



SAGAR CEMENTS (R) LIMITED

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

SCRL/IMS/ENV/07

13.09.2021

To
The Environmental Engineer,
AP Pollution Control Board,
Regional Office,
Anantapuramu.

Sub: Environment Statement of M/s Sagar Cements R Ltd for the period April 2020 to March 2021 under Environment Protection rules, 1986.

Ref: 1. Consent Order No. APPCB/KNL/ATP/17731/HO/CFO/2020 dated 14.12.2020

Dear Sir,

We are submitting herewith Environment Statement for the period April 2020 to March 2021 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
(Assist. Vice President - Works)

CC to:

1. The Deputy Director, Ministry of Environment Forest and Climate Change, Regional Office, Vijayawada.
2. The Member Secretary, Andhra Pradesh Pollution Control Board, D no 33-26-14 D/2, Near Sunrise hospital, Pushpa Hotel Centre, Chalamavari Street, Kasturibaipet, Vijayawada-520010



Registered Office: Plot No. 111, Road No.10, Jubilee Hills, Hyderabad - 500033.

Phone : +91-40-23351571, 23356572 Fax : +91-40-23356573 info-r@sagarcements.in www.sagarcements-r.in CIN: U40300TG2007PLC134320

Factory: Gudipadu Village and Post, Yadiki Mandal, Ananthapur District, Andhra Pradesh-515408, Phone: 08558-200272

ENVIRONMENTAL 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 Pradesh - -515408
(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	28.09.2020

PART-B

Water and Raw Material Consumption

(i) Water Consumption in m³/d

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

Cooling (Cement mill + Cooler spray): 124.08KLD

Domestic (Colony) : 84.40KLD

Name of Products	Process water consumption per unit of product output	
	During the previous Financial Year (April 2019 – March 2020)	During the current Financial year (April 2020 – March 2021)
Cement	0.058m ³ /Ton	0.066m ³ /Ton

(ii) Raw Material Consumption

Name of raw materials	Name of Products	Consumption of raw material per unit of output	
		During the previous financial year (April 2019 - March 2020)	During the current financial year (April 2020 - March 2021)
Lime Stone	Clinker	1.374	1.388
Bauxite		0.013	0
Total Laterite		0.051	0.074
Iron ore		0.025	0.026
Total Coal		0.096	0.106
Red mud		0.015	0.014
Bed Ash		0.006	0.003
Blast Furnace Slag for PSC Cement	PSC Cement	0.618	0.549
Gypsum (received basis) for OPC	OPC Cement	0.042	0.0391
Fly Ash for PPC	PPC Cement	0.338	0.321

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)].

Hazardous Waste	Total Quantity (Its)	
	During the Previous financial year (April 2019 – March 2020)	During the current financial year (April 2020 – March 2021)
Used Oil	1448 Litres	4869 Litres
Waste containing residue (Grease)	3620 kgs	2720 kgs

**PART-E
Solid Wastes**

Solid Waste	Total Quantity	
	During the Previous financial year (April 2019 – March 2020)	During the Previous financial year (April 2020 – March 2021)
(a) From Process	Nil	Nil
(b) From Pollution control Facility	Dust collected in ESPs, Baghouses and DE systems are recycled back to the system	
(c) Quantity recycled or reused within the unit	Dust collected 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 1219tons is utilized in the year 2020-2021 as alternative fuel in cement kiln.
- Used Oil of quantity 3310 litres & waste grease of quantity 1990kgs consumed within the premises as lubricants to chains etc.

Solid Waste:

- PP bags of quantity 12.30tons are generated and it is sold to plastic waste recyclers.
- Used Lead acid Batteries of quantity 6nos 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., a total 1219tons of hazardous waste is utilized in the year 2020-2021.

PART-H

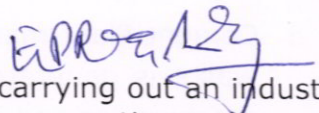
Additional measures/investment proposal for environmental protection including abatement of pollution/prevention of pollution.

- All main & internal roads are concreted to avoid fugitive emissions.
- Green development is our ongoing process within our plant area. In the year 2020-2021 a total of 9040 including Cement plant, Captive power plant and colony area.
- During the financial year 2020-21, revenue cost of Rs.40,07,430/- spent for environment monitoring, protection measures & for renewal of CFO.

PART-I

Any other particulars for improving the quality of the environment.

- 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 & ISO 45001:2018, ISO 50001:2018)


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

Date: 13/09/21



B.S. ENVI - TECH PVT. LTD.

ENVIRONMENTAL CONSULTANTS & ANALYTICAL LABORATORY

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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), Ananthapuramu(D), A.P.,
Month : July - 2020
Location Name : STP (Near Colony)
Date of Sampling : 24.07.2020

S.No	Parameters	Results		GSR 422 (E) General Standards for Discharge of Effluents Inland Surface Water
		STP INLET	STP OUTLET	
1	Colour (Hazen Units)	Greyish	10	See Note-1
2	Odour	Dis-Agreeable	Agreeable	See Note-1
3	pH	7.08	7.36	5.5- 9.0
4	Oil & Grease, mg/l	8	2	10
5	Total Suspended Solids, mg/l	210	62	100
6	Total Dissolved Solids, mg/l	1210	1130	2100
7	BOD for 3days at 270c, mg/l	133	18	30
8	COD mg/l	296	60	250
9	Chloride as Cl, mg/l	288	253	1000
10	Fluoride as F, mg/l	1.26	1.13	2.0
11	Dissolved Phosphate, mg/l	2.2	1.3	5.0
12	Percent Sodium,	55.9	54.1	---
13	Sulphide as S, mg/l	1.3	0.3	2.0
14	Boron as B, mg/l	0.34	0.27	2.0
15	Residual Sodium Carbonate	Nil	Nil	---
16	Sulphates as So ₄ , mg/l	149	129	1000
17	Iron as Fe, mg/l	0.98	0.32	3.0

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

10-11-17-18
Authorized Signatory





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TEST REPORT

WATER QUALITY DATA

Client : Sagar Cements (R) Limited
 (Formerly known as BMM Cements Limited),
Location : Gudipadu(V), Yadiki(M), Ananthapuramu(D), A.P.,
Month : October- 2020
Location Name : STP (Near Colony)
Date of Sampling : 30.10.2020

S.No	Parameters	Results		GSR 422 (E) General Standards for Discharge of Effluents Inland Surface Water
		STP INLET	STP OUTLET	
1	Colour (Hazen Units)	Greyish	10	See Note-1
2	Odour	Dis-Agreeable	Agreeable	See Note-1
3	pH	7.13	7.45	5.5- 9.0
4	Oil & Grease, mg/l	8	3	10
5	Total Suspended Solids, mg/l	220	67	100
6	Total Dissolved Solids, mg/l	1240	1150	2100
7	BOD for 3days at 270c, mg/l	140	20	30
8	COD mg/l	304	64	250
9	Chloride as Cl, mg/l	297	258	1000
10	Fluoride as F, mg/l	1.30	1.16	2.0
11	Dissolved Phosphate, mg/l	2.4	1.4	5.0
12	Percent Sodium,	56.9	55.9	---
13	Sulphide as S, mg/l	1.4	0.4	2.0
14	Boron as B, mg/l	0.36	0.29	2.0
15	Residual Sodium Carbonate	Nil	Nil	---
16	Sulphates as So ₄ , mg/l	153	132	1000
17	Iron as Fe, mg/l	0.99	0.34	3.0

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

W. D. P. H.
Authorized Signatory





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TEST REPORT

WATER QUALITY DATA

Client : Sagar Cements (R) Limited
(Formerly known as BMM Cements Limited),
Location : Gudipadu(V), Yadiki(M), Ananthapuramu(D), A.P.,
Month : January- 2021
Location Name : STP (Near Colony)
Date of Sampling : 25.01.2021

S.No	Parameters	Results		GSR 422 (E) General Standards for Discharge of Effluents Inland Surface Water
		STP INLET	STP OUTLET	
1	Colour (Hazen Units)	Greyish	10	See Note-1
2	Odour	Dis-Agreeable	Agreeable	See Note-1
3	pH	7.27	7.58	5.5- 9.0
4	Oil & Grease, mg/l	9	4	10
5	Total Suspended Solids, mg/l	231	79	100
6	Total Dissolved Solids, mg/l	1280	1180	2100
7	BOD for 3days at 270c, mg/l	149	24	30
8	COD mg/l	312	72	250
9	Chloride as Cl, mg/l	309	267	1000
10	Fluoride as F, mg/l	1.26	1.19	2.0
11	Dissolved Phosphate, mg/l	2.5	1.5	5.0
12	Percent Sodium,	57.6	55.3	---
13	Sulphide as S, mg/l	1.5	0.5	2.0
14	Boron as B, mg/l	0.34	0.31	2.0
15	Residual Sodium Carbonate	Nil	Nil	---
16	Sulphates as So ₄ , mg/l	161	140	1000
17	Iron as Fe, mg/l	1.02	0.35	3.0

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Authorized Signatory

Summary of Ambient Air Quality Report

Location: Near Packing Plant					
Month	UOM	PM ₁₀	PM _{2.5}	SO ₂	NO ₂
April '2020	µg/m ³	Monitoring not done due to lockdown			
May'2020		Monitoring not done due to lockdown			
June'2020		55	27	13.8	15.1
July'2020		66	35	14.8	16.2
Aug'2020		71	35	12.2	14.4
Sep'2020		64	32	12.8	16.8
Oct'2020		66	32	11.4	13.5
Nov'2020		78	42	15.3	17.5
Dec'2020		76	48	14.5	16.4
Jan'2021		64	32	12.4	14.2
Feb'2021		66	34	12.8	14.2
Mar'2021		68	36	13.4	15.8
Standard 24hrs			100	60	80

Location: Colony Guest House					
Month	UOM	PM ₁₀	PM _{2.5}	SO ₂	NO ₂
April '2020	µg/m ³	Monitoring not done due to lockdown			
May'2020		Monitoring not done due to lockdown			
June'2020		50	22	10.5	12.3
July'2020		58	24	9.8	10.6
Aug'2020		54	26	10.8	12.6
Sep'2020		56	24	10.4	11.2
Oct'2020		58	24	10.6	12.8
Nov'2020		60	30	11.2	12.4
Dec'2020		56	28	10.6	11.8
Jan'2021		54	26	9.6	10.8
Feb'2021		52	26	9.8	10.6
Mar'2021		48	24	9.2	10.2
Standard 24hrs			100	60	80

Location: AAQ Station 2					
Month	UOM	PM ₁₀	PM _{2.5}	SO ₂	NO ₂
April '2020	µg/m ³	Monitoring not done due to lockdown			
May'2020		Monitoring not done due to lockdown			
June'2020		53	25	13.8	15.1
July'2020		61	31	12.6	14.4
Aug'2020		66	30	14.5	16.8
Sep'2020		58	26	11.2	12.4
Oct'2020		56	23	10.2	12.6
Nov'2020		54	21	12.1	13.9
Dec'2020		64	32	11.8	12.2
Jan'2021		61	29	11.2	12.5
Feb'2021		60	30	11.6	12.4
Mar'2021		56	32	12.8	14.6
Standard 24hrs			100	60	80

Summary of Stack Monitoring Report

Location: Raw mill & Kiln					
Month	UOM	PM	SO ₂	NO _x	
April '2020	mg/Nm ³	Monitoring not done due to lockdown			
May'2020		Monitoring not done due to lockdown			
June'2020		18.30	9	341	
July'2020		22.40	8	504	
Aug'2020		18.80	12	486	
Sep'2020		19.60	12	368	
Oct'2020		17.42	7	352	
Nov'2020		13.50	12	360	
Dec'2020		24.00	8	384	
Jan'2021		14.40	8	346	
Feb'2021		15.73	BDL	452	
Mar'2021		11.93	BDL	384	
Standard			30	100	800

Month	UOM	Coal Mill	Cooler	Cement mill	
		Particulate matter (PM)			
April '2020	mg/Nm ³	Monitoring not done due to lockdown			
May'2020		Monitoring not done due to lockdown			
June'2020		5.57	18.38	13.91	
July'2020		9.15	21.2	13.11	
Aug'2020		7.25	17.61	13.99	
Sep'2020		10.27	18.54	10.62	
Oct'2020		14.6	23.54	10.25	
Nov'2020		21.4	26.7	12.28	
Dec'2020		19.09	25.02	23.78	
Jan'2021		8.05	23.76	11.16	
Feb'2021		17.92	14.08	10.55	
Mar'2021		17.34	15.35	8	
Standard			30	30	30