

KC/BSN-ENV/: 76

30<sup>th</sup>, Nov, 2023

To,  
Inspector General of Forests  
Ministry of Environment, Forest and Climate Change,  
Integrated Regional Office,  
Hyderabad 3rd Floor, Aranya Bhawan, Opp. RBI,  
Safiabad – 500004, Hyderabad,  
Telangana

Dear Sir,


Sub: - Submission of Environmental clearance compliance reports of M/s. Kesoram cement Factory-Reg

Ref: 1. Ec Kesoram cement Factory: J-11011/55/2006-IA II (I) Dated: 25.07.2007

In reference of the above subject matter and referred letter, we are submitting herewith the point wise compliance of conditions of above environmental clearance letter for the period **April-2023 to September-2023** and also we are submitting the stack data, ambient air quality data, Ambient noise levels data, effluent water quality data for the period along with report.

This is for your kind information please.  
Yours faithfully

For **Kesoram Cements Factory, Basantnagar**  
Cement division unit of Kesoram Industries Ltd



**S.GOVINDA RAO**  
**FACTORY MANAGER**

Encl: A/a.

Cc to: 1. Environmental Engineer  
T.S. Pollution Control Board,  
Regional Office – Ramagundam

2. CPCB Regional Directorate (South)  
Nisarga Bhawan, A-Block  
1<sup>st</sup> and 2<sup>nd</sup> Floor, Thimmaiah Road  
7<sup>th</sup> D-Main, shivnagar, Bengaluru-560079

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Corporate Office :  
E : corporate@kesoram.net

Cement Division Unit of Kesoram Industries Limited

Unit : Basantnagar, Works : Post Basantnagar - 505 187.  
Dist : Peddapalli, Telangana

Registered Office : Birla Building, 8th Floor, 9/1, R.N. Mukherjee Road, Kolkata-700 001,  
CIN - L17119WB1919PLC003429



**ENVIRONMENTAL CLEARANCE COMPLIANCE STATUS REPORT  
FOR THE PERIOD APR-23 TO SEP-23**



**KESORAM CEMENT  
BASANTNAGAR**



**M/S. KESORAM CEMENT FACTORY  
CEMENT DIVISION UNIT OF KESORAM INDUSTRIES LIMITED  
POST: BASANTNAGAR – 505 187  
DIST: PEDDAPALLI (T.S)**



**B K BIRLA GROUP OF CO**

**KESORAM CEMENT FACTORY  
BASANTNAGAR**

**ENVIRONMENT CLEARANCE CONDITION WISE COMPLIANCE STATUS  
F.No. J – 11011/55/2006 – IA II (I) dated: 25<sup>th</sup> July 2007**

	<b>A. Specific Conditions</b>	<b>Compliance status</b>
i.	<p>The gaseous and particulate matter emission from various units shall conform to the standards prescribed by the T.S. Pollution Control Board. At no time, the particulate emissions from the cement plant shall exceed TSPCB limit. Interlocking facility shall be provided in the pollution control equipment so that in the event of the pollution control equipment not working, the respective unit(s) is shut down automatically.</p>	<p>1. The results of Gaseous and Particulate emissions from the various units is within the standard limits prescribed by the T.S. PCB.</p> <p>2. Upgraded air pollution control equipment was provided to Raw mills, Kiln, Coal mills, Coolers, Cement mills and Packing sections.</p> <p>3. We have provided interlock facility with air pollution control equipment's for raw materials feeding system so that the feeding of raw material would be stopped in case the air pollution control equipment fails.</p> <p>Pollution control equipment Photos are enclosed as <b>Annexure- 1</b></p>
ii.	<p>Continuous monitoring system to monitor gaseous emissions shall be provided and air emissions from cement plant and captive power plant shall be controlled within 50 and 100 mg/Nm<sup>3</sup> respectively by installing adequate air pollution control system (ESPs, bag house, bag filters and dust collectors etc.). On - line monitoring data shall be submitted to the APPCB and CPCB regularly.</p>	<p>The Continuous Emission Monitoring System (CEMS) is installed for monitoring the all major Stacks attached to the Kiln, Raw mills and Coolers.</p> <p>Installed adequate Air Pollution Control equipment like RABH, High Efficiency Bag Houses and ESP to control and achieving the particulate matter emission standards prescribed by TSPCB</p> <p>Particulate Matter emissions from all the stacks of Cement Plant &amp; CPP are well within the prescribed standards of 30 &amp; 100 mg/Nm<sup>3</sup> respectively</p> <p>On - line monitoring data is being transferring to the TSPCB and CPCB server regularly.</p> <p>CEMS Photo's enclosed as <b>Annexure- 2</b></p>
iii.	<p>One ambient air quality monitoring station shall be installed in downwind direction. Ambient air quality including ambient noise levels shall not exceed the standards stipulated under EPA or by the state authorities. Monitoring of ambient air quality and stack emissions shall be carried out regularly in consultation with APPCB and report submitted to the TSPCB quarterly and to the Ministry's Regional office at Bangalore half yearly.</p>	<p>One Continuous ambient air quality monitoring station (CAAQMS) downwind installed and connected to the TSPCB/CPCB server.</p> <p>Manual Ambient Air quality including Noise levels monitoring is carried out deputing MoEF recognized external by agency and the monitoring reports are regularly submitted to MOEF &amp; CC IRO at Hyderabad on half yearly &amp; TSPCB on quarterly basis. The AAQM values &amp; Noise levels are well below the stipulated limits of NAAQ's.</p> <p>Ambient Air quality reports for the period April 2023 to Sep 2023 Enclosed as <b>Annexure-3</b></p>

iv.	<p>Secondary fugitive emissions shall be controlled within the permissible limits as per the latest CPCB guidelines. The company shall install adequate dust collection and extraction system to control fugitive dust emissions at various transfer points, raw mill handling (unloading, conveying, transporting, stacking) coal mills, cement mills, crushers, bagging vehicular movement and packing areas etc. Asphaltting/ concreting of roads and water spray all around the coal stock piles, loading / unloading areas and bag filters at transfer points shall be done to control fugitive emissions. Storage of raw materials shall be in closed roof sheds. A closed clinker stockpile system shall be provided.</p>	<p>Secondary fugitive emissions are being controlled and monitored as per the CPCB guidelines. Following are control fugitive control measures adopted.</p> <ul style="list-style-type: none"> <li>❖ 51 No's Nuisance Bag filters are installed at all transfer points for controlling of fugitive emissions and the collected dust is recycle back on the process.</li> <li>❖ All raw material transfer conveyor are covered with GI sheets and Fly ash is being handled through pneumatic system.</li> <li>❖ Cements Concrete roads are laid, Road sweeping machines is deployed and a dedicated water tanker has been deployed for spraying water on roads to control fugitive dust.</li> <li>❖ Closed Sheds are constructed for all the raw materials and finished products storage and handling to avoid fugitive dust generation</li> </ul> <p>Dust controlling measures photo's attached as <b>Annexure-4</b></p>
v.	<p>Total water requirement from the ground water source and water from the mine pit shall not exceed 4,050m<sup>3</sup>/day and prior permission shall be obtained. All the treated waste water shall be recycled and reused in the process and/or for dust suppression, green belt development and other plant related activities etc. No process waste water shall be discharged outside the factory premises and 'zero' discharge shall be adopted. Treated domestic effluent shall be used for green belt development within the plant and colony area.</p>	<p>Total water requirement is within the prescribed limit. Water consumed from Mines rain water harvesting pit for the Plant operations.</p> <p>Cooling water is being recycled. No effluent is generated from the manufacturing Process and zero discharge is adopted.</p> <p>Sewage treatment plant were installed for treatment of domestic effluent and Treated STP water is being used for green belt development in the colony area.</p>
vi.	<p>All the recommendations mentioned in the ground water survey report of water works department, Govt. of A.P shall be ensured.</p>	<p>All the recommendations mentioned in the ground water survey report of water works department, Govt. of Telangana are being followed.</p>
vii.	<p>All the cement dust collected from pollution control devices shall be recycled and reused in the process. Efforts shall be made to use more fly Ash and solid waste in the cement manufacturing. Refractory bricks shall be sold to authorized agencies. Used oil shall be sold to authorized recyclers/ re-processors only.</p>	<p>Dust collected from pollution control devices is recycled and reused in the process. Fly ash from the nearby power plant is utilized in the cement manufacturing. Waste generated is sold to authorized recyclers / re-processors.</p>
viii.	<p>Efforts shall be made to use high calorific hazardous waste in the cement kiln. Accordingly, provision shall be made in the kiln.</p>	<p>We have obtained authorization from Telangana State Pollution Control Board to use High calorific value hazardous waste and non-hazardous wastes (Organic Residue, Spent Carbon, Plastic waste, Carbon Black, Chrome sludge and Rice husk and these are being co-processing in our cement kilns.</p>

ix.	As proposed in EIA / EMP, green belt shall be developed in at least 60 ha (50 %), out of total 122.5 ha area as per CPCB guidelines in consultation with local DFO.	Thick greenbelt developed in and around the plant & colony premises. The total land available in the plant & colony is around 360 acres, out of which 270 acres (76%) have been developed with green belt with native plants.  Greenbelt development photo's attached as <b>Annuxure-5</b>
x.	The company must harvest the rain water from the rooftops and storm water drains to recharge the ground water and use the same water for the various activities of the project to conserve fresh water.	Rain water is stored in mines abandoned reservoir and it is utilized for various activities in the plant thus reducing the consumption of fresh water.  Rain water harvesting pits and storm water drains developed in the colony and mines to recharge the ground water and also check dams have been constructed at different location to harvest the rain water to improve ground water. photo's attached as <b>Annuxure-6</b>
xi.	The company shall undertake eco- development measures including community welfare measures in the project area.	Various eco- development measures including community welfare measures are being adopted for the development of the surrounding village people & area under CSR.
xii.	All recommendations made in the corporate Responsibility for Environment Protection (CREP) for cement plants shall be implemented.	All recommendations made in the corporate Responsibility for Environment Protection (CREP) for cement plants are being implemented.
	<b>B. General Conditions</b>	<b>Compliance status</b>
i.	The project authority must adhere to the stipulations made by the T.S. Pollution Control Board (TSPCB) and State Government.	The stipulations made by the T.S. Pollution Control Board (TSPCB) and State Government are being followed.
ii.	No further expansion or modification of the plant shall be carried out without prior approve of this ministry	We will not carry out any further expansion or modification of the plant without prior approval of this ministry.
iii.	At least four ambient air quality monitoring stations shall be established and one in the downward direction as well as where maximum ground level concentration of SPM, SO <sub>2</sub> and NO <sub>x</sub> are anticipated in consultation with the TSPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional office at Bangalore and APPCB once in six months.	4 Manual Ambient Air quality including Noise levels monitoring is carried out deputing MoEF recognized external by agency in core & buffer zones.  One Continuous ambient air quality monitoring station (CAAQMS) downwind installed and connected to the TSPCB/CPCB server.  and the monitoring reports are regularly submitted to MOEF & CC I.R.O at Hyderabad, CPCB RD at Bangalore and TSPCB once in six months.
iv.	Industrial wastewater shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19 <sup>th</sup> May, 1993 and 31 <sup>st</sup> December, 1993 or as amended from time to time. The treated wastewater shall be utilized for plantation purpose.	Our Plant is Dry Process unit. No effluent is generated from the manufacturing Process. Cooling water is being redirected to pump house and reusing the same into the process by mixing with fresh water.  Domestic/Sanitary effluents from the plant into septic tank followed by soak pits.  The Domestic effluents are only generated from colony which is being treated in Sewage Treatment Plant is being utilizing for plantation purpose. Reports are Enclosed as <b>Annexure-3</b>

v.	The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods. Silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environmental (Protection) Act, 1986 Rules, 1989 viz.75 dBA (day time) and 70 dBA(night time).	Overall noise levels in and around the plant area are maintained well below the prescribed standards by providing acoustic enclosures and hoods to various noise generating areas such as compressors, mills and fans.  Ambient noise levels are being monitored by MOEF recognized third party and the noise levels are below 75 dB (A) day time and 70 dB(A) night time.  Noise levels reports for the period April 2023 to Sept 2023 Enclosed as <b>Annexure-3</b>
vi.	Proper housekeeping and adequate occupational health programmes must be taken up. Occupational Health Surveillance programme shall be done on a regular basis and records maintained. The programme must include lung function and sputum analysis tests once in six months.	Good Housekeeping is being maintained at all areas of the plant. Leakage material is being recycled back in the process. Dust bins are provided at all the areas for source segregation of waste. Adequate road sweeping machines are being used for cleaning of roads.  Occupational Health Surveillance Programme is conducted on a regular basis & records maintained.
Vii.	The Project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP.	Environmental protection measures and safeguards recommended in the EIA/EMP is being complying regularly.
Viii.	A Separate environmental management cell with full-fledged laboratory facilities to carry out various management and monitoring functions shall be set up under the control of Senior Executive.	A separate environmental management cell exists with a suitable qualified environmental officer to carry out various management and monitoring functions under the control of senior executive.
ix.	As mentioned in the EIA/EMP, Rs. 2.00 Crore and Rs. 0.19 Crores earmarked towards the total cost and recurring cost/annum for implementing environmental pollution control measures shall be judiciously used to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. The funds so provided shall not be diverted for any other purposes.	Funds earmarked (capital & revenue) for environmental pollution control measures are being utilized in separate and expenditure is being regularly submitted to Ministry and its Regional Office as well as the State Government.
x.	The Regional office of this Ministry at Bangalore/Central Pollution Control Board/T.S.Pollution Control Board shall monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation should be submitted to them regularly.	Half yearly EC compliance report and monitoring data is being regularly submitted to MoEF & CC, I.R.O at Hyd, CPCB RD at Bangalore and TSPCB Regional office, Ramagundam. Recent EC Compliance report for the period of Apr 2023 to Sep-2023 submitted on 30.05.2023
xi.	The Project Authorities should inform the Regional Office as well as the ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	The project work was completed in the Year 2010 and plant is under operation since from 2010.
xii.	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the T.S. Pollution Control Board/Committee and may also	An advertisement has been published in below two local newspapers on 02.08.2007 1) Eenadu- Telugu 2) Deccan Chronical- English

be seen at website of the Ministry of Environment and Forests at <http://envfor.nic.in> this shall be advertised within seven days from the date of issue of the clearance letter at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional office.

The newspaper clippings enclosed as  
**Annexure-7**

# AIR POLLUTION CONTROL EQUIPMENTS

**1. KILN-2-BAG HOUSE**

**2. KILN-2-COOLER DCP BF**

**3. KILN-1-DPC BAGFILTER**

**4. CEMENT MILL-1 BAG HOUSE**

**5. COAL CRUSHER BAG FILTER**

**6. CEMENT MILL -2 BAG FILTER**

Air Pollution Control Equipments (APCEs) are provided for control of Stack emission & comply the prescribed standards.





## ONLINE CONTINUOUS STACK EMISSION MONITORING SYSTEM

**CEMS SPM analyzers are installed for Real time Continuous Stack Emission Monitoring.**

1. KILN-1 C-LINE

2. KILN-1-K-LINE

3. KILN-1-COOLER

4. KILN-2

5. CPP

6. KILN-2-COOLER



## ONLINE CONTINUOUS STACK EMISSION MONITORING SYSTEM

**CEMS SO<sub>2</sub>,NO<sub>X</sub> analyzers are installed for Real time Continuous Stack Emission Monitoring.**



## **CAAQMS-BASANTNAGAR PLANT**

We have Installed Two Ambient Air Quality (CAAQMS) systems in up & downward wind directions. One at Cement plant and other at Power plant. The systems are connected to SPCB and CPCB servers for Continuous online monitoring. PM10, PM2.5, SO2, NOx and CO parameters are monitored.

**CEMENT PLANT CAAQMS**



**POWER PLANT CAAQMS**



## ONLINE CONTINUOUS STACK EMISSION MONITORING SYSTEM

Weather monitoring station are provided for Real time Continuous Monitoring. Air Quality data is being transmitted online.

1. WEATHER MONITORING STATION

2. ONLINE DATA UPLOADING TO CPCB/SPCB



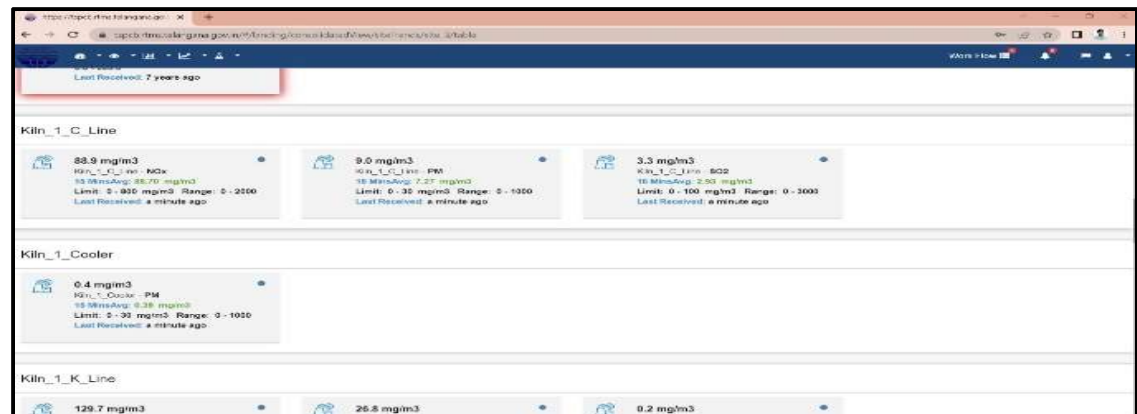
KESORAM INDUSTRIES LIMITED		
DATE : 04/05/2018		
POWER PLANT STACK EMISSION		
PARAMETER	MAIN	UNITS
SPM	25.41	mg/Nm <sup>3</sup>
SOX	431.6	mg/Nm <sup>3</sup>
NOX	173.3	mg/Nm <sup>3</sup>

Web Portal Address



SPCB : <https://tspcb.rtms.telangana.gov.in>

CPCB : <https://tspcb.rtdms.cpcb.gov.in>





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ISO 45001 : 2018

## TEST REPORT

Summary of Ambient Air Quality Analysis Report (April 2023 TO September 2023)

Parameters	PM <sub>10</sub> (µg/m <sup>3</sup> )	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m <sup>3</sup> )	NO <sub>x</sub> (µg/m <sup>3</sup> )
<b>NAAQ Standards, CPCB Dated: 18.11.2009</b>	<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>
<b>Core Zone</b>				
Near Cement Plant main gate	71.57	28.07	14.87	19
Near Mines Office	63.17	26.67	23.28	28.47
Near Working Site	65.65	22.5	26.6	20.08
Near CPP Main gate	66.80	25.75	21.58	22.52
Near Plant Boundary wall at Staff Colony	65.21	24.97	23.82	23.69
Near Plant Boundary wall at GD Nagar	65.88	24.41	24.00	22.10
Near Plant Boundary wall at Workers Colony	65.96	25.04	23.14	22.77
<b>Buffer Zone</b>				
Basanat Nagar Village	49.3	14.43	16.5	20.3
Near RamaraoPalli Village	55.7	17.27	11.67	15.57
Near Kannala Village	53.2	15.53	14.1	17.47
Near Kothapalli Village	52.77	15.63	14.03	18.17
Near Palakurthy Village	56.67	21.17	15.88	18.72
Near Takkalapalli Village	49.92	19.75	13.57	17.25

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TECHNICAL MANAGER.



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## TEST REPORT

### SUMMARY OF EFFLUENTS ANALYSIS REPORT (April 2023 TO September 2023)

#### Characteristics of Effluents - STP- Treated Outlet

Sl .No.	Period	pH	TSS	TDS	COD	BOD	Oil & Grease
	Units	--	mg/L	mg/L	mg/L	mg/L	mg/L
	Test Method	A.P.H.A 4500H+B	A.P.H.A 2540 D	A.P.H.A 2540 C	A.P.H.A 5220 B	IS:3025(P-44)	A.P.H.A 5520 B
	Tolerance limits	6.5 To 8.5	100	2100	250	100	10
1.	April 23 To September 23	7.61	29.83	850.75	62.75	19.15	<1.0

#### Summary of TPH Neutralizing pit Outlet Water (April 2023 TO September 2023)

Sl .No.	Period	pH	TSS	TDS	COD	BOD	Oil & Grease
	Units	--	mg/L	mg/L	mg/L	mg/L	mg/L
	Test Method	A.P.H.A 4500H+B	A.P.H.A 2540 D	A.P.H.A 2540 C	A.P.H.A 5220 B	IS:3025(P-44)	A.P.H.A 5520 B
	Tolerance limits	6.5 To 8.5	100	2100	250	100	10
1.	April 23 To September 23	7.85	48.75	1099.5	35.15	6.23	<1.0

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## TEST REPORT

### SUMMARY OF STACK EMISSION DATA (April 2023 TO September 2023)

CEMENT PLANT				
Description of chimney attached To	April 2023 TO September 2023		CPCB Standards	% of variation from prescribed standard with reasons
	Particulate Matter,SO <sub>2</sub> ,NO <sub>x</sub> in mg/ Nm <sup>3</sup>			
	PM		PM	
Kiln - 1 C-Line	22.5		30	Within the limits
Kiln - 1 K-Line	22.7		30	-do-
Kiln - 2	23.2		30	-do-
Cooler-1	21.3		30	-do-
Cooler-2	19.9		30	-do-
Raw Mill - 1	20.4		30	-do-
Raw Mill - 2	23.5		30	-do-
Raw Mill - 3	23.5		30	-do-
Coal Mill-1	18.7		30	-do-
Coal Mill-2	19.0		30	do-
Cement Mill - 1	19.0		30	-do-
Cement Mill - 2	16.8		30	-do-
Cement Mill - 3	21.1		30	-do-
Packing Plant-1	16.2		30	do-
Packing Plant-2	16.7		30	-do-
Packing Plant-3	17.8		30	-do-
Packing Plant-4	19.3		30	-do-
Pri Crusher-1	17.2		30	-do-
Sec Crusher-1	18.4		30	-do-
Sec Crusher-2	17.2		30	-do-
Ter Crusher-1	18.3		30	-do-
Ter Crusher-2	19.1		30	-do-
125KVA DG Set	42.7		115	do-
<b>Line</b>	<b>SO<sub>2</sub></b>		<b>SO<sub>2</sub></b>	
Kiln - 1 C-Line	14.0		100	do-
Kiln - 1 K-Line	17.8		100	do-
Kiln - 2	18.7		100	do-
125KVA DG Set	55.0		--	do-
<b>Line</b>	<b>NO<sub>x</sub></b>		<b>NO<sub>x</sub></b>	
Kiln - 1 C-Line	294.4		800	do-
Kiln - 1 K-Line	288.6		800	do-
Kiln - 2	231.6		800	do-
125KVA DG Set	79.7		--	do-



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## TEST REPORT

Summary of Surface water quality data (April 2023 TO September 2023)

S. No	Parameter	Units	Result			Limits as per IS:10500,2012	
			Takkalla palli Pond	Palakurthy Pond	Mines discharge water (mines pit) B-Block	Permissible	Acceptable
1	Taste	---	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
2	Odour	---	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
3	Color	Hazeen	3.9	4.8	3.1	5	15
4	pH@25.0°C	---	7.86	7.79	7.52	6.5-8.5	No Relaxation
5	Turbidity	NTU	3.9	3.1	2.9	1	5
6	Total Hardness as CaCO <sub>3</sub>	mg/L	291	299	252	200	600
7	Iron as Fe	mg/L	0.23	0.17	0.08	0.3	No Relaxation
8	Chloride as Cl	mg/L	139	119	111	250	1000
9	Total Dissolved Solids	mg/L	546	521	421	500	2000
10	Calcium as Ca	mg/L	63.5	63.9	53.2	75	200
11	Magnesium as Mg	mg/L	28.9	28.6	25.2	30	100
12	Copper as Cu	mg/L	<0.001	<0.001	<0.001	0.05	1.5
13	Manganese as Mn	mg/L	<0.05	<0.05	<0.05	0.1	0.3
14	Sulphate as SO <sub>4</sub>	mg/L	89.1	83.2	81.9	200	400
15	Nitrates as NO <sub>3</sub>	mg/L	8.2	8.0	7.6	45	No Relaxation
16	Fluoride as F	mg/L	0.67	0.65	0.52	1.0	1.5
17	Mercury as Hg	mg/L	<0.001	<0.001	<0.001	0.001	No Relaxation
18	Cadmium as Cd	mg/L	<0.001	<0.001	<0.001	0.003	No Relaxation
19	Selenium as Se	mg/L	<0.001	<0.001	<0.001	0.01	No Relaxation
20	Arsenic as As	mg/L	<0.001	<0.001	<0.001	BDL	0.2
21	Cyanide as CN	mg/L	<0.001	<0.001	<0.001	0.05	No Relaxation
22	Lead as Pb	mg/L	<0.001	<0.001	<0.001	0.01	No Relaxation
23	Zinc as Zn	mg/L	<0.001	<0.001	<0.001	5	15
24	Total Chromium as T-Cr	mg/L	<0.001	<0.001	<0.001	0.05	No
25	Total alkalinity as CaCO <sub>3</sub>	mg/L	152	195	312	200	600
26	Boron as B	mg/L	<0.1	<0.1	<0.1	0.5	1.0



T. Krishna

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TECHNICAL MANAGER.

# 178, Ramakrishna Nagar, Opp. IOCL, Chengicherla, Hyderabad - 500 039.

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ISO 45001 : 2018

## TEST REPORT

Summary of Ground water quality data (April 2023 TO September 2023)

S. No	Parameter	Units	Result			Limits as per IS:10500,2012	
			Palakurthy Village	Takkalla palli Village	Basanth nagar Village	Permissible	Acceptable
1	Taste	---	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
2	Odour	---	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
3	Color	Hazeen	1.1	1.3	1.0	5	15
4	pH@25.0°C	---	7.41	7.45	7.29	6.5-8.5	No Relaxation
5	Turbidity	NTU	<1.0	<1.0	<1.0	1	5
6	Total Hardness as CaCO <sub>3</sub>	mg/L	352	353	329	200	600
7	Iron as Fe	mg/L	0.07	0.05	0.06	0.3	No Relaxation
8	Chloride as Cl	mg/L	151	129	139	250	1000
9	Total Dissolved Solids	mg/L	883	796	876	500	2000
10	Calcium as Ca	mg/L	86.1	79.6	86.3	75	200
11	Magnesium as Mg	mg/L	35.2	35.4	35.4	30	100
12	Copper as Cu	mg/L	<0.001	<0.001	<0.001	0.05	1.5
13	Manganese as Mn	mg/L	<0.05	<0.05	<0.05	0.1	0.3
14	Sulphate as SO <sub>4</sub>	mg/L	94.3	96.1	96.1	200	400
15	Nitrates as NO <sub>3</sub>	mg/L	18.3	18.3	18.3	45	No Relaxation
16	Fluoride as F	mg/L	1.07	1.06	1.00	1.0	1.5
17	Mercury as Hg	mg/L	<0.001	<0.001	<0.001	0.001	No Relaxation
18	Cadmium as Cd	mg/L	<0.001	<0.001	<0.001	0.003	No Relaxation
19	Selenium as Se	mg/L	<0.001	<0.001	<0.001	0.01	No Relaxation
20	Arsenic as As	mg/L	<0.001	<0.001	<0.001	BDL	0.2
21	Cyanide as CN	mg/L	<0.001	<0.001	<0.001	0.05	No Relaxation
22	Lead as Pb	mg/L	<0.001	<0.001	<0.001	0.01	No Relaxation
23	Zinc as Zn	mg/L	<0.001	<0.001	<0.001	5	15
24	Total Chromium as T-Cr	mg/L	<0.001	<0.001	<0.001	0.05	No
25	Total alkalinity as CaCO <sub>3</sub>	mg/L	281	266	212	200	600
26	Boron as B	mg/L	<0.1	<0.1	<0.1	0.5	1.0

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**TEST REPORT**

Summary of Ground water quality data (April 2023 TO September 2023)

S. No	Parameter	Units	Result			Limits as per IS:10500,2012	
			Kothapalli Village	Ramarao palli Village	GD Nagar Village	Permissible	Acceptable
1	Taste	---	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
2	Odour	---	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
3	Color	Hazeen	1.6	1.7	1.6	5	15
4	pH@25.0°C	---	7.29	7.41	7.82	6.5-8.5	No Relaxation
5	Turbidity	NTU	<1.0	<1.0	<1.0	1	5
6	Total Hardness as CaCO <sub>3</sub>	mg/L	322	329	412	200	600
7	Iron as Fe	mg/L	0.08	0.06	0.12	0.3	No Relaxation
8	Chloride as Cl	mg/L	153	158	169	250	1000
9	Total Dissolved Solids	mg/L	812	871	923	500	2000
10	Calcium as Ca	mg/L	85.2	85.2	93.6	75	200
11	Magnesium as Mg	mg/L	35.4	37.3	42.9	30	100
12	Copper as Cu	mg/L	<0.001	<0.001	<0.001	0.05	1.5
13	Manganese as Mn	mg/L	<0.05	<0.05	<0.05	0.1	0.3
14	Sulphate as SO <sub>4</sub>	mg/L	96.1	96.1	102	200	400
15	Nitrates as NO <sub>3</sub>	mg/L	18.3	18.2	19.6	45	No Relaxation
16	Fluoride as F	mg/L	1.03	0.99	1.12	1.0	1.5
17	Mercury as Hg	mg/L	<0.001	<0.001	<0.001	0.001	No Relaxation
18	Cadmium as Cd	mg/L	<0.001	<0.001	<0.001	0.003	No Relaxation
19	Selenium as Se	mg/L	<0.001	<0.001	<0.001	0.01	No Relaxation
20	Arsenic as As	mg/L	<0.001	<0.001	<0.001	BDL	0.2
21	Cyanide as CN	mg/L	<0.001	<0.001	<0.001	0.05	No Relaxation
22	Lead as Pb	mg/L	<0.001	<0.001	<0.001	0.01	No Relaxation
23	Zinc as Zn	mg/L	<0.001	<0.001	<0.001	5	15
24	Total Chromium as T-Cr	mg/L	<0.001	<0.001	<0.001	0.05	No
25	Total alkalinity as CaCO <sub>3</sub>	mg/L	255	326	189	200	600
26	Boron as B	mg/L	<0.1	<0.1	<0.1	0.5	1.0

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Summary of Ground water quality data (April 2023 TO September 2023)

S. No	Parameter	Units	Result	Limits as per IS:10500,2012	
			Kannala Village	Permissible	Acceptable
1	Taste	---	Agreeable	Agreeable	Agreeable
2	Odour	---	Agreeable	Agreeable	Agreeable
3	Color	Hazeen	1.8	5	15
4	pH@25.0°C	---	7.46	6.5-8.5	No Relaxation
5	Turbidity	NTU	<1.0	1	5
6	Total Hardness as CaCO <sub>3</sub>	mg/L	358	200	600
7	Iron as Fe	mg/L	0.26	0.3	No Relaxation
8	Chloride as Cl	mg/L	153	250	1000
9	Total Dissolved Solids	mg/L	912	500	2000
10	Calcium as Ca	mg/L	86.1	75	200
11	Magnesium as Mg	mg/L	35.2	30	100
12	Copper as Cu	mg/L	<0.001	0.05	1.5
13	Manganese as Mn	mg/L	<0.05	0.1	0.3
14	Sulphate as SO <sub>4</sub>	mg/L	96.9	200	400
15	Nitrates as NO <sub>3</sub>	mg/L	18.2	45	No Relaxation
16	Fluoride as F	mg/L	0.85	1.0	1.5
17	Mercury as Hg	mg/L	<0.001	0.001	No Relaxation
18	Cadmium as Cd	mg/L	<0.001	0.003	No Relaxation
19	Selenium as Se	mg/L	<0.001	0.01	No Relaxation
20	Arsenic as As	mg/L	<0.001	BDL	0.2
21	Cyanide as CN	mg/L	<0.001	0.05	No Relaxation
22	Lead as Pb	mg/L	<0.001	0.01	No Relaxation
23	Zinc as Zn	mg/L	<0.001	5	15
24	Total Chromium as T-Cr	mg/L	<0.001	0.05	No
25	Total alkalinity as CaCO <sub>3</sub>	mg/L	389	200	600
26	Boron as B	mg/L	<0.1	0.5	1.0

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# MATERIAL STORAGE PRACTICES

We have provided the Covered shed and Silos for the storage of all raw materials and Finished products.

1. COAL STORAGE SHED

2. LATERITE, GYPSUM, LIME

3. FLY ASH Silo

4. CEMENT SILO

5. CLINKER STORAGE



## FUGITIVE EMISSIONS CONTROL MEASURES

We have provided the Enclosures, silo's, sheds, water sprinklers, Rain guns, Water Tanker, Water Jet ,TPS and concrete roads for control of fugitive emission in plant & Mines.

1. Dust Supression

2. Road Sweeping& TPS Vehicle

3. Water tanker

4. MUCKPILE LOADING WITH WATER

5. WATER SPRINKLING

6. WET DRILLING



a

# GREENBELT IN PLANT

Annexure-5

**Plantation At Staff Colony**



**Basantnagar Plant View**



**Plant Road**



**Plantation at CPP Water reservoir**



**Plantation at CPP**



**Plantation at Colony Residential Area**

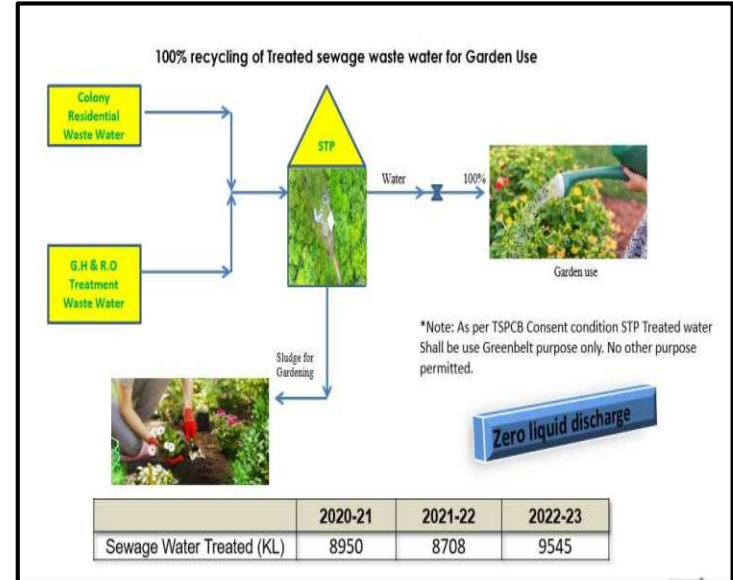


**Kesoram Deer Park**



## **AFFORESTATION *IN THE PLANT & COLONY***





TPH Water Reservoir



Mines Water Reservoir



RAIN WATER HARVESTING AT MINES AREA





**Advertisement of Environmental Clearance in the News paper**

**DECCAN Chronicle**  
The largest circulated English daily published in Andhra Pradesh

Karimnagar Thursday 2 August 2007

**KESORAM CEMENT NOTICE**

The General Public is hereby informed that M/s. Kesoram Cement, Basantnagar, Karimnagar District, have been accorded ENVIRONMENTAL CLEARANCE by Ministry of Environment & Forest, New Delhi for Expansion of Cement Plant (1.23 MTPA to 2.0 MTPA) vide letter No. F No. J - 11011/55/2006-IA II (I) Dtd. 25.07.2007 the Environmental Clearance Letter Copy is available with the State Pollution Control Board and also available on the Ministry's website [www.envfor.nic.in](http://www.envfor.nic.in). This is issued for the notice of all General Public.

Sd/-  
**L. Nagesh Gowd.**  
Factory Manager

Basantnagar  
01.08.2007.

**కేశరాండు కిరీంసగర్**

గురువారం 2 ఆగస్టు 2007 ★ ★ ★ ★ 16 పేజీలు

**కేశరాం సిమెంట్ ప్రకటన**

సాధారణ ప్రజానికానికి ఇందుమూలముగా తెలియజేయునది ఏమనగా M/s. కేశరాం సిమెంట్, బసంత్ నగర్, కరీంనగర్ జిల్లా వారికి లేఖ నెం. J-11011/55/2006-IAII(I) తేది: 25.07.2007 ద్వారా కేశరాం సిమెంట్ ప్లాంట్ నుండి సంవత్సరానికి 1.23 నుండి 2.0 మిలియన్ టన్నుల సిమెంట్ ఉత్పత్తి నిమిత్తము పర్యావరణ మరియు అడవుల మంత్రిత్వ శాఖ, న్యూఢిల్లీ నుండి ఎన్వైరాన్మెంట్ క్లియరెన్స్ ఇవ్వబడినది. ఎన్వైరాన్మెంట్ల క్లియరెన్స్ లేఖ కాపీ రాష్ట్ర కాలుష్య నియంత్రణ మండలి వద్ద లభించును. మరియు మంత్రిత్వ శాఖ యొక్క వెబ్ సైట్ [WWW.envfor.nic.in](http://WWW.envfor.nic.in). పై కూడ లభించును. సాధారణ ప్రజానికమంతటికి సమాచారం నిమిత్తం ఈ ప్రకటన జారీ చేయబడుచున్నది.

బసంత్ నగర్  
01.08.2007

Sd/-, **ఎల్.నగేశ్ గౌడ్.**  
ప్యాక్లర్ మేనేజర్, బసంత్ నగర్



**KESORAM INDUSTRIES LTD,**  
CEMENT DIVISION-UNIT BASANTNAGAR

**ప్రపంచ పర్యావరణ దినోత్సవం**  
**5<sup>th</sup> June 2023**

**Theme: "SOLUTION TO PLASTIC POLLUTION"**  
**UNDER THE CAMPAIGN # BEAT PLASTIC POLLUTION"**

**అంశం : "ప్లాస్టిక్ రహితమే కాలుష్యానికి పరిష్కారం"**



World Environment Day 2023





Trusted Technology - Solid Strength

## AW Programme on Segregation of Wet and Dry Waste and Compost food waste at Home

**కేశోరాం సిమెంట్, బసంత్ నగర్**

**తడి, పాడి చెత్తను వేరుచేద్దాం!**  
స్వచ్ఛ కాలన్ కు సహకరిద్దాం!

మీ ఇంట్లో తడి చెత్తను కొత్త బుట్టలోను... పాడి చెత్తను పాత బుట్టలోను... వేరుచేసి రోజూ మీ ఇంటి వద్దకు వచ్చే పారిశుధ్య సేవకు అందించండి.

**తడి చెత్త**

**పాడి చెత్త**

గణ వ్యర్థాలను వేరుచేసి కాలన్ పరిసరాలను పరిశుభ్రముగా ఉంచుదాం

**తడి చెత్త**

మింగివేసిన శాభాపదార్, మాంసాహార పదార్థాలు, కాయగూర, పండ్లతొక్కలు, కాఫీ, టి పాడి, పండించిన పూలు మరియు ఆకులు, మొదలైన సెంటిమెంట్ పదార్థాలు

**పాడి చెత్త**

కాగితాలు, పెప్ బాటిల్స్, అల్యూమినియం ఫాయిల్, గొజ్జ సంచులు, కాగితం కప్పలు, రబ్బర్ & ప్లాస్టిక్ బ్యాగ్స్, పాత కవర్లు, టెక్స్టైల్ & షూర్స్, పిండి పువ్వు మొదలైన తిరిగి ఉపయోగపడే పదార్థాలు

స్వచ్ఛ పరిసరాలను అభివృద్ధి చేసి అంటూ వ్యాధులను నివారించండి!

**KESORAM CEMENTS, BASANTNAGAR**  
**BIO-MEDICAL WASTE CATEGORY**

IV SETS  
SPRINGS  
GLOVES  
PLASTIC BAGS  
CATHETERS

DRESSINGS  
BANDAGE COTTON  
& LINTS  
HUMAN BODY PARTS  
EXPOSED SALIVA  
LAB ITEMS  
PLASTERS

AMULETS  
GLASS ITEMS

SHARP ITEMS  
SCALPES  
SUTURE NEEDLES  
BLADES



- Ecosystem Services**
- Reduced Soil pollution.
  - Reduced air pollution (open burning)
  - Improved soil fertility, nutrient exchanging.
  - Used manure for plants better growth.



## Awareness Programme on Rainwater Harvesting, Water Saving, Energy saving, Usage of Rooftop solar and EV Vehicles



### Healthy Life Style(Encourages to usage of millets foods and Practices organic farming in their homes



Awareness Programmes in Plant

Trusted Technology - Solid Strength

**Trainings and Awareness Programs**

1. Employee education & training
2. Training in internal and external
3. Improvement jobs
4. Implement the best practices & innovation
5. Recognition of employee involvement on innovation

Online Training

External Trainings

Monthly Review Meetings

Review of Innovation Projects



**Corporate Social Responsibility**  
**Apr 23 to September 23**

S. No	SDG	Description of CSR	Details of Expenditure & work done	Village	Rs. In Lakhs
1	SDG-4	Quality Education	School Running Expenses at Kesoram Cements,Basantnagar	Basantnagar	60.0
2	SDG -3	Support to Health and Medical Services	Medical Expenses at Dispensary	Basantnagar	5.84
3	SDG -6	Support to Providing Drinking Water	Free summer water camps - 4 centres	Basantnagar	1.86
4	SDG -15	Support to Biodiversity Conservation	Deer park maintenance	KC, Basantnagar	16.24
5	SDG -9	Support to Infrastructure	Painting to temples, repair & Jungle cutting- White wash	Surrounding Villages	0.65
6	SDG -6	Supporting for drinking water	Providing Drinking Water to Employees and Villagers	Basantnagar	10.24
7	SDG-13	Support to Biodiversity Conservation	Distribution of Trees Saplings	Basantnagar	0.10
8	SDG -9	Support to Sanitation	Construction of Toilets	GD Nagr	0.24
				<b>Total</b>	<b>95.17</b>

