

# SAGAR CEMENTS (R) LIMITED

(A wholly owned subsidiary of SAGAR CEMENTS LIMITED)

(formerly known as BMM CEMENTS LIMITED)

SCRL/IMS/ENV/07

To
The Environment Engineer
AP Pollution Control Board,
Regional Office, Plot no-15
Door No 4-2-740-15
BLT Rajahamsa Villas, Tirumala Nagar,
Tapovanam, apt - 515004



Sub: Environment Statement of M/s Sagar Cements R Ltd for the period April 2019 to March 2020 under Environment Protection rules, 1986.

- Ref: 1. Consent Order No. APPCB/KNL/ATP/17731/HO/CFO/2019 dated 24.07.2019
  - 2. Consent Order No. APPCB/KNL/KNL/17731/HO/CFO/2016 dated 12.06.2019
  - 3. Consent Order No. APPCB/KNL/KNL/17731/HO/CFO/2016 dated 24.03.2016

Dear Sir,

We are submitting herewith Environment Statement for the period April 2019 to March 2020 for Cement plant unit of M/s Sagar Cements R Ltd located at Gudipadu village, Yadiki Mandal, Anantapuramu district in Andhra Pradesh.

This is for your kind information and office records please.

Thanking you

Yours faithfully, For Sagar Cements (R) Limited,

E. P. Ranga Reddy (AVP Works)

#### CC to:

- The Additional Principal Chief Conservator of Forest (C), Ministry of Environment, Forest and Climate Change, Regional Office (SEZ), 1st and 2nd floor, Handloom Export Promotion Council, 34, Cathedral Garden Road, Nungambakkam, Chennai - 34
- 2. The Member Secretary, AndhraPradesh Pollution Control Board, D no 33-26-14 D/2, Near Sunrise hospital, Pushpa Hotel Centre, Chalamavari Street, Kasturibaipet, Vijayawada-520010

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# SAGAR CEMENTS (R) LIMITED

(A wholly owned subsidiary of SAGAR CEMENTS LIMITED) (formerly known as BMM CEMENTS LIMITED)

SCRL/IMS/ENV/07

26.09.2020

To The Environment Engineer AP Pollution Control Board, Regional Office, Plot no-15 Door No 4-2-740-15 BLT Rajahamsa Villas, Tirumala Nagar, Tapovanam, apt - 515004

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## **ENIVIRONMENTAL STATEMENT FORM-V**

(See rule 14)

Environmental Statement for the financial year ending with 31st March

### PART-A

(i)	Name and address of the owner/occupier of the industry operation or process	Mr E Pandu Ranga Reddy M/s. Sagar Cements R Limited, Gudipadu (V), Yadiki (M), Ananthapuramu (Dist) Andhra Pradesh515408
(ii)	Industry category- Primary- Secondary-	Red category Cement Clinker
(iii)	Production capacity Units	Cement - 0.95 Million TPA Clinker - 0.75 Million TPA
(iv)	Year of establishment	2008
(v)	Date of the last Environmental Statement submitted	27.09.2019

## PART-B Water and Raw Material Consumption

# (i) Water Consumption in m<sup>3</sup>/d

Process: Not Applicable (As plant is based on Dry Process technology)

Cooling: 139.24 m<sup>3</sup>/d

Domestic (Colony): 176.45 m3/d

Name of Products	Process water consumption	per unit of product output
	During the previous Financial Year (April 2018 – March 2019)	During the current Financial year (April 2019 - March 2020)
Cement	0.061m <sup>3</sup> /Ton	0.058m <sup>3</sup> /Ton

# (ii) Raw Material Consumption

Name of raw	Name of	Consumption of raw material	per unit of output
materials	Products	During the previous financial year (April 2018 – March 2019)	During the current financial year (April 2019 – March 2020)
Lime Stone	- d .	1.396	1.374
Bauxite		-	0.013
Total Laterite	Clinker	0.052	0.051
Iron ore		0.031	0.025
Total Coal		0.095	0.096
Red mud		0.011	0.015
Bed Ash		0.008	0.006
Blast Furnace Slag for PSC Cement	Cement	0.552	0.618
Gypsum for OPC		0.041	0.042
Fly Ash for PPC		0.336	0.338

PART-C Pollution discharged to environment /unit of output (Parameter as specified in the Consent issued)

Pollutants	Quantity of pollutants discharged (mass/ day)	Concentration of pollutants discharged (mass/volume)	Percentage of variation from prescribed standard with reasons.
(a) Water	Zero Discharge	As the plant is being operated on dry basis, no liquid effluent is generated. Domestic waste water generated from colony is treated in STP and treated water and sludge generated is used for greenbelt development. Quarterly analysis report of STP treated water is enclosed in annexure I	Nil
(b) Air	Summary of	Air quality reports are enclosed in annexure II.	Nil

### PART-D Hazardous Wastes

[as specified under hazardous wastes (Management & Handling rules, 1989)].

	Total Quantity (Its)			
Hazardous Waste	During the Previous financial year (April 2018 – March 2019)	During the current financial year (April 2019 – March 2020)		
Waste Oil	2420 Liters	1748		

### PART-E Solid Wastes

	Total Quantity				
Solid Waste	During the Previous financial year (April 2018 – March 2019)	During the Previous financial year (April 2019 – March 2020)			
(a) From Process	Nil	Nil			
(b) From Pollution control Facility	Dust collected in ESPs, Baghouses and DE systems are recycled batto the system				
(c) Quantity recycled or reused within the unit		ected in ESPs, Baghouses and DE systems are recycled back to the system			

#### PART-F

Please specify the characterizations (in terms of composition and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

### Hazardous waste:

- Cement Plant manufacturing is based on Dry Process technology. No Hazardous waste is generated from the process except used oil which is generated from machineries and it is sent to authorize recycler/used in-house.
- Spent Carbon (hazardous waste) of quantity 768.80tons was utilized in the year 2019-2020 as alternative fuel in cement kiln.

### Solid Waste:

- PP bags generated are sold to plastic waste recyclers.
- o Battery wastes are sold to dealers on buy back basis.

#### PART-G

Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production.

M/s Sagar Cements (R) Ltd is being operated on dry process technology, which is cost effective and environmentally clean technology. The advantage of dry process is also in fuel economy.

To emphasis on conservation of natural resources and to reduce the disposal problems of the waste from other units like Pharmaceuticals etc, total 768.80tons of hazardous waste was utilized in the year 2019-2020.

### PART-H

Additional measures/investment proposal for environmental protection including abatement of pollution/prevention of pollution.

- $_{\odot}$  Installed two no's of SO<sub>2</sub> and NO<sub>x</sub> ambient analyzers for existing Continuous Ambient Air Quality Monitoring Stations.
- o All main & internal roads are concreted to avoid fugitive emissions.
- Green development is our ongoing process within our plant area and also plant boundary. In the year 2019-2020 a total of 122717 including Mines, Cement, Captive power plant and colony areas.
- A total of 8070 saplings planted under Miyawaki programme in an area of 0.5acre.
- During the financial year 2019-20, capital cost of Rs. 40,12,000/, revenue cost of Rs.11024535/- & energy consumption cost for pollution control equipments is Rs. 30,85,7880/- spent for environment monitoring & protection measures.

#### PART-I

### Any other particulars for improving the quality of the environment.

- o Periodic Monitoring of Stack emissions, Air and Water parameters
- Celebration of Environment Day for environment awareness among employees and contract workman within the plant premises.
- The company obtained IMS Certification (ISO 9001:2015, ISO 14001:2015 & OSHAS 18001) effectively from 24.05.2016

(Signature of a person carrying out an industry – operation or process)

Date: 26 | 09 | 2020



# B.S. ENVI - TECH PVT. LTD.

## **ENVIRONMENTAL CONSULTANTS & ANALYTICAL LABORATORY**

4" Floor, 'AMITY VILLE', 12-13-1270/71/73, St. Ann's Road, Tarnaka, Secunderabad - 500 017, Telangana, INDIA Ph.:+91 40 49723062 / 27016806 Fax:+91 40 49783063 Email:info@bsenvitech.com Website:www.bsenvitech.com

### TEST REPORT

### WATER QUALITY DATA

Client

: Sagar Cements (R) Limited

(Formerly known as BMM Cements Limited),

Location

: Gudipadu(V), Yadiki(M), Anantapur(D), A.P.,

Season

: Monsoon Season - 2019

Location Name : STP Water Date of Sampling : 30.07.2019

S.No	Parameters	Res	ults	GSR 422 (E) General Standards for	
	Parameters	STP INLET	STP OUTLET	Discharge of Effluents Inland Surface Water	
1	Colour (Hazen Units)	Greyish	10	See Note-1	
2	Odour	Dis-Agreeable	Agreeable	See Note-1	
3	pH.	6.82	7.48	5.5- 9.0	
4	Oil & Grease, mg/l	8	2	10	
5	Total Suspended Solids, mg/l	118	40	100	
6	Total Dissolved Solids, mg/l	1005	965	2100	
7	BOD for 3days at 270c, mg/l	110	15	. 30	
8	COD mg/l	244	60	250	
9	Chloride as Cl, mg/l	214	214	1000	
10	Fluoride as F, mg/l	1.15	1.10	2.0	
11	Dissolved Phosphate, mg/l	1.12	1.10	5.0	
12	Percent Sodium,	56.9	55.6		
13	Sulphide as S, mg/l	1.3	0.3	2.0	
14	Boron as B, mg/l	0.24	0.20	2.0	
15	Residual Sodium Carbonate	Nil	Nil	***	
16	Sulphates as So4, mg/l	121	121	1000	
17	Iron as Fe, mg/l	0.80	0.32	3.0	

Note 1: All efforts should be made to remove colour and unpleasant odour as far as practicable

Authorized Signatory



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## TEST REPORT

### WATER QUALITY DATA

Client

: Gudipadu Limestone Mine of BMM Cements Limited

Location

: Gudipadu(V), Yadiki(M), Anantapur(D), A.P.,

Season

: Post Monsoon Season - 2019

Location Name : STP Water Date of Sampling : 22.11.2019

S.No	Parameters	Res	ults	GSR 422 (E) General Standards for	
	T availeters	STP INLET	STP OUTLET	Discharge of Effluents Inland Surface Water	
1	Colour (Hazen Units)	Greyish	10	See Note-1	
2	Odour	Dis-Agreeable	Agreeable	See Note-1	
3	pH	6.93	7.23	5.5- 9.0	
4	Oil & Grease, mg/l	6	2	10	
5	Total Suspended Solids, mg/l	250	75	100	
6	Total Dissolved Solids, mg/l	1022	970	2100	
7	BOD for 3days at 270c, mg/l	108	12	30	
8	COD mg/l	240	40	250	
9	Chloride as Cl, mg/l	220	205	1000	
10	Fluoride as F. mg/l	1.18	1.02	2.0	
11	Dissolved Phosphate, mg/l	2.5	1.10	5.0	
12	Percent Sodium,	57.5	56.8	. ***	
13	Sulphide as S, mg/l	1.2	0.2	2.0	
14	Boron as B, mg/1	0.28	0.12	2.0	
15	Residual Sodium Carbonate	Nil	Nil		
16	Sulphates as So4, mg/l	126	119	1000	
17	Iron as Fe, mg/l	0.88	0.25	3.0	

Note 1: All efforts should be made to remove colour and unpleasant odour as far as practicable

**Authorized Signatory** 



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### TEST REPORT

### WATER QUALITY DATA

Client

: Gudipadu Limestone Mine of BMM Cements Limited,

Location

: Gudipadu(V), Yadiki(M), Anantapur(D), A.P.,

Season

: Winter Season - 2019-20

Location Name : STP Water Date of Sampling : 28.02.2020

S.No	Parameters	Res	ults	GSR 422 (E) General Standards for	
	, Turameters	STP INLET	STP OUTLET	Discharge of Effluents Inland Surface Water	
1	Colour (Hazen Units)	Greyish	10	See Note-1	
2	Odour	Dis-Agreeable	Agreeable	See Note-1	
3	pH	6.92	7.25	5.5- 9.0	
4	Oil & Grease, mg/l	7	2	10	
5	Total Suspended Solids, mg/l	200	50	100	
6	Total Dissolved Solids, mg/l	1180	1140	2100	
7	BOD for 3days at 270c, mg/l	124	14	30	
8	COD mg/l	288	48	250	
9	Chloride as Cl, mg/l	278	261	1000	
10	Fluoride as F, mg/l	1.28	1.1	2.0	
11	Dissolved Phosphate, mg/l	2.1	1.2	5.0	
12	Percent Sodium,	59.1	57.0		
13	Sulphide as S, mg/l	1.2	0.2	2.0	
14	Boron as B, mg/l	0.32	0.28	2.0	
15	Residual Sodium Carbonate	Nil	Nil		
16	Sulphates as So4, mg/l	142	134	1000	
17	Iron as Fe, mg/l	0.99	0.30	3.0	

Note 1: All efforts should be made to remove colour and unpleasant odour as far as practicable

Authorized Signatory

# Summary of Ambient Air Quality Report

	Location: CCR					
Month	UOM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	
April '2019		68	32	11.6	12.4	
May'2019		72	35	11.8	12.6	
June'2019		68	31	11.2	12.4	
July'2019		62	34	11.2	12.9	
August'2019		64	38	11.6	12.4	
Sep'2019		68	42	12.8	14.6	
Oct'2019		72	36	13.5	15.6	
Nov'2019	μg/m³	76	40	14.6	16.4	
Dec'2019		68	34	14.8	18.6	
Jan'2020	1	70	35	15.6	18.2	
Feb'2020		68	32	16.8	18.2	
March'2020	1	62	35	15.6	18.3	
Standard 24hrs		100	60	80	80	

Location: Colony Guest House						
Month	UOM	PM <sub>10</sub>	PM <sub>2,5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	
April '2019		65	34	9.8	11.4	
May'2019		62	36	10.2	11.2	
June'2019		52	32	10.7	11.2	
July'2019		48	35	9.5	11.4	
August'2019		47	31	8.9	10.3	
Sep'2019	μg/m³	49	34	9.6	10.8	
Oct'2019		58	38	10.6	12.7	
Nov'2019		60	42	10.2	11.5	
Dec'2019		56	36	10.4	12.8	
Jan'2020		59	40	10.8	12.8	
Feb'2020		56	34	11.4	12.8	
March'2020		58	35	10.6	12.3	
Standard 24hrs		100	60	80	80	

Location: AAQ Station 2						
Month	UOM	PM <sub>10</sub>	PM <sub>2,5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	
April '2019		- 72	37	10.8	11.9	
May'2019		68	38	10.6	11.4	
June'2019		56	28	10.6	11.8	
July'2019		52	24	10.4	11.6	
August'2019		56	27	10.8	11.9	
Sep'2019	$\mu g/m^3$	54	24	11.5	12.8	
Oct'2019		64	32	12.8	14.5	
Nov'2019		68	32	13.4	14.8	
Dec'2019		64	34	13.6	15.4	
Jan'2020		68	36	14.2	16.4	
Feb'2020		64	32	15.2	16.5	
March'2020		61	30	14.5	16.1	
Standard 24hrs		100	60	80	80	

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# Annexure II

# **Summary of Stack Monitoring Report**

Location: Raw mill & Kiln						
Month	UOM	PM	SO <sub>2</sub>	NO <sub>x</sub>		
April '2019	mg/Nm <sup>3</sup>	12.39	8	265		
May'2019		6.03	12	275		
June'2019		10.38	12	275		
July'2019		8.59	8	238		
August'2019		15.45	5	385		
Sep'2019		13.51	8	365		
Oct'2019		14.98	6	358		
Nov'2019		17.77	4	375		
Dec'2019		19.49	8	418		
Jan'2020		17.66	4	364		
Feb'2020		20.49	12	364		
March'2020		20.12	10	356		
Standard		30	100	800		

Month	иом	Coal Mill	Cooler	Cement mill
		Particulate matter (PM)		
April '2019	mg/Nm³	24.21	19.81	17.27
May'2019		26.93	16.4	17.67
June'2019		23.42	17.76	22.34
July'2019		18.36	20.48	19.15
August'2019		20.37	24.24	9.8
Sep'2019		19.77	22.34	12.47
Oct'2019		17.42	24.76	19.88
Nov'2019		15.74	22.52	15.46
Dec'2019		18.09	24.8	17.20
Jan'2020		22.93	26.8	15.54
Feb'2020		14.79	24.2	17.32
March'2020		14.56	23.8	17.56
Standard		30	30	30

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