records within 15 days.	Following.		
V	Continuous on-line monitors for particulate emissions SO2 and NOx for stacks of Raw/kiln mill, clinker cooler, coal mill, cement mill etc. shall be provided and shall make necessary arrangements for submission of On-	Low NOx burner with multichannel burner technology provided in the kiln & Pre-heater calciner is specially designed for low NOx which control the NOx emission. Interlocking facility has been provided. Eleven no's of		

	line real time emission data to CPCB website, NOx burners shall be installed to control NOx emissions. Interlocking facility shall be provided between pollution control equipment and the process operation so that in the event of the pollution control equipment not working, the respective unit (s) is shut down	Continues stack monitoring stations are installed at Limestone crusher, RABH stack, Line – 1 & Line-2 Cooler ESP stacks, Coal mills 1, 2 & 3, and Cement mills 1,2,3&4 stacks, data transfer to on line to TSPCB & CPCB website. SO2 & NOx Analyzer are installed at RABH stack on 02.01.2016.
vi	Regular Ambient air Quality Monitoring shall be carried out. The existing monitoring stations will be reviewed in consultation with the concerned State Pollution Control Board and more stations shall be set up, if required. It will be ensured that at least one monitoring station is set up in up-wind & in down-wind direction along with those in other directions. On-line data for air emissions shall be transferred to the CPCB and concerned SPCB regularly. The instruments used for ambient air quality monitoring shall be calibrated regularly.	Ambient air quality is monitored by M/S. Lawn Enviro Associates, Hyderabad on regular basis. Data is submitted once in three months to TSPCB, Nalgonda , Joint Chief Environmental Engineer, Ramachendrapuram and Member Secretary, Hyderabad. The instrument used for ambient air quality monitoring are being calibrated from time to time. 1). Two no's of online Ambient Air Quality Monitors has installed at Upwind & Downwind direction in consultation with the PCB and data transfer to on line to TSPCB & CPCB
vii	Raw material will be stored in covered yards and clinker in a dome with all round high sidewalls to control fugitive emissions. Fugitive emissions from cement mill, packing area and coal yard shall also be controlled.	<ul> <li>All the necessary measures are taken as mentioned below to control the fugitive emissions:</li> <li>a) All the transfer points are provided with dedicated dust collectors.</li> <li>b) Water spray provided by TWO mobile water tankers to control fugitive emissions generated from roads, raw material sheds.</li> <li>c) A closed shed with all round high concrete side wall are provided to clinker stock pile.</li> </ul>

		d) All raw materials are stored in
		covered sheds only.
viii	Dust collectors and extraction system	Provided.
	(suction apparatus) shall be installed	
	to control fugitive dust emissions at	
	coal and lime stone unloading points,	
	at all the transfer points, stockpiles to	
	arrest free release of dust.	
ix	Materials will be transported in	Following
	tippers, covered trucks, covered	
	containers, covered rail wagons etc.	
	Windbreakers will be installed to	Following where ever necessary.
	restrict fugitive dust.	
х	Water sprinkling arrangement should	Two Mobile water tankers are available
	be made in the raw material stock	to spray water apart from the water
	yard and cement bag loading areas.	sprinklers on internal roads, loading
		and unloading areas. Photos enclosed
xi	Total water requirement shall not	Total water consumption is within the
	exceed 2190 m3/day and water	limits.
	withdrawal permission shall be	Annexure - III
	submitted to the Ministry.	
XII	Minimum COC for CPP will be 6.0.	Followed.
XIII	demostic activities shall be treated in	200 KLD STP Commissioned running
	Connectic activities shall be treated in	wen.
	Sowage water Reclamation Plant	
	(SW/PD) respectively and	
	(SWRP) Tespectively and	
	makeun in CPP for cooling dust	Photos enclosed
	suppression other plant related	Flotos eliciosed
	activities and green helt development	
	No wastewater will be released	
	outside the premises Zero discharge	
	shall be strictly adopted. During	
	monsoon, the wastewater will be	
	stored in the mine pit.	
xiv	Solid waste generated shall be 100%	No solid waste & Fly Ash was not
	recycled and reutilized in the process	generated in the industry. Waste oils
	it and no solid waste shall be disposed	are reused at Re-climber chains for
1	•	1

	Fly Ash generated will be used in-	kiln.
	house for the manufacture of PPC.	
	Bottom ash shall be used in the raw	
	mill and used for land filling / cement	
	manufacturing. Waste oil sludge shall	
	be reused in the plant and finally	
	burnt in the kiln or sold to authorized	
	recyclers/re-processors.	
xv	The company shall strictly follow all	Following.
	the recommendations mentioned in	
	the charter on Corporate	
	Responsibility for Environmental	
	Protection (CREP).	
xvi	Green belt shall be developed on	Total Green belt developed in plant & Outside
	additional land 8 ha.	the plant up to March'2016 201.76 acers total
		plants are216134.
		Photos enclosed
xvii	The company must harvest surface as	Rain water harvesting structure is
	well as rainwater from the rooftops	provided for roof water and surface
	the building proposed in the	water.
	expansion project and storm water	
	drains to recharge the ground water	
	and use the same water for the	
	various activities of the project to	Photos enclosed
	conserve fresh water.	
	GENERAL CONI	DITIONS
I	The project authorities must strictly	Consent for operation (CFO) obtained
	adhere to the stipulations made by the	from TSPCB vide letter no - TSPCB/RO -
	concerned State Pollution Control	RCP/NLG/10366/CFO/HO/2014-355,
	Board and the State Government.	Dated 09.12.2014. CFO Validity Up
		to:31.01.2017.
li	No further expansion or modification	Shall be complied
	in the plant shall be carried out	
	without prior approval of the Ministry	
	of Environment and Forests.	
lii	Adequate number of influent and	Followed.
	effluent quality monitoring station	
	shall be setup in consultation with the	
	SPCB. Regular monitoring shall be	
	carried out for relevant parameters.	
	carried out for relevant parameters.	

lv	The project proponent shall also	SCL is complying
	comply with all the environmental	
	protection measures and safeguards	
	recommend in the FIA/FMP report	
V	Industrial wastewater shall be properly	No wasto water is generated in the
v	sollosted and treated so as to conform	No waste water is generated in the
	to the standars preseriled under CCD	plant. Cooling water is re-circulated
	to the standers prescribed under GSR $122 (5)$ detect $10^{\text{th}}$ May $1002 \text{ and } 21^{\text{st}}$	and domestic waste water is
	422 (E) dated 19 May, 1993 and 31	connected to STP.
	December 1993 or as amended from	
	time to time the treated waste water	
	shall be utilized for plantation purpose.	
Vi	The overall noise levels in and around	Maintained well within the prescribed
	the plant area shall be limited within	limits.
	the prescribed standards (85 dBA) by	
	providing noise control measures	Annexure -IV
	including acoustic hoods, silencers,	
	enclosures etc., on all sources of noise	
	generation	
Vii	Proper housekeeping and adequate	SCL is conducting occupational health
	occupational health programs shall be	programs from 04.05.2016 to
	taken up. Regular Occupational health	09.05.2016 and maintaining relevant
	Surveillance programmed shall be	records. We purchased Two Sweeping
	carried and records shall be	machines & Vacuum cleaner for roads
	maintained properly for at least 30 -	sweeping purpose.
	40 Years. The program shall include	
	lung function and sputum tests once in	Photos enclosed
	six months. Sufficient preventive	
	measures shall be adopted to avoid	
	direct exposure to dust etc.	
Viii	A separate environment management	A separate cell is constituted to
	cell with full fledge laboratory facilities	manage the environmental activities in
	to carry out various management and	the supervision of Senior Executive.
	monitoring functions shall be set up	
	under the control of a senior Executive.	
Ix	As proposed in the EIA/EMP, Rs.40.0	The allocated fund will be spent only
	crores and Rs.0.40 Crores /annum shall	to implement environmental
	be earmarked to meet the capital cost	protection and pollution control
	and recurring cost/annum for the	measures.
	environmental protection measures	
	shall be used judiciously to implement	
L		L

	the conditions stimulated by the	
	the conditions supulated by the	Annexure - VI
	Ministry of Environment and Forests as	
	well as the State Government. The	
	funds so provided shall not be diverted	
	for any other purpose.	
Х	Regional Office of this Ministry of	Follows without fail.
	Bangalore / concerned State Pollution	
	Control Board / Central Pollution	
	Control Board shall monitor the	
	implementation of the stipulated	
	conditions Six monthly compliance	
	status report and monitoring data	
	along with statistical interpretation	
	chall be submitted to them regularly	
V:	Shall be submitted to them regularly.	
XI	The project proponent should	The necessary advertisements have
	advertise in at least two local	already been published.
	newspapers widely circulated in the	
	region around the project one of	
	which shall be in the vernacular	
	language of the locality concerned	
	informing that the project has been	
	accorded environmental clearance by	
	the ministry and copies of the	
	clearance letter are available with the	
	concerned State Pollution Control	
	Board / committee and may also be	
	seen at Website o be Ministry and	
	Forests at http://onfor.pic.in The	
	advertisement should be made within	
	advertisement should be made within	
	7 days from the date of issue of the	
	clearance letter and a copy of the same	
	should be forwarded to the Ministry's	
	Regional Office at Bangalore.	
Xii	The project Authorities shall inform the	The plant has been commissioned and
	Regional office as well as the Ministry	date of commissioning has been
	the date of financial closure and final	intimated MOEF.
	approval of the project by the	
	concerned authorities and the date of	
	start of land development work.	
	concerned authorities and the date of start of land development work.	

**ANNEXURE - I** 

#### SAGAR CEMENTS LIMITED, MATTAMPALLY , NALGONDA (Dist.,) TELANGANA STATE STACK MONITORING REPORT Six Monthly Report (January-2016 to June -2016)

STACK PARTICULARS	Stack gas Temperature (ºC)		Stack Gas Velocity (m/sec)			Dust concentration Suspended Particulate Matter (mg/Nm <sup>3</sup> )			
	Min	Max	Average	Min	Max	Average	Min	Max	Average
Limestone crusher	47	55	49.82	9.00	12.96	10.66	8.85	38.87	20.11
Cola Mill-1			CO	AL MILL	– 1 NOT	IN OPERAT	ION		
Cola Mill-2	63	71	65.82	15.24	16.39	15.90	14.72	33.88	22.49
Cola Mill-3	59	68	62.5	9.72	10.42	10.26	16.33	30.29	22.27
RABH (Kiln-1,2 & VRM)	102	210	153.92	11.56	13.62	12.81	13.38	36.23	27.93
Cooler ESP-1	285	285	285.00	15.19	15.19	15.19	24.65	24.65	24.65
Cooler ESP-2	280	309	291.18	12.28	13.69	13.06	24.38	40.40	31.08
Cement Mill-1			CEMI	ent mil	.L – 1 NC	DT IN OPERA	TION		
Cement Mill-2	73	112	98.36	12.75	15.22	13.54	10.44	25.81	18.75
Cement Mill-3	98	114	105.25	9.10	11.28	10.10	10.72	28.55	21.92
Cement Mill - 4	95	108	101.56	9.02	9.94	9.37	8.01	26.00	20.70
Packing Plant -1	68	78	72.25	12.26	15.90	14.80	16.42	28.74	23.01
Packing Plant -2	68	74	71.42	8.07	8.88	8.67	21.24	28.81	25.43
Packing Plant - 3	65	76	70.58	8.22	9.07	8.75	18.94	27.83	23.88

ANNEXURE - II

#### SAGAR CEMENTS LIMITED, MATTAMPALLY , NALGONDA (Dist.,) TELANGANA STATE AMBIENT AIR QUALITY MONITORING REPORT Six Monthly Report (January-2016 to June-2016)

		Particula	te Matter			
LOCATION	Particulars	μg/	′m3	SO2µg/m3	NOxµg/m3	
		PM -10 PM - 2.5				
	Min	46.00	18.00	6.00	13.00	
Guest House	Max	68.00	27.00	10.00	21.00	
	Average	57.67	22.83	8.17	16.83	
	Min	34.00	11.00	6.00	14.00	
Plant Main Gate	Max	74.00	32.00	13.00	24.00	
	Average	62.67	25.00	10.00	19.17	
	Min	43.00	17.00	8.00	15.00	
Near VRM area	Max	85.00	38.00	15.00	24.00	
	Average	66.67	26.50	11.17	19.17	
	Min	62.00	21.00	6.00	16.00	
Coal Yard (Near STP)	Max	86.00	35.00	11.00	24.00	
	Average	72.33	28.00	8.50	20.00	
	Min	69.00	26.00	10.00	15.00	
Near LS Crusher	Max	88.00	37.00	14.00	25.00	
	Average	78.00	30.33	12.50	21.00	

#### Annexure – III

# SAGAR CEMENTS LIMITED, MATTAPALLY, NALGONDA (DIST)., TELANGANA STATE

## Water consumption Details From January'2016 to June'2016.

	Water Consumption (kilo litters)				
Month & Year	Industrial	Domestic			
January'2016	25709.00	1867.00			
February'2016	31605.00	1071.00			
March'2016	24155.00	909.00			
April'2016	15160.00	856.00			
May'2016	10125.00	925.00			
June'2016	8588.00	886.00			
Total	115342.00	6514.00			

ANNEXURE –I V

#### SAGAR CEMENTS LIMITED, MATTAMPALLY, NALGONDA (Dist.,) TELANGANA STATE NOISE MONITORING REPORT Six Monthly Report (January-2016 to June-2016)

	NOISE LEVEL dB(A)							
LOCATION	Day T	ime (6 AM	- 10PM)	Night Time ( 10 PM - 6AM)				
	Min	Max	Average	Min	Мах	Average		
Near LS crusher area	60.5	73.6	69.88	55.4	69.0	65.27		
Near VRM area	71.0	73.8	72.73	66.4	69.4	67.72		
Near Coal Mills area	70.0	73.8	71.88	62.2	69.0	66.63		
Near Cement Mill 1&2 area	69.0	70.5	69.73	61.5	68.4	65.52		
Near Cement Mill 3&4 area	72.8	74.0	73.40	68.2	69.1	68.55		
Near Packing Plant - 1 area	59.8	68.6	64.03	53.2	65.1	59.25		
Near Packing Plant - 2 area	62.8	70.2	68.03	60.1	66.4	63.30		
Near Mechanical Work shop	61.6	68.2	64.57	58.4	62.4	59.82		
Near Time Office (Plant Main gate)	66.2	71.2	67.88	60.4	65.4	62.60		

#### Annexure- VI

# SAGAR CEMENTS LIMITED, MATTAPALLY, NALGONDA (DIST)., TELANGANA STATE

# Founds investment for Environmental protection and pollution control for the period from January-2016 to June- 2016.

Sr. No	Particulars	Investment Amount
01	New bag Filters installed at BC-2B discharge, Old cement mill-2 belt transfer point, Old cement Clinker hopper venting and packing plant spiral chute venting	50,00,000.00
02	Damaged bags replacement	2,57,430.00
03	Dust collectors maintenance	6,43,138.00
04	Monitoring	1,40,000.00
05	New bag Filters installed at BC-2B discharge, Old cement mill-2 belt transfer point, Old cement Clinker hopper venting and packing plant spiral chute venting	30,22,200.00
06	Green belt development	6,12,000.00
	Total	96,58,112.00

#### **BAG FILTERSFOR LIMESTONE CRUSHER**





#### **BAG FILTER FOR COAL CRUSHER**







## **BAG FILTERS FOR RAW MILL SECTION**











#### **BAG FILTER FOR COAL MILL SECTION**







#### **BAG FILTERSFOR PYRO SCTION**













#### **BAG FILTER FOR CEMENT MILL SECTION**













# **VRPM SECTION VENT BAG FILTERS**

































![](_page_33_Picture_0.jpeg)

#### **BAG FILTERS FOR PACKING SECTION**

![](_page_33_Picture_2.jpeg)

![](_page_34_Picture_0.jpeg)

![](_page_34_Picture_1.jpeg)

## **GREEN BELT**

![](_page_35_Picture_1.jpeg)

![](_page_35_Picture_2.jpeg)

![](_page_36_Picture_0.jpeg)

![](_page_36_Picture_1.jpeg)

![](_page_37_Picture_0.jpeg)

![](_page_37_Picture_1.jpeg)

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![](_page_46_Picture_0.jpeg)

**NEW PLANTATION** 

![](_page_46_Picture_2.jpeg)

![](_page_47_Picture_0.jpeg)

![](_page_47_Picture_1.jpeg)

![](_page_48_Picture_0.jpeg)

![](_page_48_Picture_1.jpeg)

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![](_page_50_Picture_1.jpeg)

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![](_page_52_Picture_1.jpeg)

![](_page_53_Picture_0.jpeg)

![](_page_53_Picture_1.jpeg)

# 200 KLDSeavageTreatment Plant (STP)

![](_page_54_Picture_1.jpeg)

# **Rain Water harvesting Structure for Roof Water**

![](_page_54_Picture_3.jpeg)

# Rain Water harvesting Structure for Roof Water

![](_page_55_Picture_1.jpeg)

Rain Water harvesting Structure for Roof Water

![](_page_55_Picture_3.jpeg)

# Vacuum Cleaner For Spillage Cleaning & RoadsSweeping.

![](_page_56_Picture_1.jpeg)

## Mechanized Sweeping Machine For Roads Sweeping.

![](_page_56_Picture_3.jpeg)

![](_page_57_Picture_0.jpeg)

![](_page_57_Picture_1.jpeg)

# Water Sprinkling On Haul Roads.

![](_page_57_Picture_3.jpeg)

# Motorzed Water Tanker.

![](_page_58_Picture_1.jpeg)

#### **ONLINE POLLUTION MONITORING EQUIPMENTS**

![](_page_58_Picture_3.jpeg)

![](_page_59_Picture_0.jpeg)

![](_page_59_Picture_1.jpeg)

![](_page_60_Picture_0.jpeg)

![](_page_61_Picture_0.jpeg)

![](_page_61_Picture_1.jpeg)

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#### **BIO DIGESTER GAS PLANT**

![](_page_66_Picture_2.jpeg)