



JSW Cement Ltd

P.O. Vidyanagar, Tq : Sandur,
Dist. Ballari - 583275 Karnataka, India
Phone : 08395-241001
Fax : 08395-241003
Website : www.jsw.in

CIN - U26957MH2006PLC160839

To,
Regional Officer
Karnataka State Pollution Control Board,
Sy No. 597P, Ward No. 25,
4th Main Road, Near Dr. Vishnuvardhana Park,
Kuvempunagar, Bellary – 583104.

Date: 27/09/2022

Dear Sir,

Sub: - Submission of Environment Statement in Form-V for 4.0 MTPA cement grinding unit of JSW Cement Limited, reg.

Ref: - Combined Consent Order No AW-329792, dated 16.02.2022.

Environmental Clearance No: IA-J-11011/540/2017-IA-II(I) dated 01.02.2018

With reference to the above subject, please find enclosed here with the Environment Statement in Form-V for the financial year 2021-2022 for 4.0 MTPA cement grinding unit of M/s JSW Cement Limited.

Thanking You,

Yours Faithfully,
For JSW Cement Ltd


Rajkumar Dhempe
Plant Head

Copy to:
Member Secretary,
Karnataka State Pollution Control Board
#49, 4th & 5th floor
Parisara Bhavan, Church Street
BENGALURU-560001



Part of O.P. Jindal Group

Regd. Office: JSW Center,
Bandra Kurla Complex,
Bandra (East), Mumbai 400051
Phone: 022-42461000
Fax : 022-26502001

ENVIRONMENT STATEMENT REPORT
(Form-V)

[Year 2021 - 2022]

REPORT BY



(JSW Cement Ltd, Vijayanagar Works)
Cement Grinding Unit
Vidyanagar (P.O) Toranagallu (V), Sandur (Tq)
Bellary - 583275

INTRODUCTION

Man is a part of nature, and not separate or independent; at the same time, man is unique in the influence he has over nature. Man derives all his food, clothing, shelter, and other amenities from nature. In that process, if he does not take care to protect and cherish nature, but decrease or destroys, he will find that his own life and that of his children is in jeopardy.

The environment, a word as it stands today is not simple; it is not a fashionable word, but has got established definitions incorporates limitless complexities, bear definite power to put everybody under a flood of worries and pushes us to plan for betterment with minimum problems. The environment is now catching for all, the industry, the government, the people. Hence, it is joint responsibility to protect, preserve the environment and avoid the perishing the natural treasures. At this critical junction of time and efforts, the Indian industry has fulfilled its commitment in maintaining the environmental integrity.

JSW Cement Limited considers itself responsible for Environment and Society. We are committed to emission reduction, climate protection, effective energy management, responsible use of resources and its conservation keeping in mind that **“Today’s Need – Future of Our Children”**.

The next few pages of this Environment Statement Report (ESR) of JSW Cement Limited is based on actual data and verified record, will present a picture of more optimism for environmental care than ever before.

JSW Cement Ltd: is the new diversification foray of JSW Group, a part of US \$ 14 billion Group, has grown into various core economic sectors – Steel, Energy, Cement, Infrastructure, Paints and IT. The group has plants located in various parts of the world.

JSW group is fast adding capacity in steel and power manufacturing. As a result, large quantity of slag and fly ash is being generated, disposal of which caused serious problem. In order to use both these waste materials i.e. slag and fly ash, cement manufacturing is one of the best options. Slag can be used as much as 50 - 70% of clinker in cement manufacturing while fly ash is limited to be used maximum up to 35%, usually restricted to 30%.

JSW Cement's first plant was set up at Vijayanagar, District Bellary in Karnataka with a capacity of 0.60 million tonnes per annum in 2008, enhanced cement plant 3.60 MTPA in the year 2017 and again enhanced cement plant 4.0 MTPA in the year 2019. The plant uses the latest German Technology supplied by M/s KHD Humbolt Wedag. JSW Cement is a slag based blended cement, manufactured by using granulated blast furnace slag from the Group's steel plant and manufacturing Composite Cement by using fly ash from the Group's energy plant, saving valuable natural resources. This is a giant step by the company towards providing cement that is strong, durable and at the same time eco-friendly.

Besides producing Portland Slag Cement (PSC), the company also manufactures Ground Granulated Blast Furnace Slag (GGBS) and Composite Cement. GGBS is preferred by almost all concrete manufacturers across South India as an additive material for cement for better quality concrete. In order to achieve consistency in product quality, we have for the first time in the world adopted the technology of grinding both raw materials as well as cement by using Combi Flex Roller Press in finished mode with dynamic separator. This facility enables us to produce and supply much finer and uniform quality cement. The company has pioneered a modern plant for the first time in the world that uses Combi finish mode Roller Press Circuit for grinding and manufacturing both PSC and GGBS.

The slag cement and composite cement not only preserves the natural resources but also helps in improving the Durability of the Concrete Structures. Use of Slag Cement to produce Concrete can significantly improve durability of the concrete in several ways and consequently extend the life of concrete structures. During the life of the structure, the compressive strength of Slag Cement significantly increases well beyond the 28 days

Details of Pollution Control Measures installed at various location (Annexure-4)

S. No.	Location of PCM	PCM
1	Vertical Roller Mill	Bag House
2	Roller Press 1 & 2	Bag House
3	Roller Press 3 & 4	Bag House
4	Clinker Silo	Bag Filter
5	Cement Silo (5 no's)	Bag Filter
6	Fly ash Silo	Bag Filter
7	Packing House	Bag Filter
8	All transferring points of raw material handling and product.	Bag Filter
9	Sewage treatment plant for domestic sewage	Sewage treatment plant (60 KLD)
10	Green belt development in the premises	Green belt development

Raw materials are being stored covered yard (Annexure-5)



Conveyor belts are fully covered and Installed bag filters at all transfer points (Annexure-6)

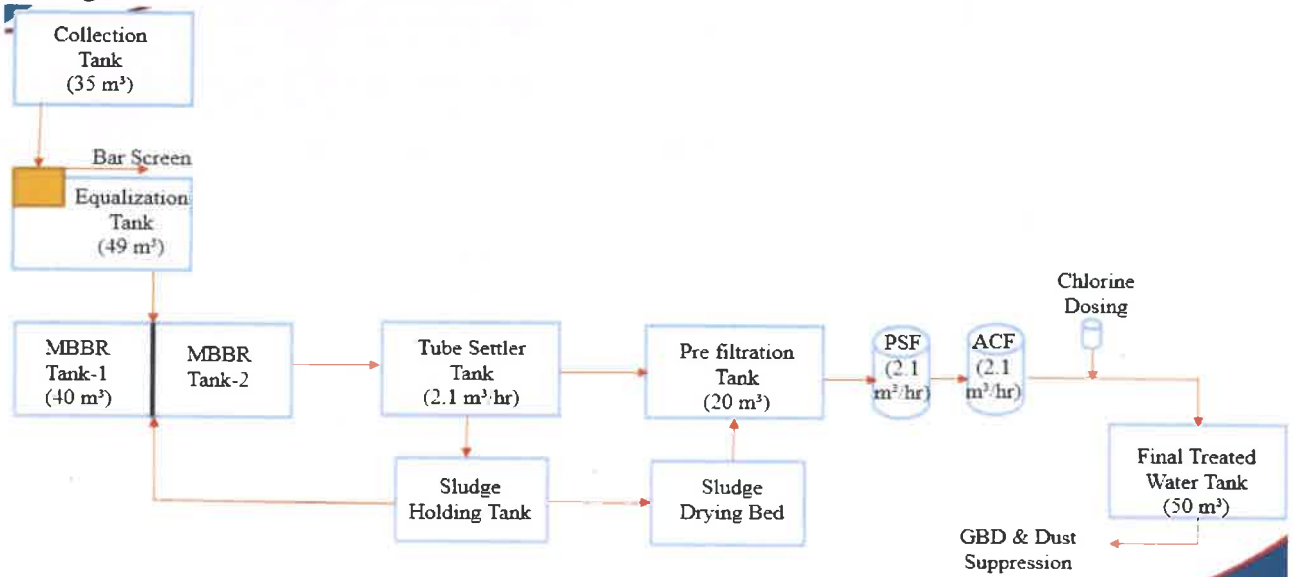




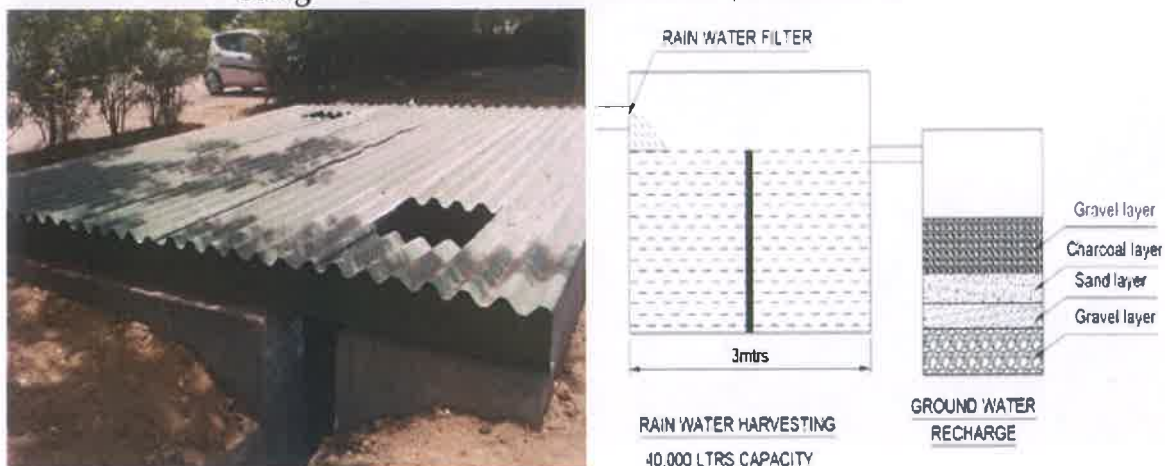
Water sprinkling for dust suppression (Annexure-7)



Sewage Treatment Plant (Annexure-8)



Rainwater harvesting Tank for water conservation (Annexure-9)



Green belt development (Annexure-10)

Year wise plantation at Plantation

S.No.	Year	No. of Shrubs Plantation	No. of Trees Plantation	Lawn area in Sqmt
1	2009-10	500	500	-
2	2010-11	1000	1000	-
3	2011-12	2000	1000	-
4	2012-13	2000	1000	-
5	2013-14	2500	1200	-
6	2014-15	1500	1000	-
7	2015-16	1500	300	-
8	2016-17	1500	220	-
9	2017-18	6750	326	637
10	2018-19	7850	5297	2030
11	2019-20	4233	1248	1080
12	2020-21	3768	2048	300
12	2021-22	4685	4280	00
	Total	39786	19419	4047

Total area: 150 acres.

Total area of Green Belt Development: 45 acres (Until jul 2021)

Types of Species planted: Tecomo goudichoudi , Nerium pink oberoy, Tabernamopntana Single, Cizelpenia, Alstonia, Pheltophorum, Neem, Samanea Saman, Ficus Regenald, Areca Plam, Conocarpus, Tacoma stans, Nerium oleander, Tabibia Rosea, Gulimor, Cardia, Banumia, Ficus banjamine, Tree Jasmine, Raintree, and Teak.



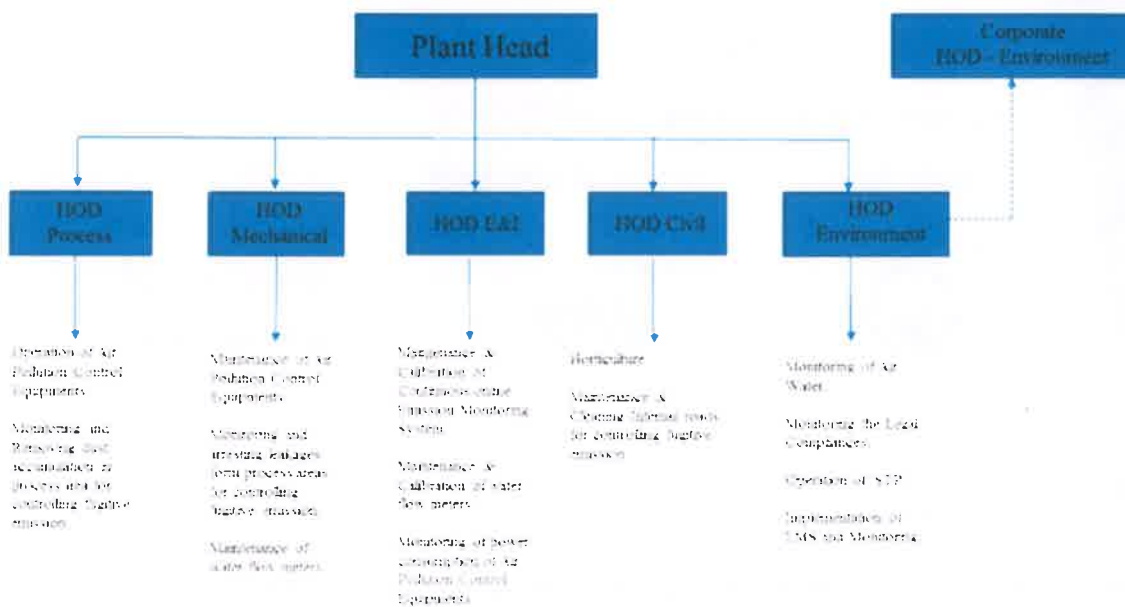




Online Continuous Emission Monitoring System and data is displayed near main gate (Annexure-11)



Details of Environmental Cell



Environment Management System ISO 14001:2015 (Anexure-11)



CERTIFICATE OF APPROVAL

Issued by Indian Register Quality Systems
(A Division of IRCLASS Systems and Solutions Private Limited)

This is to certify that the Environmental Management Systems of

Organisation: JSW Cement Limited

Address: Vijayanagar Works:
Vidayanagar (P.O),
Toranagallu (V), Sandur (Tq),
Bellary, Karnataka - 583 275

has been assessed and found conforming to the following requirement

Standard: ISO 14001:2015

Scope: Manufacturing of Portland Slag Cement (PSC), Ground Granulated Blast Furnace Slag (GGBS), Ordinary Portland Cement (OPC), Composite Cement (CC), Dry Mix Mortar (DM) & Screen Slag

Certificate No.: IRQS/220300582

Initial Certificate Date : 21/05/2013

Current Date of Granting : 04/05/2022

Expiry Date : 03/05/2025



Indian Register Quality Systems



Shashi Nath Mishra
Head IRQS

This approval is subject to continued satisfactory maintenance of the Environmental Management Systems of the organization to the above standard which will be monitored by IRQS. The use of the Accreditation Mark indicates accreditation with respect to activities covered by the certificate with accreditation no. 0371. Condition Overleaf

CSA/IRQS/ENV/MS/IN/01

Head Office: 52A, Adi Shankaracharya Marg, Opp. Powai Lake, Powai, Mumbai - 400 072, India.

Corporate Environment Policy

JSW Cement Ltd. (JSWCL) is committed to meeting the needs of customers and other stakeholders at large in an environmentally sound manner, through continuous improvement in environmental performance in all its activities. Management at all levels, jointly with employees, is responsible and will be held accountable for company's environmental performance.

Accordingly, JSWCL aims to:

Protect the environment and prevent pollution through implementing best available technologies and practices.

Ensure safety of its products and operations for the environment by using standards of environmental safety, which are scientifically sustainable and commonly acceptable.

Develop, introduce and maintain environmental management systems across the company to meet the company standards as well as statutory requirements relating to environment and verify compliance with these standards through regular auditing.

Assess environmental impact of all its activities and set continual improvement objectives and targets and review these periodically to ensure that these are being met at the individual unit and corporate level.

Reduce waste, conserve energy and explore opportunities for reuse and recycle.

Optimum utilization of industrial waste as alternative raw materials and fuel to conserve natural resources

Encourage efficient use of natural resources including energy, water and utilities, fuels, raw materials and food.

Promote use of renewable energy

Be a water positive unit by adopting rainwater harvesting in and around the facilities

Integrate the consideration of environmental concerns and impacts at the design, planning and operational stages of our activities.

Develop and maintain procedures/ processes to bring into focus any infringement/ deviation/ violation of the environmental or forest norms/ conditions to the Board of Directors and stakeholders at large

Involve all employees in the implementation of this Policy and provide appropriate training. Provide for dissemination of information to employees on environmental objectives and performance through suitable communication networks.

Encourage suppliers & service providers to develop and employ environmentally superior processes and ingredients and co-operate with other members of the supply chain to improve overall environmental performance.

Work in partnership with external bodies and Government agencies to promote environmental care, increase understanding of environmental issues and disseminate good practices.

CAPITAL COST INVESTMENT ON POLLUTION CONTROL MEASURES UP TO 31st March 2020					
Sl. No	Description	Qty	Unit Rate	Total in Lakhs	Total in Crores
Air Pollution control measures in RP mill area					
a	Bag House RP mill area	4	19679100	78716400	7.87
b	Bag filter (KID)	2	7690400	15380800	1.54
c	Bag filter (Rieco)	1	5200000	5200000	0.52
d	Beumer	1	500000	500000	0.05
e	Silo extraction & packing plant	1	12012000	12012000	1.20
f	On line Stack dust monitor system	2	451350	902700	0.09
Total Cost					11.27
Air Pollution control measures in VRM area					
a	VRM Bag house cost	1	38616440	38616440	3.86
b	Packing plant bag filters CIMPPB1024	4	1160078	4640312	0.46
c	Reject building bag filter	2	920114	1840228	0.18
d	Feed group Bag filter	5	2735902	13679510	1.37
e	Bag filter transfer point	2	547070	1094140	0.11
f	On line Stack dust monitor system	1	1001596	1001596	0.10
Total Cost					6.09
Expenditure on belt covering, material storage sheds (fugitive emission control)					
a	CSP Sheds (Tones)	265	66000	17490000	1.75
b	Gypsum Sheds (Tones)	550	66000	36300000	3.63
c	Belt Conveyor shed (Tones)	620	66000	40920000	4.09
Total Cost					9.47
STP (Sewage Treatment Plant) 60 KID			2068776	2068776	0.21
Rain water harvesting			500000	500000	0.05
Paving /concreting of internal roads (fugitive emission control measures)			41000000	41000000	4.10
Environment monitoring equipment's			552000	552000	0.06
Green belt development			4500000	4500000	0.45
Total Cost					4.86
Grand Total Cost on Environment					31.69

RECURRING COST INVESTMENT ON POLLUTION CONTROL MEASURES FROM APRIL-2021 TO March-2022		
Sl. No	Description	Amount in Lakhs
1	Afforestation	13.5
2	Environment Monitoring	13.9
General Environment Management		
3	Bag Filter & Bag House Maintenance	54.0
4	STP Operation & Maintenance	6.0
5	STP Power Consumption	4.6
6	Environmental Awareness	2.3
7	Water Tanker for Sprinkling	14.0
Total		1099.8
Grand Total		1127.2

World Environment Day Celebration -2022 JSW

JSW Cement Limited, VJNR Works

We are reviving our



JSWCL always advocate Green Environment and Preservation of nature, everyone must be aware that the technology used in our process also supports green environment. JSWCL promoters of Green India; our process units are well Equipped with latest technology equipments that consumes less energy and water. And also Using by-products as raw materials preserving the Nature, Mineral resources. Producing less CO2 Emission,



World Environment Day:

World Environment Day is an opportunity for all of us to get involved in a move which is critical for our shared future and work in a co-ordinated manner to empower all of us to play an active role in protecting our environment.

Theme of World Environment Day 2022 "Only One Earth"

Why Environment Day is celebrated ?

It is opportunity to share your ideas and activities for making our world cleaner, greener, and brighter.

Talking about the environment only on this day and forget about it for the rest of the year would not help. We need to be aware and strive to make changes in our daily activities. No matter how big or small your action may be every input counts, which in turn will help us in saving our world from deteriorating further from

Pollution

Environmental degradation

Resource waste



JSWCL have organized all the events from 15th May 2022 to 30th May 2022 inside the plant.

June 8th 2022 JSW Cement Limited Celebrated World Environment Day along with Employees & Associate Employees to create awareness among surroundings regarding Environment Protection.

The agenda for the day was:

**LOW CARBON EMISSIONS +
HIGH QUALITY PRODUCTS
= JSW CEMENT**

In 2021, the net scope of 1 CO₂ emission for JSW Cement was 276 kg CO₂/tonne of cement, which is the lowest in the cement industry.



JSW Cement
World's Most Eco-Friendly
Cement Company



Welcoming Senior Environment Officer KSPCB, Bellary as Chief Guest, Plant Head JSWCL-VJNR Works, Environment Head JSWCL-VJNR Works



Program Started by Watering the Plant





Distribution of Prizes for Winners in Events



**CONSERVING RESOURCES
TO CREATE
A BETTER FUTURE.**

Our commitment to the CLIMATE GROUP
helps businesses achieve a BETTER
FUTURE. And JSWCO will help you join the
new steps and conserve resources for
the future.

JSW Cement
100% Green
100% Quality
100% Integrity

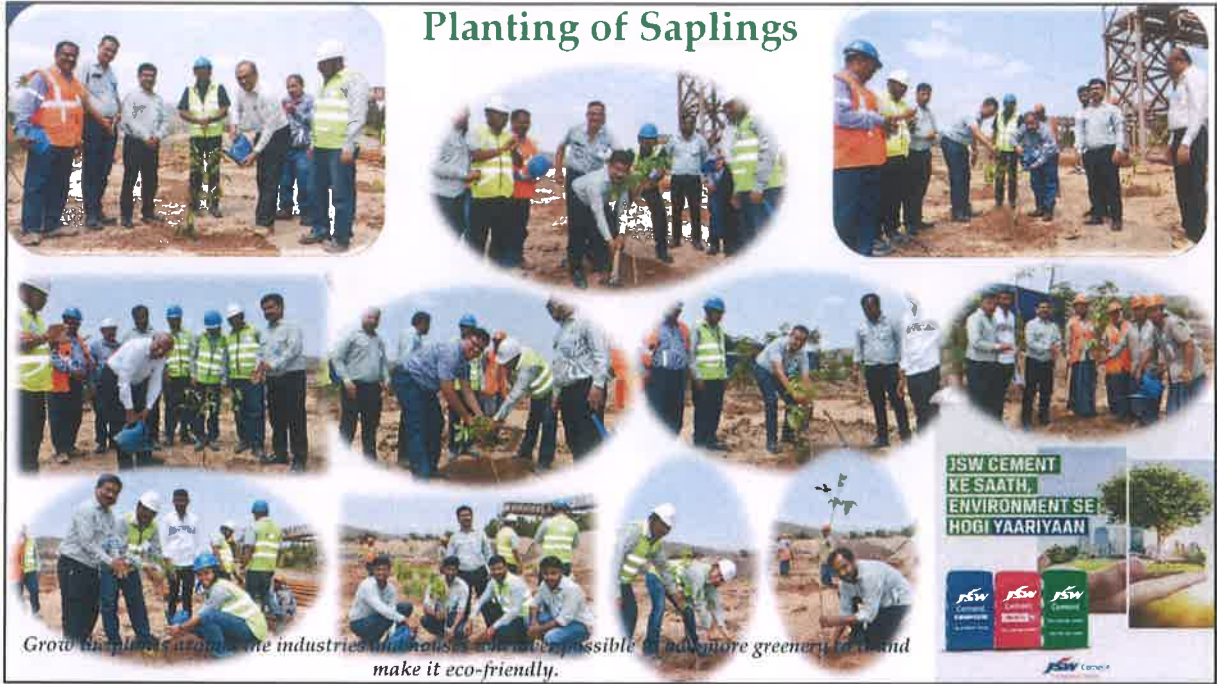
Encourage ideas – have contest to seek ideas from employees that will lead to a cleaner, leaner organization

**THE MOST EFFECTIVE WAY TO PROVE
YOUR CONCERN FOR THE ENVIRONMENT IS TO UTILIZE
PORTLAND SLAG CEMENT FOR YOUR IDEAL HOME.**

JSW Cement
100% Green
100% Quality
100% Integrity

Do Something Wonderful, people may imitate or awarded

Planting of Saplings



Distribution of Saplings

