CK BIRLA GROUP | ORIENT CEMENT

Through Courier

Ref:OCL/ENV/Sr.VP-(WORKS)/21-22/ 420 **Date: 12/08/2021**

To,
Member Secretary,
Karnataka State Pollution Control Board
#49, 4th & 5th floor
Parisara Bhavan, Church Street
Bengaluru-560001

Dear Sir,

Sub: - **Environment Statement Report (Form-V) of Plant & Mines for the financial year 2020-2021: -Reg**

Ref-1: - GOI Notification No. G.S.R. 329(E) Dt.13.03.1992 & G.S.R.386 (E) Dt.28.04.93 of MOEF, New Delhi

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With reference to the above cited subject and vide reference- 1, **M/s Orient cement Ltd,** Chittapur, is here by submitting the **Environmental Statement/Audit Report-Form V** of **Captive Limestone Mines & Cement Plant** for the financial period **1st April 2020 to 31st March 2021.** Kindly find the enclosed statement report for your perusals & acknowledge the receipt of the same.

Thanking You,
Yours Faithfully,
For Orient Cement Ltd

Satyabrata Sharma
Sr. Vice President – Works & Unit Head

Copy to:

1. Additional Principal Chief Conservator of Forests (C),
   Ministry of Environment & Forest, Govt. of India
   Regional office (Southern zone)
   Kendriya Sedan, IV th Floor, E & F Wings,
   17th Main Road, II Block, Koramangala, Bangalore-560034
2. Environmental officer,
   Karnataka State Pollution Control Board,
   Plot no 12/2,SY. No.19/P Mansafdar layout
   MG Road ,Santraswadi , Kalaburagi- 585 101.

O/c - Environment Dept.

ENVIRONMENTAL STATEMENT REPORT

FOR

PLANT
(FORM-V)

[YEAR 2020 - 2021]

REPORT BY

(Orient Cement Ltd.)

Captive Limestone, Clinkerisation,

Cement Unit & Captive Power Plant

Itga (V), Chittapur (Tq)
Kalaburagi (Gulbarga) - 585292

CK BIRLA GROUP

ENVIRONMENTAL STATEMENT REPORT

(Form-V)

[Year 2020 - 2021]

REPORT BY

ORIENT CEMENT

(Orient Cement Ltd.)
Captive Limestone, Clinkerisation,
Cement Unit & Captive Power Plant
Itga (V), Chittapur (Tq)
Kalaburagi (Gulbarga) - 585211

CONTENTS

Prologue

Orient Cement is a Green Field project by CK Birla Group and EHS policy reflects each & every section in the organization. Our main vision is to conserve the Environment through new technologies, new initiatives.

At National Level, great emphasis is being laid on maintaining environmental quality, particularly in the regions where large-scale developmental programs are being undertaken. Orient Cement has adopted corporate policy along with EHS policy, for conserving the Sustainable environment and its development.

Company aspires to exceed market expectations across all sustainability issues and go beyond legal compliance to proactively reduce our environmental impacts. Our goals are to reduce our overall carbon footprint by embedding Environmental controls and practices into the daily management of the firm and thereby encouraging positive behavior from our staff to achieve a greener culture.

In order to comply with Environmental Protection Act and Environmental Preservation and Sustainable Development, Orient Cement has prepared the Environmental Statement Report; this report is furnished in Form-V & along with the data for Environmental components like Air, Water, & Noise for the period of **April-2020 to March-2021**.

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 perishing the natural treasures. At this critical junction of time and efforts, the Indian industry has fulfilled its commitment in maintaining the environmental integrity.

Orient 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 Orient Cement Limited is based on actual data and verified record, will present a picture of more optimism for environmental care than ever before.

Orient Cement Ltd: is situated at Itga Village, Chittapur Taluk, Gulbarga District: which is about 50 Km from Gulbarga. It started its commercial operation in the year 2015. Presently factory is operating with one Kiln of capacity 6000 TPD & 50MW Power Plant. The Company is manufacturing Ordinary Portland Cement (OPC) & Pozzolana Portland Cement (PPC).

M/s Orient Cement Ltd is operating lime stone mine at Itga (V), Chittapur Taluk and Gulbarga District as captive mines for their Cement manufacturing at factory, which is about 02 Km from Mines. This

mine is being operated using mechanized open cast method with heavy equipment like hydraulic excavators, dozers, and dumpers.

OCL Chittapur is certified with Quality (ISO 9001), Environment 14001 and operational health and safety (OHSAS 18001) certification from BSI. The new integrated cement manufacturing unit at Chittapur is equipped with new state of the art technology and latest energy- efficient equipment.

Cement manufacturing contributes significantly to the Air pollution level only in the vicinity of the works as large quantity of pulverized materials is handled at each stage of manufacturing that is from crushing of Raw material to final packing of cement resulting emission of dust leading to Air pollution. This is due to very nature of cement manufacturing.

Apart from dust, combustion product and coal used in the kiln to burn Raw materials give rise to formation of SOx and NOx. The Sulphur content of Coal would vary from source to source. However, the alkaline nature of Raw materials leads to direct absorption of SOx.

The dust emitted from various machines is controlled by providing hi-tech air pollution control equipments such as Electrostatic precipitators and bag house. The emission sources in the cement plant are mainly process dust emission and fugitive dust emissions.

Water Pollution is virtually absent in the cement plant as no liquid effluents are seriously involved & CPP liquid effluents is treated used in dust suppression. The water is used for cooling the machines/parts of the machines. A WTP – Cooling Water Tower is being maintained for the circulation of water for the entire plant. The major area of domestic water consumption inside the plant is for drinking, toilet, for canteen use & Colony.

The policy for the abatement of pollution by the government of India provides for submission of environment statement by all the industries. Environmental Statement is therefore an output of Environmental Audit.

So an effort has been made in this report to explain Environmental Statement for the financial year 2019-2020 ended 31st March 2020 as per Government of India notification GSR 329 (E), dated 13th March 1992 and amendment to Environmental (Protection) Rules 1986 and subsequent amendment there on.

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ORIENT CEMENT LIMITED

CORPORATE ENVIRONMENT, HEALTH & SAFETY POLICY

Our Commitment - At Orient Cement Limited, our priority towards Environmental Protection, ensuring Health & Safety of Employees, Stakeholders, Contractors, Visitors, Associates, and community by way of:

- ✓ Ensuring Compliances to all applicable Legal & Statutory, Social, and other requirements.
- ✓ Improvement in Environmental performance and resource efficiency.
- ✓ Reviewing of Objectives, Targets for continual improvements towards Environment, Workplace, Health and Safety.
- ✓ Providing Safe workplace and technology for efficient use of natural resources, energy consumptions, promoting waste to energy and recycling wastes for circular economy.
- ✓ Engaging & Training Human capital to enhance their skills and augment resources for effective EHS performance.
- ✓ Continual measures for prevention of occupational injuries and Health Hazards.
- ✓ Pollution control measures for protecting clean and green environment.

Pandey

S K PANDEY

PRESIDENT MANUFACTURING

1st Apr'21

CK BIRLA GROUP

ORIENT CEMENT

ORIENT CEMENT LIMITED

CORPORATE POLICY ON CARBON FOOTPRINT REDUCTION

Orient Cement Limited committed towards climate change, explore, adoption of technologies and input processing materials which reduce carbon footprint,

- ✓ Identify and implement Low carbon technology and processes across all the Plants.
- ✓ Measure and Monitor Carbon footprint numbers and new plans identify, plan and to reduce future Carbon footprint numbers.
- ✓ Adopt aggressive abatement actions to reduce life cycle footprint and drive growth through best practices and innovation.
- ✓ Identify and implement on continuous sustainability projects.
- ✓ Awareness, knowledge sharing of best practices towards reduction of impact of climate change and adherence to Global warming temperature below $2^{0}C$.

S K PANDEY

PRESIDENT MANUFACTURING

1st Apr'21

CK BIRLA GROUP

ORIENT CEMENT

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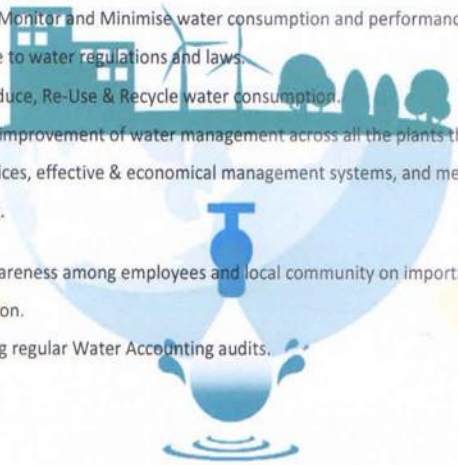
CORPORATE WATER MANAGEMENT POLICY

Orient Cement Limited believes that water is the root of every life on earth and so providing good quality water on sustainable basis for improvement of the Health & safety of employees, stakeholders and ecosystem is our ethical responsibility.

We committed to:

- Measure, Monitor and Minimise water consumption and performance of operations.
- Adherence to water regulations and laws.
- Follow Reduce, Re-Use & Recycle water consumption.
- Continual improvement of water management across all the plants through adoption of best practices, effective & economical management systems, and methods of Rain harvesting.
- Create awareness among employees and local community on importance of water conservation.
- Conducting regular Water Accounting audits.



Pandey

S K PANDEY

PRESIDENT MANUFACTURING

1st Apr'21

ENVIRONMENTAL STATEMENT REPORT

[FORM-V]
(See rule 14)

PART-A

Name and address of the owner/ Occupier of the industry	:	Satyabrata Sharma Sr. Vice President - Works Itga (V), Chittapur (Tq) Gulbarga - 585211
Operation process	:	Production of Cement
i. Industry category: Primary-(STC code) Secondary-(STC code)	:	Red category

ii. Production category-units

Cement plant	:	2.0 MTPA of Clinker
	:	3.0 MTPA of Cement
Captive Power Plant	:	50 MW

iii. Year of establishment

Cement plant	:	Sept 2015
Captive Power Plant	:	Feb 2016

iv. Date of last environmental statement submitted: 05/09/2020 for the year (2019-2020)

Postal Address

1) Registered Office	:	Orient Cement Ltd. 5-9-22/57/D G.P Birla Center 2nd & 3rd floor Adrash Nagar, Telangana Hyderabad - 500063
2) Factory	:	Orient Cement Ltd. Itga (V), Chittapur (Tq) Gulbarga - 585292 Phone: 08474-236716 Fax: 08474-236716

PART-B

Water Reservoir at Plant (Water from Kagina River & Natural water due to mining operations) is the major source of water for this factory. Due to moderate rainfall in this region, there is always drastic variation in the yield of water from these sources and almost this area is suffering from water shortage. In this view company is also operating a Sewage Treatment Plant & Effluent Treatment Plant to treat the entire wastewater of the factory and colony, so that it can be recycled and reused for cooling the machines, gardening and for abatement of pollution in the area.

The water consumption for the year **2020-2021** is shown in the table given below and the consumption of water is measured with the help of water meters which are installed at different points of sources. Water consumption readings are being sent to the State Pollution Control Board in the monthly return.

(i) Water Consumption (m^3/day):

Being a complete dry process cement manufacturing plant does not require any process water. Water consumption in the plant for cooling, boiler feed, gardening etc is as follows.

Sl.No	Description	During Previous Financial Year 2019-20 in (m^3/day)	During Current Financial Year (2020-2021) (m^3/day)
	Water consumption in m^3 / d or KLD	958.69	2011.83
1.	a) Process/Cooling	611.707	1765.845
	b) Domestic/Gardening	346.695	245.993

Note: OCL is permitted to withdraw water from river Kagina at the rate of 5.56 MLD, the agreement had in between M/s Orient cement ltd. and KNNL , the validity is 18.03.2023

Name of products	Process water consumption per unit of products output	
	During the Previous financial year (2019-2020)	During the current financial year (2020-2021)
Cement	0.065 (KL/Ton)	0.030(KL/Ton)
Power	0.29 (KL/MWH)	0.27 (KL/MWH)

(ii) Raw material consumption per ton of product

Name of raw materials	Name of products	Consumption of raw material per unit of (Clinker) output	
		During the Previous financial year (2019-20)	During the current financial year (2020-2021)
Lime Stone	Clinker	1.414	1.422
Laterite		0.073	0.029
Bauxite		0.059	0.066
Coal		0.030	0.112

Name of raw materials	Name of products	Consumption of raw material per unit of (Cement) output	
		During the Previous financial year (2019-2020)	During the current financial year (2020-2021)
Lime Stone	Cement (OPC & PPC)	1.15	1.176
Laterite Iron & Silica		0.06	0.042
Bauxite		0.04	0.048
Coal		0.02	0.041
Petcoke		0.05	0.044
Clinker		0.81	0.821
Fly Ash		0.14	0.161
Gypsum		0.03	0.031

Name of raw materials	Name of products	Consumption of raw material per unit of (Power) output	
		During the Previous financial year (2019-2020)	During the current financial year (2020-2021)
Coal	Power	0.9682 MT/MWh	0.97 MT/MWh

PART-C

The impact of the cement plant pollution on the environment is limited to its immediate surrounding areas. In reality dust pollution is the only environmental problem in & around the plant. Although the dust produced while manufacturing of cement is nontoxic, nonflammable, and non-corrosive. It does constitute a nuisance to a little extent. So, the company has adopted several technological measures to completely avoid the dust emission at the source itself.

Water pollution is virtually absent as no liquid effluent are seriously involved. The water here is used for cooling the machines/parts of the machine. A WTP – Cooling Tower is being maintained for the circulation of water for the entire plant. The major area of domestic water consumption inside the plant is for domestic (Drinking, Toilet, Colony and for Canteen use).

The company is monitoring the dust level concentration at all the emission sources by batch sampling technique. The quantity of pollutants discharged is calculated at an average emission level taken from monthly stack monitoring reports.

Pollution discharged to environment/unit of output : (Parameter as specified in the consent issued).

	Pollutants	Quantity of pollutants discharged (Mass/day))	Concentration of pollutants in discharge (Mass/Volume)	Percentage of variation from prescribed standards with reasons
a) WATER: -				
	Outlet effluent of sewage treatment plant	116.30 KL/day	----	----
1.	pH		7.5 mg/L	Within Standard
2.	BOD 3 days at 27°C		6.2 mg/L	Within Standard
3.	COD		9.9 mg/L	Within Standard
4.	Ammonical Nitrogen		0.1 mg/L	Within Standard
5.	Total Nitrogen		3.6 mg/L	Within Standard
6.	Phosphate		0.1 mg/L	Within Standard
7.	Fecal Coliforms		5.2 mg/L	Within Standard
b) AMBIENT AIR:-				
1.	Near Main Gate	PM10	62.15 µg/Nm³	Within Standard
		PM2.5	24.35 µg/Nm³	Within Standard
		SO2	11.92 µg/Nm³	Within Standard
		NOx	11.35 µg/Nm³	Within Standard
		CO	0.43 mg/Nm³	Within Standard
2.	Near Coal Yard	PM10	62.53 µg/Nm³	Within Standard
		PM2.5	25.59 µg/Nm³	Within Standard
		SO2	12.08 µg/Nm³	Within Standard
		NOx	11.08 µg/Nm³	Within Standard
		CO	0.43 mg/Nm³	Within Standard
3.	Near Dispatch Gate	PM10	62.08 µg/Nm³	Within Standard
		PM2.5	22.91 µg/Nm³	Within Standard
		SO2	12.54 µg/Nm³	Within Standard
		NOx	11.78 µg/Nm³	Within Standard
		CO	0.45 mg/Nm³	Within Standard

4.	Near CPP plant	PM10	61.72 µg/Nm³	Within Standard
		PM2.5	24.71 µg/Nm³	Within Standard
		SO2	11.97 µg/Nm³	Within Standard
		NOx	11.32 µg/Nm³	Within Standard
		CO	0.45 mg/Nm³	Within Standard

*** The value represents arithmetic average of 12 months for the financial year 2020-2021.**

Stack Gas Quality for Particulate Matter

CEMENT PLANT & CPP:

S.No	POLLUTANTS	QUANTITY OF POLLUTANTS DISCHARGED (m3/H)-Flow	CONCENTRATIONS OF POLLUTANTS IN DISCHARGE (Mass/Vol.) (mg/Nm3)	PERCENTAGE OF VARIATION FROM PRESCRIBED STANDARDS WITH REASONS
1.	Crusher	34616.53	15.30	Within Standards
2.	Kiln/Raw mill	423353.23	22.08	
3.	Coal mill	94024.04	17.42	
4.	Cement mill	137151.85	20.35	
5.	Packing plant	11945.03	17.56	
6.	Clinker cooler	289435.48	17.47	
7.	CPP	136844.22	37.07	

*** The value represents arithmetic average of 12 months for the financial year 2020-21**

PART-D

Hazardous Wastes

[As specified under Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, **2008 as Amended]**

Hazardous waste Generation	**Total Quantity MT/KL/No's**	
	During Previous Financial Year 2019-2020	**During Current Financial Year 2020-2021**
Waste oil / used oil	7.18KL (Reutilized for internal machineries)	7.96KL (Reutilized for internal machineries)
Used Batteries	For the period Apr-19-Sep-19 - Nil For the period Oct – 19 to March 2020 – 248 Nos.	For the period Apr-20 to Sep-2021 – 117 No.s For the period Oct – 20 to March 2021 – 158 Nos.

Name & Category of the waste	**Qty received & Co-processed in MT**
Hazardous waste(A)	
(20.3) Distillation Residue	1060.57
(28.1) Organic/Process residue	1504.80
(28.2) Spent Catalyst	0
(28.3) Spent Carbon	14.67
(28.6) Spent Solvent	611.42
(29.1) Process Waste or residue	0
(35.3) Chemical Sludge from Waste water treatment	39.91
(36.1) Any Process or distillation Residue	1095.63
Subtotal (A)	**4327.00**
Non-Hazardous/Other waste	
Carbon Black / waste pneumatic and other tyres	36.78
Subtotal (B)	**36.78**
Grand Total A+B	**4363.78**

The Waste oil generated at different sections in the plant is collected in the hazardous waste oil platform especially made for the purpose. Waste oil so collected in the leak proof container (M.S.Barrels) is being sold to the authorized reprocesses/recyclers KM Oils Pvt Ltd, Kalaburagi if generated in huge quantity. The waste oil generated is also reutilized in our plant machineries for lubrication purpose if the quantity is less. The details specifying the same is submitted via Form-IV to KSPCB vide our letter no **Ref: OCL/ENV/Sr-VP (Works)/2020-21/F-376 dated 04/05/2021.**

New Batteries purchased from the dealers/agency during the period April-2020 to March-2021 has been submitted in Form VIII to Board on half yearly basis vide our letter no **OCL/ ENV/Sr.VP(Works)/ 2020-21/298 Dated: 07.10.2020 & OCL/ ENV/Sr.VP(Works)/ 2020-21/ 372 Dated: 09.04.2021 respectively.**

PART-E

Solid Wastes

Sl.No	Solid Waste	Total Quantity	
		During the Previous financial year 2019-2020	**During the current financial year 2020-2021**
1. (a)	From process (Fly ash from captive Thermal Power Plant)	Nil from Cement plant. #59047 MT from Power Plants	Nil from Cement plant. #50302 MT from Power Plants
(b)	Fly Ash from RTPS / NTPC/Kudgi/Raichur/Ramgondam/STPP	# 275720 MT	#267151 MT
2.	From pollution control facility	329.716 MT/Year Recycled in to the main process in cement plant	291.738 MT/Year Recycled in to the main process in cement plant
3.	Quantity recycled or reutilized Within the unit	**329.716 MT/Year** (In process, material recycled from Pollution control equipment like ESPs /Bag House /Bag filter).	**291.738 MT/Year** (In process, material recycled from Pollution control equipment like ESPs /Bag House /Bag filter).
i	Sold	------	------
ii	Disposed	------	------

Fly ash utilization is improving continuously; this is observed from the consumption values of total Fly ash generated at our Power plant, RTPS, NTPC, Kudgi , Raichur , Ramagondam & STPP.

PART-F

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

Hazardous waste:

All used Oil generated from the different sections of plant is being collected in closed drums, barrels and then stored at Hazardous waste storage platform that has been made as per Hazardous Waste (Management, Handling & Trans boundary Movement) Rule, 2016. These stored hazardous wastes **are being sold to authorized recycler within the stipulated time / utilised for the machineries.**

Solid waste:

- There is no solid waste generated during the process of cement manufacturing process.
- In process, materials are recycled from pollution control equipment like ESP and Bag filters.
- The total generated fly ash & bottom ash are utilized for the manufacturing of cement.
- Refractory bricks and Mild steel scrap generated is disposed to party for further use/ recycling.

PART-G

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

- Cement Production 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. The stack emissions from the plant are controlled by equipment like Bag Houses, ESP's & Bag Filters installed at various material transfer points to arrest the fugitive emissions. The particulate matter collected in the pollution control equipment is recycled in process.
- All the raw materials are being stored in covered yard **by which reduction in fugitive emission is achieved**.
- The conveyor belts are fully covered **due to which fugitive emission is controlled.**
- Clinker and cement is being stored in silos due to which fugitive emission **is controlled**.
- Fogging system has been installed at Raw material handling area and conveyor belts for further reduction of fugitive emission.
- Water sprinkling for dust suppression on the road and other dust generation points in and around the plant is being done to control the fugitive emissions.
- Utilization of fly ash for the manufacturing of cement is being done to avoid landfilling of waste.
- Huge rain water harvesting pit of capacity 5.6 lakh cubic meter is developed in the plant for storing water during rainy season and utilization of the same is being done for plant, mines dust suppression, Gardening etc.
- Installed an STP of capacity 500 KLD in order to recycle or reuse the treated water for plantation purpose/Gardening Purpose etc.,

- Rainwater harvesting reservoir with a capacity 5,60,000m3 has been constructed at the plant area, for recharging ground and thereby reducing the consumption of surface water.
- Development of extensive green belt in and around the plant & Colony area to abate the pollution.

Modifications for the year 2020-21 for energy conservation and better Environment

Process:

- Compressor's discharge pressure reduced from 6.0 to 5.8 bar
- Idle running of material handling section reduced
- Applied heat resistance paint in kiln hood
- Changed HPSV lamps to LED lamps
- Raw mill product residue optimized from 3.3 to 3.8% on 212 microns
- Cement mill bag house heaters idle running hours reduced
- Idle running of cooler ESP transport reduced
- Raw mill bag house idle running reduced
- HRB discharge Bag filter fan changed to VFD

Usage of alternative fuels in Kiln

- LAFR
- Rice Husk
- Pharma Waste
- Using Super Poly Diesel in place of HSD for Kiln Firing.

Electrical & Instrumentation:

- **Replacement of HPSV lamp with LED lamp**

Instrumentation: -

- Bypass water line arrangement for coal water spray system.
- Installation and commissioning of VFD for cooler area bag filter fan
- Provision of hardwired soft reset buttons for RM Weigh Feeders
- Complete integration of Cement Mill-1 & 2 Separator Grease Distribution systems to DCS.
- Installation of dual proximity switch and controller in critical belt conveyors at cement mills.
- Provision of plant UPS with step-up transformer for clinker loading weighbridge controllers.

Power Plant:

- Optimized ESP purge air blower heater run hours based on temperature control and achieved Energy saving of 400kWH/day
- Replaced Conventional lighting with LED Light fittings. And achieved 50kWH/day.

Mechanical:-

Following Modifications were done towards betterment of Environment & reducing power consumption.

- Belt conveyor full protection shed for controlling dust emissions & rain at 133BC570
- Bag filter Hopper modification for controlling spillages at 311BF020/322BF020
- Discharge chute modification for controlling spillages at 311BC720
- Sector gate installation in reject bin of Raw mill 1
- Installation of monsoon protection/dust emission control shed at various belt conveyors discharges
- Dump hopper modification in coal wagon tippler for controlling spillages
- Discharge chute modification for controlling spillage & jamming control at 211BC150
- Suction line modifications by arranging dampers in bag filter at TT-3 building
- Modification in suction line of 2 bulk loading systems
- Bags replacement in various bag filters & bag houses
- Controlling of Dust emission @ Cement Mill TT3 Building
- Proper Arrangements of Oil Barrel & Cleanliness approach of Oil Room /Hydraulic Room
- Commissioning of Bag Filter fan for Clinker Extraction Belt Conveyor (482 BC 350):-
- Belt replacement due to the heavy cracks on belt surface & modified the Scarpers to avoid the spillage of 1stfloor of Cement mill hopper feed building Area -
- Provided modified Scrapers for Clinker Extraction Belt Conveyor (482 BC 250 & 482 BC 350) , Clinker Transporting Conveyor (482 BC 600) , Gypsum Belt Conveyor (133 BC 720) to prevent the spillage at Cement Mill Area.
- Discharge Chute modified for Belt Conveyor (511 BC 620 & 532 BC 030) to avoid the spillage which happening earlier.

Utility: -

- Transvector nozzles were installed in packers of Packing plant, which reduced compressed air usage significantly thereby reducing energy consumption.
- Mechanical auto drain valves were installed in air receivers at Packing plant, which lead to reduction of compressed air usage, thereby reducing energy consumption.
- New pipelines were installed for inlet of water to drinking RO units, which led to stoppage of bore well pumps, thereby reducing energy consumption.
- Water supply is being ensured to garden (near WTP) through gravity, without the use

PART-H

Additional measures/investment proposal for energy conservation and better environment.

- Continuous efforts are always being made to maintain the environment clean and green by developing a Green Belt.
- Installation of WHRB to utilize Hot gases from Cooler & Preheater and produce Electricity of 14MW.
- Regularly we are monitoring ambient air quality, Noise level and stack along with water quality analysis.
- Constructing of internal good road inside the plant to reduce fugitive dust emission in Phase manner
- Scheduled maintenance and monitoring of all Air Pollution Control Device's (APCD'S) like Bag Filters and Bag House are being regularly undertaken to ensure their efficient operations in order to keep emissions level within the prescribed limit.
- Awareness programs like plantation activities, Slogan competition, drawing competition & Essay competition was organized for Employees & Families of Employees for awareness on environment protection on 5th June (World Environment Day) , Ozone day (16th Sep) & Earth day (22nd April)
- Actions are taken to utilize Hazardous wastes like Paint sludge, ETP Sludge & other alternate fuels like Carbon powder, tyre chips, plastic waste, agro waste ,MSW waste ,RDF waste etc. in Kiln.
- Green belt development and tree plantation is our on-going & continuous process. We are doing new plantation to increase the bio-diversity of the area.
- Total plant area is 266 Ha out of which plantation will be done in 33% area which is 88 Ha. Presently **174696 plants in 107Ha areas have been** planted surrounding Boundary Zone, of the total plant & Mines area.

Proposed modifications for the year 2021-22 for Energy Conservation and Better Environment:

Process: -

- Arresting air ingress across APH for proper heat transfer from flue gas to the air
- Replacement of all old and inefficient lighting system by Energy efficient Lighting system i.e. LED.
- Replacement of present burner with High momentum Pyro Jet or Jet Flex Burner
- Cement Mill 1 Fan Efficiency improvement from 76.3 % to 85.4 %
- Cement Mill 2 Fan Efficiency improvement from 75.6 % to 85.4 %
- Optimization of Kiln Coal transportation phase density
- Improve cooler ESP fan efficiency from 40.5 % to 86.15 % by replacing with new impeller

Power plant: -

- To reduce the power consumption by replacing Conventional lighting with LED Light fittings.

Mechanical: -

- Sector gate installation in reject bin of Raw mill - 2
- Modification in suction line of remaining 2 bulk loading systems
- Spillage chute installation at reversible belt conveyor 211BC070
- Sheeting at wagon loading area towards wagon tippler for controlling dust emission
- Energy saving of compressor running hours by modification of baghouse compressed purging airline unions are replaced with flange fittings
- Installation of auto cut-off valve to cement mill 1&2 compressed main airline.
- Refurbishment of cement mill-1 table and rollers.
- Refurbishment of cement mill-1 separator fan.
- Energy saving of compressor running hour by using of low-pressure blower to body cleaning at cement mill

Electrical & Instrumentation:

Electrical: -

Replacement of Coal shed lighting for 400W HPSV lamp to 200W LED lamps

Instrumentation: -

- Installation and commissioning of VFD for LS Crusher bag filter fan
- Additional Bluetooth communication system for coal stacker

- Provision of indications for RM additive reclaimer position in piles and interlocking with respective hopper's feeding system.

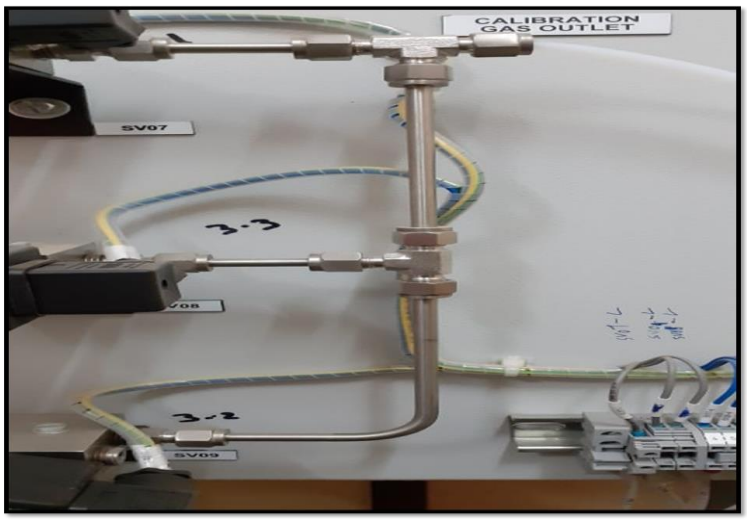
Utility:-

- Automation of pumps in WTP-STP to prevent overflow of tanks, thereby reducing energy consumption and water wastage.
- Installation of VFD in compressors to meet demand fluctuations, thereby reducing energy consumption.
- Replacing cooling tower outlet pumps by more suitable and lower wattage pumps, thus reducing energy consumption.
- Replacing high pressure compressors with low pressure ones for Fly ash unloading, thus reducing energy consumption.

PART- I

Any other particular in respect of environmental protection and abatement of pollution

- Implementation of EMS including compliance of environmental laws through periodic Management Review & Internal/ external audits.
- Awareness promotion through various environmental competitions, workshops, presentations etc. on world environment day, Ozone Day & Earth Day.
- Improvement in Ambient Air Quality through effective control on fugitive dust emission.
- Extensive green belt surrounding the boundary & inside plant premises is being developed in a phase wise manner.
- Installation of Remote calibration facility for Gaseous parameter SO2 & NOx for stacks of CPP & Kiln.

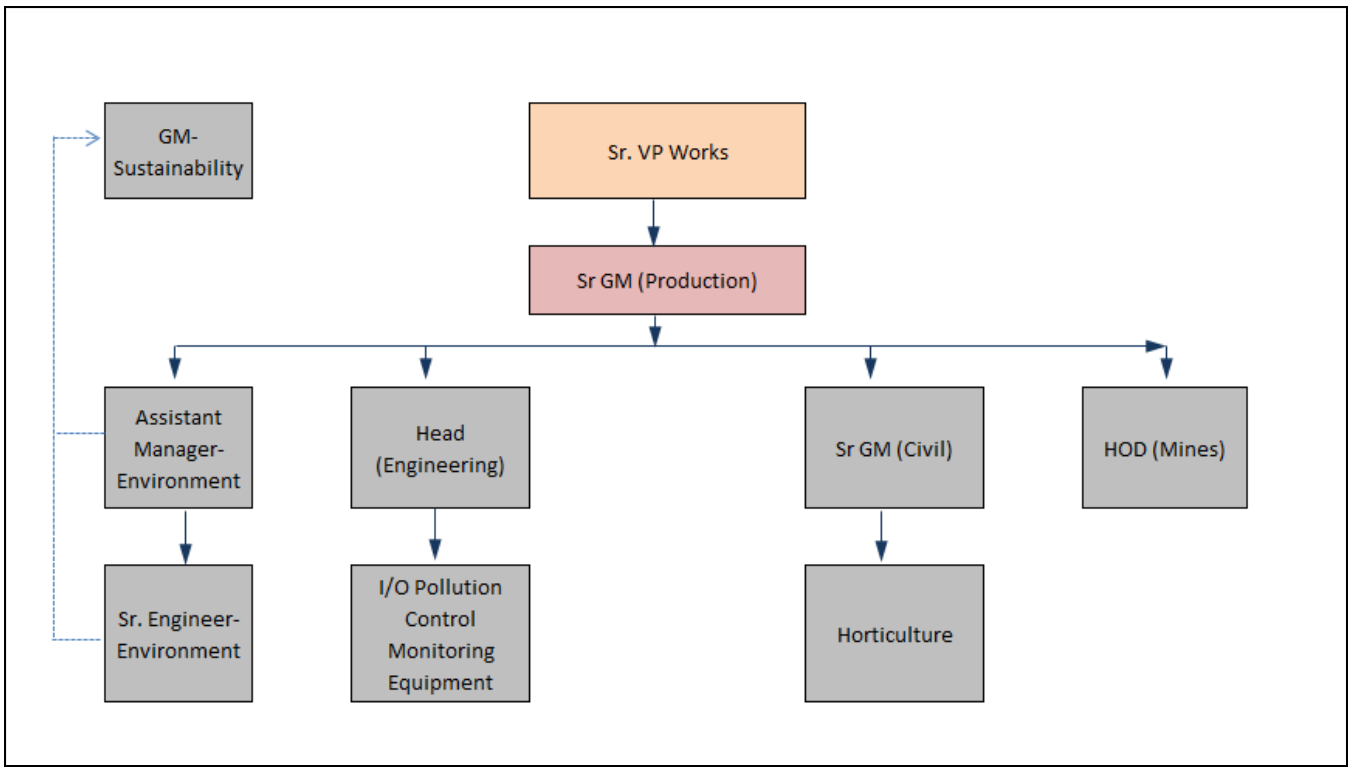


Remote calibration Setup

Continuous Ambient Air Quality Monitoring stations (04 No's Locations)

Installation of Continuous Stack emission monitoring stations for main stacks

Details of Environmental Cell



Miscellaneous

World Environment Day Celebrations -2020

Environmental Awareness:

World Environment Day 2020 was celebrated at M/s Orient Cement Ltd, Chittapur, on 5th June 2020 @ 10:00 AM .This year theme for World Environment day was: **"BIODIVERSITY -TIME FOR NATURE,"** with a Slogan **"*Reduce , Reuse Recycle*"** for which Environment Department along with staff of Orient Cement Ltd commenced an opening program chaired by **Shri. Satyabrata Sharma-Unit Head, Shri. Santosh Kumar Sharma-Sr.GM-Production & other delegates** at Packing plant area with mass plantation of around 80 saplings and later individual department planted with mass plantation in selected area in plant premises and planted around 300 saplings.

From 3rd June to 5th June-2020, OCL Chittapur has conducted an awareness program through online portal as per the guidelines issued by KSPCB, such as Quiz completion, Essay Competitions, drawing competitions by involving school children's.

The Welcome Note along with World Environment Day Speech was addressed by Mr. Ramesh Bashetty from Environment Department & then the Speech was addressed by our Unit Head Shri. Satyabrata Sharma in a thought-provoking manner, which set a perfect platform for our colleagues who have gathered for WED celebration.

The chairperson suggested few visions to be included to make remarkable changes in the environment and addressed the people to change their thoughts to change an good environment. Also prize distribution program was carried out rewarding the winners, who have participated in the World Environment day Events (Essay, Blogging & drawing / painting).

Glimpses of World Environment Day-2020 celebrations at Orient Cement Ltd, Karnataka

Plantation by Our Unit Head Mr. Satyabrata Sharma at Packing plant Area

Group photo by Orient staff on WED-2020

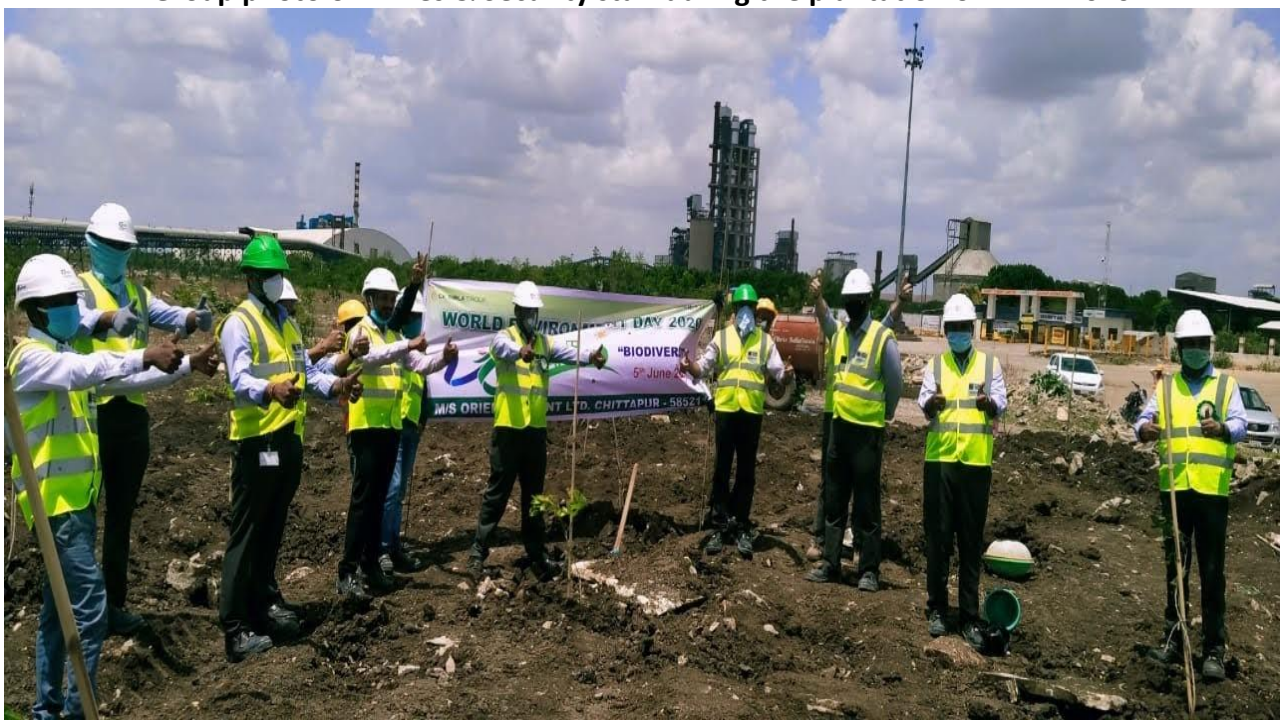
Mass Plantation by HR & Account team near Admin Building: Group photo on WED-2020

Plantation by OCL Staff near Packing plant area

Plantation by Workers, labors & mines staff near surge bin hoper area

Plantation by Workers, labors & mines staff near surge bin hoper area

Group photo of Mines & Security staff during the plantation on WED 2020



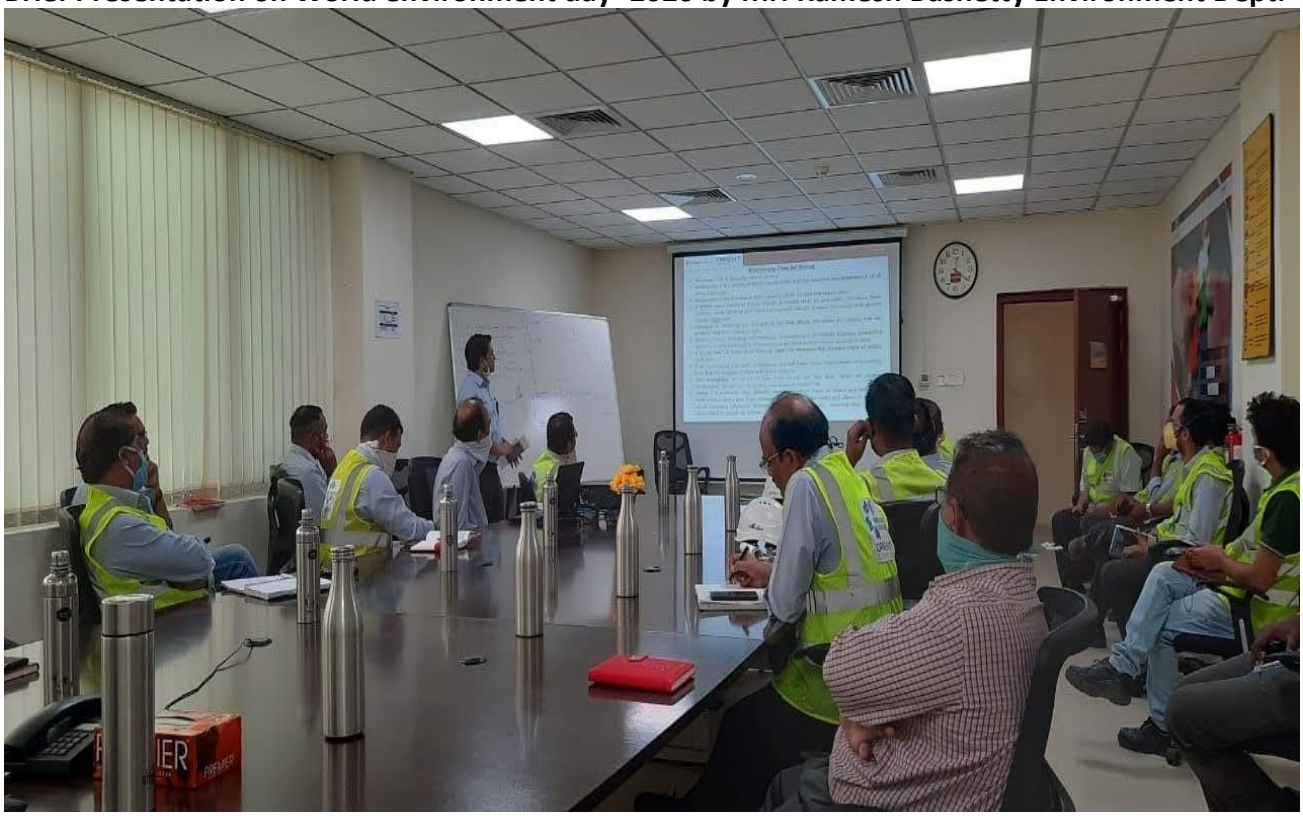
Group photo of OHC staff during the plantation at OHC center on WED 2020

Group photo of DAV & Civil department staff during the plantation at DAV School area on WED 2020

Plantation by DAV staff at DAV school ground area on the occasion WED-2020

Plantation by laborer's at Labor colony on WED -2020

Brief Presentation on World environment day -2020 by Mr. Ramesh Bashetty Environment Dept.



Plantation being carried out by Mines, Process & Environment Staff

Prize distribution to winners by Mr. Shivbasappa Nandyal Sr. GM -Civil

Prize distribution to winners by Mr. Shivbasappa Nandyal Sr. GM -Civil

Prize distribution to winners by Mr. Saji Kumar Sr. GM -HR

Prize distribution to winners by Mr. Saji Kumar Sr. GM -HR

AMBIENT NOISE LEVEL (PLANT) [Leq Value in dB(A)] FY-2020-21

Particular	Tolerance Limit dB(A) in day time	Actual Avg Values Max dB(A) Day Time
Near Power Plant	75	67.73
Near Coal Yard	75	66.05
Near Water Reservoir	75	64.07
Near Main Gate	75	65.00

Particular	Tolerance Limit dB(A) in Night time	Actual Avg Values Max dB(A) Night Time
Near Power Plant	70	62.61
Near Coal Yard	70	59.70
Near Water Reservoir	70	60.47
Near Main Gate	70	61.80

Details of Pollution Control Measures installed at various location

S. No.	Location of PCM	PCM
1	Lime stone crusher	Water Sprinkling at Hopper & Bag Filter
2	Additives crusher	Bag Filter
3	Coal crusher	Bag Filter
4	Raw Mill	Bag House
5	KILN	
6	Cooler	ESP
7	Coal Mill	Bag Filter
8	Cement Mill-1	Bag Filter
9	Cement Mill-2	
10	Captive Power Plant	ESP
11	Stacker	Water Sprinkling and Covered
12	Clinker Silo	Bag Filter
13	Fine Coal bin Silo	Bag Filter
14	Raw Meal Silo	Bag Filter
15	Cement Silo (4 no's)	Bag Filter
16	Fly ash Silo	Bag Filter
17	Packing House (5 no's of Packers)	Bag Filter
18	All transferring points of raw material handling and product.	Bag Filter
19	Sewage treatment plant for domestic sewage	Sewage treatment plant (500 KLD)
20	Green belt development in the premises	Green belt development

Statement Showing Power Consumption Plant for the Year April-2020 to Mar-2021

MONTH	POWER CONSUMPTION (KWh) KPTCL/CPP/ Renewable energy
Apr-20	1819362
May-20	10772174
June-20	5961799
July -20	7875371
Aug-20	7480457
Sept-20	9185837
Oct-20	11612163
Nov-20	9901399
Dec-20	12749005
Jan-21	14864667
Feb-21	14335019
Mar-21	15640856
TOTAL	**122198111**

Statement Showing Power Consumption Mines for the Year April-2020 to Mar-2021

MONTH	POWER CONSUMPTION ((KWh)) KPTCL/CPP/Renewable energy
Apr-20	0
May-20	339811
Jun-20	174029
Jul-20	203763
Aug-20	212885
Sep-20	262465
Oct-20	404574
Nov-20	303975
Dec-20	396567
Jan-21	426515
Feb-21	385915
Mar-21	416454
TOTAL	**3526951**

Year wise plantation details carried at Orient Cement Ltd

The Details of Tree Plantation in Orient Cement Factory and Mines area from 2013-14 to 2020-2021 and Percentage of Survival

Year	Factory	Mines	Surrounding Plant Area(Labours colony, Staff Colony, Colony Road Side, School, Main Gate Front Area)	Total	Survival % Age	Survivals
2013-2014	25000	-	-	25000	50%	12500
2014-2015	25000	-	-	25000	50%	12500
2015-2016	30000	1220	-	31220	70%	21854
2016-2017	49000	4780	-	53780	66%	35700
2017-2018	21266	3159		24425	75%	18476
2018-2019	13631	3963	15233	32827	80%	26261
2019-2020	10799	4279	24446	39524	80%	31620
2020-2021	4862	6726	13280	24868	72%	17905
Total:	**179558**	**24127**	**52959**	**256644**	**68%**	**176816**

Total plant area: 266 Ha.
Total GBD to be developed: 33%of plant area = 87.78 Ha. (To be developed in five years)
Total area of Green Belt Development in factory & Colony: 157 Ha till March 2021
Total Area of Green Belt Developed in FY 2020-2021: 21.93 Ha.
Total area planned during current FY-2021-22: 25Ha.

Types of Species planted:

Pongemia, Badam, Thaspesia, Sisha Piniya, Acacia, Neem, Tamarind, Honge trees, Eucalyptus, Ashok, Peeple tree, Hercules fermc, Gilmore tree, Subabul tree, Hatti tree, Conocarpus (Dubai Tree) Feltoform, Bamboo, matti, alstonia, keshiaseema, keshiya-java, mango, kaala jamun, alma, guava, caesalpinia, and Others.

Green Belt Development inside the plant premise

DETAILS OF EPM EXPENDITURE up to FY 2020-21

ASSET DESCRIPTION	Amount	Amount in Lakhs
DUST SUPRESSION SYSTEM	43,58,474	43.58
BAG FILTER & ESP FOR STACKS	33,54,39,089	3,354.39
CPP - RCC CHIMEY	2,87,14,293	287.14
WATER RESERVOIR	25,87,57,199	2,587.57
WATER TREATMENT PLANT	12,85,41,299	1,285.41
SEWAGE TREATMENT PLANT	7,28,00,825	728.01
ROAD & DRAIN	50,14,63,605	5,014.64
GREEN BELT DEVELOPMENT	53,48,720	53.49
FLY ASH SILO & HANDLING SYSTEM	12,89,16,613	1,289.17
EFFLUENT TREATMENT PLANT & DM PLANT IN CPP	3,60,66,506	360.67
CPP - ELECTROSTATIC PRECIPITATOR	10,77,18,110	1,077.18
CPP ASH HANDLING SYSTEM	3,98,25,799	398.26
COMPLETE BURNER ASSEMBLY	1,17,15,390	117.15
AMBIENT AIR QUALITY MONITORING	2,20,13,783	220.14
SNCR FOR NOX REDUCTION	3,03,21,259	303.21
AMMONIA SLIP SENSOR STACK APPLICATION	17,80,000	17.80
MEDIA CONVERT - LIQUID AFR SYSTEM	2,54,471	2.54
NEUTRON SURVEY METER	4,25,000	4.25
UT PUMP	13,03,410	13.03
WASTE SEGREGATION YARD	4,55,406	4.55
SHREDDER FOR AGRO WASTE AFR	3,47,913	3.48
BUCKET ELEV,FEEDING ARRG & SHED FOR AGRO	18,89,931	18.90
RAIN WATER HARVESTING	12,03,438	12.03
Total	**1,71,96,60,534**	**17,197**

CSR-R&R Activities carried out FY 2020-21

Sno	Nature of expenses	Amount (Rs. In Lakh)
1	Dispensary Expenses - Apr To Jun'20	3,97,952
2	Dispensary Expenses - Ambulance & Medicine Exp	16,88,663
3	Hire Machinery For APMC Road Repair & Murram	6,58,581
4	Issue of Driving License 25 Nos., Formation of Farmer Cluster, Abbacus Training & English Devlopment 175 Nos Children - Akruti Trust	9,13,500
5	Hire of 12 KL Water Tanker (Itaga, Diaggon)	1,67,305
6	Dispensary Expenses - July to Sept'20	6,39,956
7	Dispensary Expenses - Ambulance & Medicine Exp	3,82,263
8	School Expenses	21,164
9	Agricultural Activities, Formation Of Farmer Cluster, Education Programme (Abbacus Training & English Devlopment), Youth capability building Programme, Women Empowerment, Skill Development, Shishu Aahar - Akruti Trust FY 2020-21	24,45,075
10	Nala Training/Pitching at Itaga Village	9,32,340
11	SHREDDER MACHINE FOR MSW PLASTIC WASTE	18,00,000
12	Dispensary Expenses -Salary, Ambulance & Medicine Exp	26,81,156
13	Hire Machinery -Maintenance of various Nearby Road	2,62,520
14	Hiring of 12 KL water tanker for Drinking Water Supply (Itaga, Diggaon Village)	2,62,252
15	School - Scholarships, Playground Maintnance, Painting,	2,90,816
16	School - PIPELINE FABRICATION FOR FIRE FIGHTING	79,650
17	School Expense for FY 20-21	57,43,367
	Total	**1,93,66,558**

Initiatives on Environment

Water sprinkling & rubber Curtains @ Limestone Hopper

Fogging System on Belt Conveyors

Water Sprinkling (Fogging system) in Limestone Hopper

Concrete road inside the plant to avoid fugitive dust

Belt Conveyors are fully covered

Clinker Silo is fully covered

Covered Shed for Raw Material storage

Raw materials Storage Yard are covered

Bag House for Kiln & Raw

ESP for Cooler and CPP

Bag Filters at all transfer points

Water Storage Reservoir & Rainwater Harvesting

Water Sprinkling for Dust Suppression on Roads

WTP & STP

ENVIRONMENTAL STATEMENT REPORT

FOR

ITAGI MINES
(FORM-V)

[YEAR 2020 - 2021]

REPORT BY

(Orient Cement Ltd.)

Captive Limestone, Clinkerisation,

Cement Unit & Captive Power Plant

Itga (V), Chittapur (Tq)
Kalaburagi (Gulbarga) - 585292

CK BIRLA GROUP

ENVIRONMENTAL STATEMENT REPORT

(Form-V)

[Year 2020 - 2021]

REPORT BY

ORIENT CEMENT

(Orient Cement Ltd.)
Itagi mines
Itga (V), Chittapur (Tq)
Kalaburagi (Gulbarga) - 585211

CONTENTS

Prologue

Orient Cement is a Green Field project by CK Birla Group and EHS policy reflects each & every section in the organization. Our main vision is to conserve the Environment through new technologies, new initiatives.

At National Level, great emphasis is being laid on maintaining environmental quality, particularly in the regions where large-scale developmental programs are being undertaken. Orient Cement has adopted corporate policy along with EHS policy, for conserving the Sustainable environment and its development.

Company aspires to exceed market expectations across all sustainability issues and go beyond legal compliance to proactively reduce our environmental impacts. Our goals are to reduce our overall carbon footprint by embedding Environmental controls and practices into the daily management of the firm and thereby encouraging positive behavior from our staff to achieve a greener culture.

In order to comply with Environmental Protection Act and Environmental Preservation and Sustainable Development, Orient Cement has prepared the Environmental Statement Report; this report is furnished in Form-V & along with the data for Environmental components like Air, Water, & Noise for the period of **April-2020 to March-2021**.

1.1 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 perishing the natural treasures. At this critical junction of time and efforts, the Indian industry has fulfilled its commitment in maintaining the environmental integrity.

Orient 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 Orient Cement Limited is based on actual data and verified record, will present a picture of more optimism for environmental care than ever before.

Orient Cement Ltd: is situated at Itga Village, Chittapur Taluk, Gulbarga District: which is about 50 Km from Gulbarga. It started its commercial operation in the year 2015. Presently factory is operating with one Kiln of capacity 6000 TPD & 50MW Power Plant. The Company is manufacturing Ordinary Portland Cement (OPC) & Pozzolana Portland Cement (PPC).

M/s Orient Cement Ltd is operating limestone mine at Itga (V), Chittapur Taluk and Gulbarga District as captive mines with limestone production of 3.0 Million tonnes per Annum for their Cement manufacturing at factory , which is about 02 Km from Mines. The project site is located between latitude and longitude of the mine lease area 17^0 6' 34.87'' - 17^0 8' 13.86'' N and 77^0 7'

35.65'' - 77^0 9' 35.41'' E. This mine is being operated using mechanized open cast method with heavy equipment like hydraulic excavators, dozers and dumpers.

The policy for the abatement of pollution by the government of India provides for submission of environment statement by all the industries. Environmental Statement is therefore an output of Environmental Audit.

So an effort has been made in this report to explain Environmental Statement for the financial year 2019-2020 ended 31st March 2020 as per Government of India notification GSR 329 (E), dated 13th March 1992 and amendment to Environmental (Protection) Rules 1986 and subsequent amendment there on.

1.2 METHOD OF MINING:

We are operating mines in eco-friendly way for sustainable development of environment. The mines are operated by open-cast mechanized method of working where deep hole drilling and blasting and deployment of HEMM are used.

Separate Benches are made in overburden & Limestone to avoid contamination. In limestone further five benches formed based on grade/Quality of limestone. ROM quality is maintained with the help of online X-belt Gamma rays analyzer. All the stone mined is being utilized for cement manufacturing.

1.3 ENVIRONMENT MANAGEMENT:

Top soil management:

We are stacking topsoil of black cotton at designated places at stable ground so called BC soil dump. The reason for stacking is to preserve the topsoil for plantation and land fertilization for natural condition. BC soil dump is maintained in specified gradient manner. Some of the topsoil removed is used for plantation purpose in mines area and in our plant area.

AERIAL VIEW OF TOP SOIL DUMP

TOE WALL ALONG WITH GARLAND DRAIN AT BELOW THE TOPSOIL DUMP

GARLAND DRAIN ALONG THE TOPSOIL DUMP TOE WALL WITH RANDOM RUBBLE BARRIERS

CATCHMENT/GARLAND DRAINS IN MINES AREA

CATCHMENT/GARLAND DRAINS WITH RR DRY STONE BARRIERS

DESILTING WORK

AIR QUALITY MANAGEMENT:

- Wet drilling arrangement and dust extractor system provided in drilling machine.
- Bag filter is provided at crusher to collect dust.
- Conveyor belts are totally covered with metal hood.
- Water spray is being done in hopper & on conveyor belts.

WATER QUALITY MANAGEMENT:

We are using mines pit water for dust suppression and drilling operation along the mines working area and haulage roads involved in transportation of limestone to crusher. We also use the pit water for planation purpose. We engaged a water tanker for plantation and for dust suppression.

Monitoring Locations of Ground water Level:

Sl.No	Location Name	Water Level in (m-BGL)
1	Itga Village	10.42
2	Moghla Village	8.41
3	Diggaon Village	6.19
4	Chittapur Village	4.90

AFFORESTATION:

FY 2020-21 trees planted are 6726. Types of species are Gulmohar, Filta pam, Acacia, Neem, tamarind, Ashok, People tree, Dubai Conocurpus (dubai Tree), Honge trees, Bougain villa, Badam, Thespesia populmea, Sankeswar, Peltoform, Neem, Nelli, Shubham trees, Alstonia scholaris, Pongamia pinnata.

Areas of trees planted are as follows

a) Nalla safety zone.
b) Main haulage road.
c) Near weight bridge.
d) Office front and backside.
e) Main road near soil dump gap filling
f) Near view point.
g) Near road 7.5 m safety zone.
h) Near mine crusher road and weigh bridge road.
i) Near village safety zone.

The Details of Tree Plantation in Orient Cement Factory and Mines area from 2013-14 to 2020-2021 and Percentage of Survival

Year	Factory	Mines	Surrounding Plant Area (Labors colony, Staff Colony, Colony Road Side, School, Main Gate Front Area)	Total	Survival % Age
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2014-2015	25000	-	-	25000	50%
2015-2016	30000	1220	-	31220	70%
2016-2017	49000	4780	-	53780	66%
2017-2018	21266	3159	-	24425	75%
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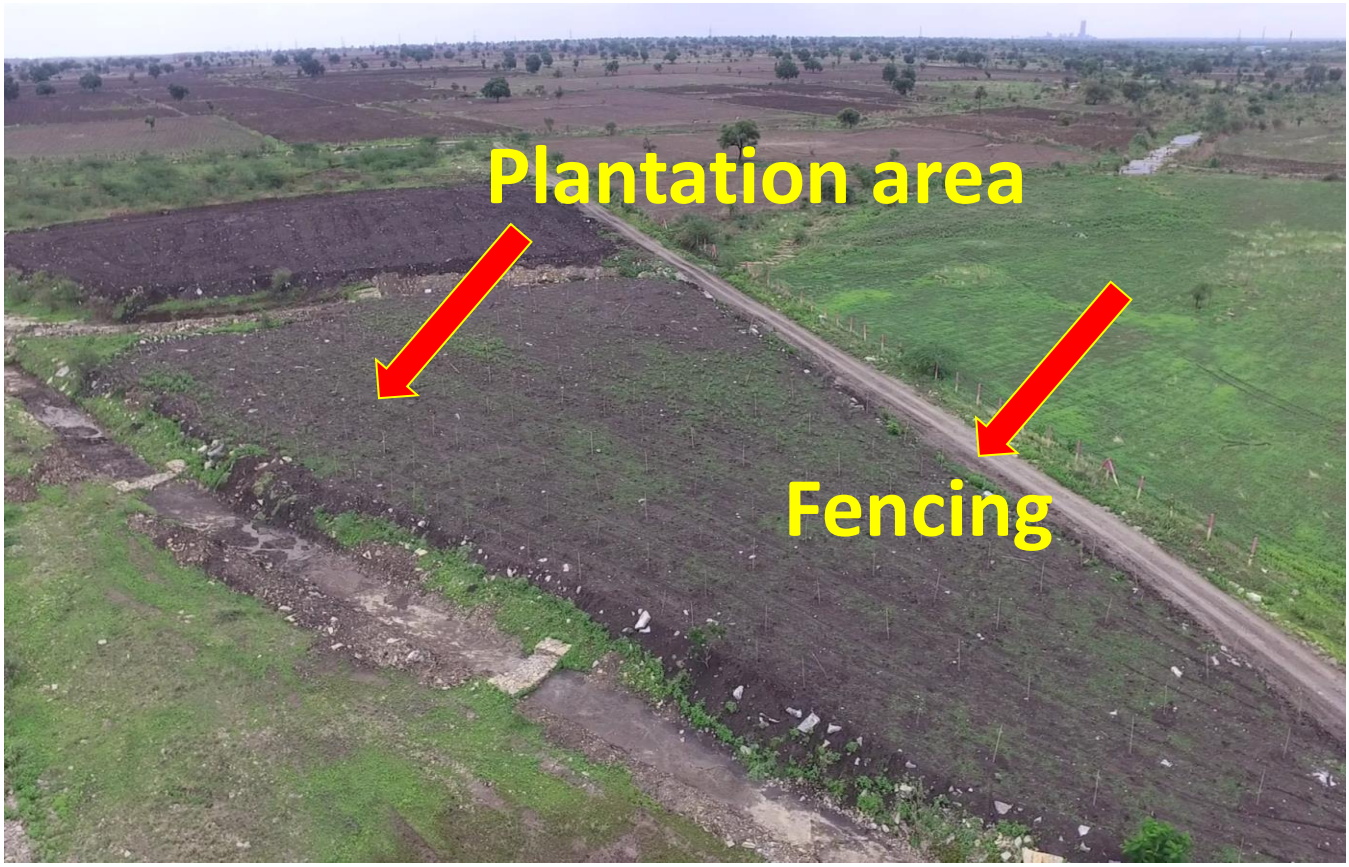
17	School Expense for FY 20-21	57,43,367
	Total	**1,93,66,560**

PLANTATION OVER DUMP AREA



PLANTATION ALONG THE SERVICE ROAD &HAUL ROADS

Plantation on Virgin Area After Spread the B.C Soil

PLANTATION ALONG THE SERVICE ROAD &HAUL ROADS

PLANTATION INFRONT OF MINES-OFFICE

FENCING OF AFFORESTATION AREA & AGRO FORESTORY

STONE PITCHING ALONG THE NALA BANKS

STONE PITCHING BELOW THE TOPSOIL DUMP

DISPLAY OF COMMITY MEMBERS

PLANTATION ALONG THE SERVICE ROAD &HAUL ROADS

Year wise plantation at Mines

SL No	Financial Year	Location	Area in Ha.	Number of trees Planted	No. of plants survived	Survival (%)	Types of Species
1	2015-16	Reclaimed Black cotton dump area and Behind Mines Office	1.3	1220	610	50%	Acacia, Neem, tamarind, Ashok, People tree, Conocarpus (dubai Tree), Honge trees.
2	2016-17	Safety zones, Magazine Roads, Mineral stock area and Along the nala banks	2.35	4780	2390	50%	Acacia, Neem, tamarind, Ashok, People tree, Conocarpus (dubai Tree), Honge trees.
3	2017-18	Safety zones, Behind office & Garage and near view point	2.13	3159	2527	80%	Acacia, Conocarpus, Bougain villa, Badam, Honge, Tapsi, Sankeswar, Peltoform, Neem, Nelli, Shubham trees
4	2018-19	Avenue plantation(near nala), 7.5 m safety zone, Behind ANFO mixing shed & Near New rest shelter (WLA)	4.3	3963	3646	92%	Acacia, Conocarpus, Bougain villa, Badam, Honge, Tapsi, Sankeswar, Peltoform, Neem, Nelli, Shubham trees
5	2019-20	Nala & Buffer Safety zone and office surround area	3.33	4279	3829	89%	Conocarpus, Badam, Honge
6	2020-21	7.5m Safety zone, Village safety zone and Gap plantation	1.8	6726	6480	96%	Accasia, Conacorpous, Bougain villa, Badam, Honge, Tapsi, Sankeswar, Peltoform, Neem, Nelli, Shubham trees
Total			**15.21**	**24127**	**19482**	**81%**	

Total area: 519 Ha
Active Mining Area: 31.40 Ha

Environmental Monitoring details as under:

Monitoring is carried out by M/S Cosmo Conscious Research laboratory, Bellary and SUMS Techno labs Pvt. Ltd Hosapete in all four seasons. The details are as under.

S.No	Environmental parameters	Parameters
1	Ambient Air Quality	Ambient air quality is being monitored continuously season wise as per IBM circular 3/92 & NAAQ notification 2009.
2	Noise	Season wise noise measurement study is carried out within the mining lease area. Personal protective devices were provided to workers to reduce the impact of noise.
3	Ground vibration	Ground vibration study is carried out by the company and every blast is monitored by "Seismograph". It is observed that all the readings are less than acceptable level.
4	Water	Water quality within the mine pit is monitored on regular basis. IS – 10500-2012 Drinking water standards, GSR 422 (E) General Standards for discharge of Effluent.

a) Stack monitoring report is as below.

S.NO.	POLLUTANTS (Particulate matter)	Avg. Quantity of Flow discharged (Nm3/H)	Avg. CONCENTRATIONS OF POLLUTANTS IN DISCHARGE (Mass/Vol.) (mg/Nm3)	Tolerance Limit (mg/Nm3)
01	New Crusher stack	31718.49	15.30	30

b) Measures Taken to Control Noise:-

- Seismograph is used to get details of vibration and Noise pre blasting.
- Control blasting technique adopted by using NONEL.
- Schedule and Preventive maintenance of HEMM.
- Centralized lubrication system in Drilling Equipment.
- Noise mapping is done regularly in all mining operation area.

AMBIENT NOISE LEVEL (MINES) [Leq Value in dB(A)] FY-2020-21

Particular	Tolerance Limit dB(A) in day time	Average Actual Values in dB(A)
Crushing & Screening	**75**	**61.53**
Mining Area	**75**	**59.62**
Haulage / Office	**75**	**50.55**
Surge bin hopper	**75**	**53.33**

Particular	Tolerance Limit dB(A) in Night time	Average Actual Values in dB(A)
Crushing & Screening	**70**	**53.79**
Mining Area	**70**	**54.63**
Haulage / Office	**70**	**47.09**
Surge bin hopper	**70**	**46.39**

c) Measures taken for Ground Vibration Control:

- Seismograph is used to get details of vibration, Noise & fly rock pre blasting. Blasting pattern is modified if parameters are high.
- Down the Hole initiation is performed by shock tubes NONEL to reduce the noise and ground vibration.
- Optimum Charge per delay is maintained as per the recommendation given by DGMS.
- Blasting operation is carried out under supervision of qualified and experienced team.

ENVIRONMENTAL STATEMENT REPORT

[FORM-V]
(See rule 14)

PART-A

Name and address of the owner/ Occupier of the industry	: Satyabrata Sharma Sr. Vice President – Works Itga (V), Chittapur (Tq) Gulbarga - 585211
Operation process	: Production of Cement
i. Industry category: Primary-(STC code) Secondary-(STC code)	: Red category
ii. Production category-units	: 2 MTPA (for Clinker Production) 3 MTPA (for Cement Production)
a. Installed Capacity	: 3.6 MTPA (Lime Stone)
b. Consented Capacity	: 3 MTPA (Lime Stone)
iii. Year of establishment	: 2015 (ML-2681)
iv. Date of last environmental statement submitted	: 05/09/2020 FY 2019-20

Postal Address

1) Registered Office	: Orient Cement Ltd. 5-9-22/57/D G.P Birla Center 2nd & 3rd floor, Adrash Nagar, Telangana Hyderabad- 500063
2) Factory	: Orient Cement Ltd. Itga (V), Chittapur (Tq) Gulbarga - 585211 Phone: 08474-236716 Fax: 08474-23671

PART-B

Water and Raw Material Consumption

Particulars	During Previous Financial Year (2019-2020)	During Current Financial Year (2020-2021)
	(m^3/day)	(m^3/day)
Process/Dust suppression	45.00	43.10
Domestic/Gardening/Dust Suppression	3.61	3.35

Name of products	Process water consumption per unit of products output	
	During the previous financial year (2019-2020)	During the current financial year (2020-2021)
	(m^3/day)	(m^3/day)
Limestone	162.24 m^3/MT of Limestone	148.61 m^3/MT of Limestone

(ii) Raw material consumption

Name of raw materials	Name of products	Consumption of raw material per unit of (Clinker) output	
		During the previous financial year (2019-2020)	During the current financial year (2020-2021)
Limestone	Limestone	1.40	1.43

PART-C

Pollution discharged to environment/unit of output (Parameters as specified in the consent issued)

S.NO	Pollutants	Quantity of pollutants discharged (Mass/day))	Concentration of pollutants in discharge (Mass/Volume)	Percentage of variation from prescribed standards with reasons
a) WATER: -				
a.	Effluent treatment plant	Nil	----	No wastewater generation in Mines
b) AMBIENT AIR: -				
a.	Mining Area	PM10 & PM2.5	72 µg/m3	Within Standards
			25 µg/m3	
b.	Haulage		73 µg/m3	Within Standards
			24 µg/m3	
c.	Crushing & Screening		74 µg/m3	Within Standards
			25 µg/m3	
d.	Surge bin hopper		71 µg/m3	Within Standards
			23 µg/m3	

*** The value represents arithmetic average of 12 months for the financial year 2020-21**

Ambient Air Quality Report in µg/m³ Mines FY 2020-21

Mining Area		Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Average
	PM 10	Nil	73	75	74	64	56	79	78	91	77	62	61	**72**
	PM 2.5	Nil	25	24	25	20	15	24	36	29	24	23	34	**25**
	SO2	Nil	17	22	21	17	12	14	15	16	15	14	15	**16**
	Nox	Nil	17	22	22	21	15	19	19	19	15	15	16	**18**
	CO	Nil	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	ND	ND
Haulage														
	PM 10	Nil	79	74	75	63	56	78	85	92	72	65	64	**73**
	PM 2.5	Nil	24	23	23	19	16	21	40	26	21	15	34	**24**
	SO2	Nil	14	22	23	17	13	14	15	15	15	14	14	**16**
	Nox	Nil	15	23	23	21	15	17	18	17	14	14	15	**17**
	CO	Nil	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	ND	ND
Crushing & Screening														
	PM 10	Nil	78	73	73	75	58	70	85	88	69	69	71	**74**
	PM 2.5	Nil	21	21	23	25	16	19	41	34	17	21	37	**25**
	SO2	Nil	18	21	22	16	15	13	16	18	16	15	14	**17**
	Nox	Nil	17	22	21	21	17	15	18	20	13	13	15	**17**
	CO	Nil	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	ND	ND
Labor Colony/Near														
	PM 10	Nil	69	70	69	72	56	72	87	88	70	62	63	**71**
	PM 2.5	Nil	20	21	21	23	16	20	43	31	13	14	36	**23**
	SO2	Nil	17	15	15	17	13	13	13	16	15	15	14	**15**
	Nox	Nil	18	17	17	21	15	15	15	19	14	13	15	**16**
	CO	Nil	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	ND	ND

Mines Pit Water Quality Monitoring Data FY 2020-21

Parametrs	Unit	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Avg
Colour	Hazen units	-	<5	<5	<5	<5	<5	<5	<5	<5	Under Process	<1	<1	#DIV/0!
conductivity	ms/cms	-	920.5	898	858	902	831	371	794	581	689	808	892	776.77
Total dissolved Solids	mg/l	-	515	506	514	542	622	260	548	364	480	568	637	505.09
pH	-	-	8.48	8.36	8.18	8.39	7.54	7.56	7.33	6.76	8.66	7.84	7.8	7.90
Turbidity	NTU	-	3.3	3.5	2.8	2.4	3.2	5.8	3.5	0.1	0.5	0.7	5.9	2.88
Total Suspended Solids	mg/l	-	15	26	18	26	30	22	28	20	2	5	2	17.64
Calcium as Ca	mg/l	-	43.2	42.4	42.4	46.4	58.96	51.2	22.8	87.2	46.49	60.12	58.52	50.88
Magnesium as Mg	mg/l	-	24.5	23.81	22.1	24.6	35.82	8.75	23.3	8.26	29.12	27.17	28.62	23.28
Total Hardness as CaCo3	mg/l	-	212	204	216	224	294.82	164	228	252	236	262	264	232.44
Chlorides as Cl	mg/l	-	28	26.99	27	39.99	102.95	15.6	83.97	33.25	27.22	25.24	22.76	39.36
Sulphates as SO4	mg/l	-	64.31	60.38	63.12	65.38	72.9	50.73	59.55	44.68	Under Process	76.5	81.5	63.91
Flourides as F	mg/l	-	0.46	0.49	0.39	0.42	0.39	0.06	0.08	0.26	Under Process	1.26	1.18	0.50
Nitrate Nitrogen As No3	mg/l	-	7.46	6.45	7.22	6.86	10.72	0.59	1.62	4.82	Under Process	0.6	0.8	4.71
Total Alkalinity as CaCo3	mg/l	-	272	264	276	282	277.76	151.39	208	169.65	220	315	400	257.80
Total Iron as Fe	mg/l	-	0.12	0.17	0.14	0.18	0.21	0.18	0.21	0.14	BDL	BDL	BDL	0.17
Total Coliform Count	MPN/100ml	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Escherichia Coli Count	MPN/100ml	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

PART-D

Hazardous Wastes

[As specified under Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008]

Hazardous Wastes		Total Quantity	
		During the Previous Financial year (2019-2020)	During the Current Financial year (2020-2021)
(a) From Process	(a) Spent/ Used Oil (Category 5.1) (Including CPP)	7.18 MT	7.96 MT
(b) From Pollution control Facilities	N.A.	N.A.	N.A.

However, this waste is being generated from industrial related activity i.e. hydraulic movement of machines, oiling/ greasing etc. which will be sold to registered to recycler once authorization for Hazardous waste is received from the board.

PART-E

Solid Wastes

	Total Quantity (Overburden) in tones	
	During the previous financial year (2019-20)	During the current financial year (2020-2021)
(a) From process	57872 (Over burden)	28045 (Over burden)
(b) From pollution control facility	4.400 MT (from LS Crusher Bag filter)	3.550 MT (from LS Crusher Bag filter)
(c) Quantity recycled or re-utilized	4.400 MT	3.550 MT

PART-F

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

Hazardous waste:

- No hazardous waste generated from the mining activities.
- Limestone Crusher Gear box oil will be stored and disposed for authorized person.

Solid waste:

- Generated and disposed during 2020-21: 28045MT of over burden is used for making bunds and for green belt development.

PART-G

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

- 0.71 ha of Overburden soil dump area has been reclaimed and rehabilitated by plantation.
- Total 24127 saplings have been planted in 15.21ha area till March 2021 along the statutory barrier, along the road, nalla safety zone and mines safety zone.
- Constructed Embankment and garland drain around the pit about 285m to avoid surface water into mines.
- Around 9700 sqm of Stone pitching has been made along the slopes of nala stream both sides.
- Automatic water sprinkler has been installed on main haul road to reduce dust Emission.
- Crushed limestones are being conveyed to plant by fully covered belt conveyor to avoid spillage and air borne dust.
- Water sprinkling system is provided at crushing operations and transfer points of belt conveyer for controlling fugitive emissions.

BC Soil Dump with Protection Wall

Garland Drain along the Dump Toe Wall with Random Rubble Barriers

Garland drain with RR barrier

Stone Pitching along Nala Banks

Automatic water sprinkler

Automatic water sprinkler

Closed Belt Conveyor

Closed Belt Conveyor

Dust Control System at Lime stone Crusher

Desilting Work

Modifications for the year 2020-21 for energy conservation and better Environment:

- To avoid the Run – Off of topsoil from the dump, Toe wall is constructed along with garland drain for a length of about 370 mts below the top soil dump.
- Constructed Embankment and garland drain around the pit to avoid surface water into mines area.
- 26 No's of Random rubble check barriers in garland drain within the ML area.

Catchment Drains with RR Dry Stone Barriers

- Pressurized water sprinkler is fitted on water tanker for spraying on blasted material to avoid dust during loading.
- 4 No's of Permanent tower lights installed in mines for illumination of working area.
- Existing plantation maintenance cost Rs. 8,50,000/-
- Total 2.5KV solar panel has been installed in various location as alternative power.
- Sources for lighting and other applications.
- Desilting of garland drain, nala, ponds cost Rs.1,15,000/-
- Constructed of Rainwater Harvesting Pit.
- Total green energy purchased FY 2020-21 is 16620000 kwh for plant & mines utilization.

- **Air receiver tank with sensor is fitted at hopper to rectify air pressure drop issue and Variable Frequency Drive in 111AF060 Apron feeder for low energy consumption**
- **Bin Level Measurement System in crusher surge hopper to control idle running of crusher and Level switches & Solenoid valves in Water Tanks for water spray system at crusher hopper to control water pump power consumption**

Air receiver tank with sensor at hopper to rectify air pressure drop issue

Variable Frequency Drive in 111AF060 Apron feeder

PART-H

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

1. Total 24127 saplings have been planted in 15.21 ha area as on March 2021 along the statutory barrier, along the road, nalla safety zone, In front of Mines office and mines safety zone .
2. Total 370 m of Toe wall at below the top soil dump has been construction and garland drain along the dump toe wall with 36 no's of random rubble type barriers is made to arrest the silt.
3. Catchment/garland drains for a length 2800m for appropriate size with suitable gradient is made around the mine pit and at haul roads to prevent run off water and desilted at regular intervals.
4. Pressurized water sprinkler is fitted on water tanker for spraying on blasted material to avoid dust during loading.
5. Rainwater harvesting pit with size 50m X 40m with depth 2m has been constructed near south side of the mine lease boundary for ground water recharge.
6. Pumping of Mine water to plant reservoir has been installed.
7. Existing plantation maintenance cost Rs. 8, 50,000/-

8. Total 2.5KV solar panel has been installed in various locations as alternative power sources for lighting and other applications.
9. Desilting of garland drain, nala, ponds cost Rs.1,15,000/-
10. 2322 m of fencing made around the working pit and along the mining lease boundary to avoid unauthorized entry.
11. 5m height earthen bund for a length of about 250 m has been formed along the village and Mining lease boundary.
12. Personal dust monitoring will be done to workmen in every quarterly.
13. Around 9700sq.m of area stone pitching has been done at both sides of nala bank to avoid soil erosion.
14. Total green energy (wind & solar) purchased for the FY 2020-21 is 166200000kwh for plant & mines (2.5% of total green energy consumption) operational utilization

- **EXPENDITURE ON ENVIRONMENT MANAGEMENT**

DETAILS OF EPM EXPENDITURE

ASSET DESCRIPTION	Amount	Amount in Lakhs
DUST SUPRESSION SYSTEM	43,58,474	43.58
BAG FILTER & ESP FOR STACKS	33,54,39,089	3,354.39
CPP - RCC CHIMNEY	2,87,14,293	287.14
WATER RESERVOIR	25,87,57,199	2,587.57
WATER TREATMENT PLANT	12,85,41,299	1,285.41
SEWAGE TREATMENT PLANT	7,28,00,825	728.01
ROAD & DRAIN	50,14,63,605	5,014.64
GREEN BELT DEVELOPMENT	53,48,720	53.49
FLY ASH SILO & HANDLING SYSTEM	12,89,16,613	1,289.17
EFFLUENT TREATMENT PLANT & DM PLANT IN CPP	3,60,66,506	360.67
CPP - ELECTROSTATIC PRECIPITATOR	10,77,18,110	1,077.18
CPP ASH HANDLING SYSTEM	3,98,25,799	398.26
COMPLETE BURNER ASSEMBLY	1,17,15,390	117.15
AMBIENT AIR QUALITY MONITORING	2,20,13,783	220.14
SNCR FOR NOX REDUCTION	3,03,21,259	303.21
AMMONIA SLIP SENSOR STACK APPLICATION	17,80,000	17.80
MEDIA CONVERT - LIQUID AFR SYSTEM	2,54,471	2.54
NEUTRON SURVEY METER	4,25,000	4.25
UT PUMP	13,03,410	13.03
WASTE SEGREGATION YARD	4,55,406	4.55
SHREDDER FOR AGRO WASTE AFR	3,47,913	3.48
BUCKET ELEV,FEEDING ARRG & SHED FOR AGRO	18,89,931	18.90
RAIN WATER HARVESTING	12,03,438	12.03
TOTAL	**1,71,96,60,534**	**17,197**

Details of Expenses (in Rs) made towards Environment Protection in Mines for the year 2020-21

Sl no.	Particulars	2020-21
1	Expenses for B C Soil Handling & Use for Afforestation	**10,43,259.00**
2	Expenses for Afforestation	**9,20,750.00**
3	**Expenses for Construction of Rain water Hravesting Pit**	**11,22,180.00**
4	Expenses for construction of earthen garland drain along the magazine diversion road outside mining lease area and within mining lease area	**1,10,000.00**
5	Expenses for Desilting of Check Dam & Nala	**92,000.00**
6	Expenses for Dust Suppression operation & maint cost of Water Tanker	**15,00,000.00**
7	Expenses for operation & maint cost of permanent water sprinkler in Haul road, view Point and floating fountains in mine pit	**4,50,000.00**
8	Expenses for Use of NONEL, Electronic Detonators, Wooden Spacers and Stem Plugs.	**5,09,623.00**
9	Expenses for Environmental Monitoring Expenses + Airborne dust survey for workmen	**11,00,000.00**
10	Expenses for Ear Plugs & Earmuffs	**50,000.00**
11	Expenses for Oil Separation Tank Maintenance	**-**
12	Expenses for Handling of Waste Oil, Scrap Batteries, Used Cotton Waste, Filters	**-**
	Total	**68,97,812.00**
Rs in Lakhs		**68.98**

Proposed modifications for the year 2020-21 for Energy Conservation and Better Environment:

1. 3750 saplings are proposed covering an area of 1.50 ha within ML area.
2. Formation of Balance bund with 5m height along the village and mining lease boundary side with plantation - 345m length.
3. Existing plantation maintenance.
4. Fixing of permanent sprinkler in the new haulage road for dust suppression.
5. Fencing around pit – 1000m.
6. Construction of Garland drain along the new haulage road.

PART- I

Any other particular in respect of environmental protection and abatement of pollution

- Promoting Eco Friendly zero waste mining.
- Implementation of EMS including compliance of environmental laws through periodic Management Review & Internal/ external audits.
- Awareness promotion through various environmental competitions, workshops, presentations etc. on world environment day.
- Improvement in Ambient Air Quality through effective control on fugitive dust emission.
- Extensive green belt is being developed in the mining area with plantation of tree saplings surrounding mining lease area.

Arrangement of Solar light Panels in required areas

MISCELLANEOUS

World Environment Day 2020 Celebrations

World Environment Day 2020 was celebrated at M/s Orient Cement Ltd, Chittapur, on 5th June 2020 @ 10:00 AM .This year theme for World Environment day was: **"BIODIVERSITY -TIME FOR NATURE,''** with a Slogan **"*Reduce , Reuse Recycle*"** for which Environment Department along with staff of Orient Cement Ltd commenced an opening program chaired by **Shri. Satyabrata Sharma-Unit Head, Shri. Santosh Kumar Sharma-Sr.GM-Production & other delegates** at Packing plant area with mass plantation of around 80 saplings and later individual department planted with mass plantation in selected area in plant premises and planted around 300 saplings.

From 3rd June to 5th June-2020, OCL Chittapur has conducted an awareness program through online portal as per the guidelines issued by KSPCB, such as Quiz completion, Essay Competitions, drawing competitions by involving school children's.

The Welcome Note along with World Environment Day Speech was addressed by Mr. Ramesh Bashetty from Environment Department & then the Speech was addressed by our Unit Head Shri. Satyabrata Sharma in a thought-provoking manner, which set a perfect platform for our colleagues who have gathered for WED celebration.

The chairperson suggested few visions to be included to make remarkable changes in the environment and addressed the people to change their thoughts to change an good environment. Also prize distribution program was carried out rewarding the winners, who have participated in the World Environment day Events (Essay, Blogging & drawing / painting).

Glimpses of World Environment Day-2020 celebrations at Orient Cement Ltd, Karnataka.

Plantation by Our Unit Head Mr. Satyabrata Sharma at Packing plant Area

Group photo by Orient staff on WED-2020

Mass Plantation by HR & Account team near Admin Building: Group photo on WED-2020

Plantation by OCL Staff near Packing plant area

Plantation by Workers, labors & mines staff near surge bin hoper area

Plantation by Workers, labors & mines staff near surge bin hoper area

Group photo of Mines & Security staff during the plantation on WED 2020

Group photo of OHC staff during the plantation at OHC center on WED 2020

Group photo of DAV & Civil department staff during the plantation at DAV School area on WED 2020

Plantation by DAV staff at DAV school ground area on the occasion WED-2020

Plantation by laborer's at Labor colony on WED -2020

Brief Presentation on World environment day -2020 by Mr. Ramesh Bashetty Environment Dept.

Plantation being carried out by Mines, Process & Environment Staff

Prize distribution to winners by Mr. Shivbasappa Nadyal Sr. GM -Civil

Prize distribution to winners by Mr. Shivbasappa Nadyal Sr. GM -Civil

Prize distribution to winners by Mr. Saji Kumar Sr. GM -HR

Prize distribution to winners by Mr. Saji Kumar Sr. GM -HR

Glimpses of Social Activities organised by Orient Cement Ltd, Karnataka.

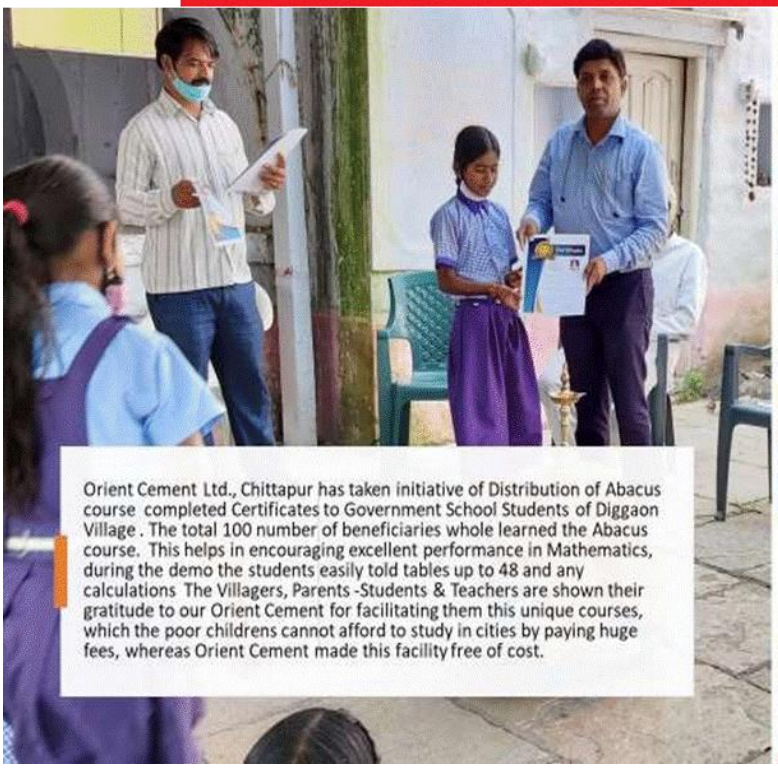
Great Place To Work.

Orient Cement Ltd., Chittapur has taken initiative of Distribution of Scholarship amount through Cheques to Government School Students of 7th-8th & 10th Class merit Students who secured highest marks in their respective classes. This helps in encouraging childrens to improve their academic excellency to other up-coming Government School Childerens of Adopted villages of Chittapur Taluka. The Parents -Students & Teachers are shown their gratitude to our Orient Cement for facilitating them

Great Place To Work.

Orient Cement Ltd., Chittapur has taken initative of Distribution of Chairs & Table to 16 Anganwadi's School Teachers and Baby Sitting Chairs to 16 Anganwadi's School Children. This helps in encouraging children's & Teachers for their comfortability for learning & teaching at the Anganwadi's Schools of 16 Anganawadi's Centre of Adopted villages of Chittapur Taluka . The Parents -Students & Teachers are shown their gratitude to our Orient Cement for facilitating them.

Great Place To Work.



Orient Cement Ltd., Chittapur has taken initiative of Distribution of Abacus course completed Certificates to Government School Students of Diggaon Village . The total 100 number of beneficiaries whole learned the Abacus course. This helps in encouraging excellent performance in Mathematics, during the demo the students easily told tables up to 48 and any calculations The Villagers, Parents -Students & Teachers are shown their gratitude to our Orient Cement for facilitating them this unique courses, which the poor childrens cannot afford to study in cities by paying huge fees, whereas Orient Cement made this facility free of cost.

Great Place To Work.

Orient Cement Ltd., Chittapur has taken initiative of Training to Farmers in Organic Farming to avoid fertilizers & pesticides in very low cost budget to improve their crop yield and quality products. Further, training given education to farmers of Diggaon village what is the benefit of Cow-urine and Cow-dung. More then 59 farmers benefited on this program conducted by Orient Cement to encourage the farmers for their proper cultivations. The farmers & villagers are shown their gratitude to our Orient Cement for facilitating them

Orient Cement Ltd., Chittapur has taken initiative of Driving Training & License to un-employed 30 young-men's of Itaga-Diggaon villagers. All the 30 un-employed young men's are being trained very well in LMV and got the license. The Parents & villagers are shown their gratitude to our Orient Cement for facilitating this Driving Training & License of LMV to get their young un-employed son's into employments and some of them started their own Car hiring business.

Great Place To Work.

Orient Cement Ltd., Chittapur has taken initiative of Abacus course to Government School Students of Itaga- Diggaon - Station Tanda Village even during Corona period also with all safety measurers . The total 425 number of beneficiaries who learned the Abacus course. This helps in encouraging excellent performance in Mathematics. The Villagers, Parents -Students & Teachers are shown their gratitude to our Orient Cement for facilitating them this unique courses, which the poor childrens cannot afford to study in cities by paying huge fees, whereas Orient Cement made this facility free of cost.

Great Place To Work.

Orient Cement Ltd., Chittapur has taken initiative of Computer Training classes to Itaga village students . All the 110 students are being trained very well in Computer courses. The Parents-Teachers & villagers are shown their gratitude to our Orient Cement for facilitating this Computer training to the students which is very essential in today's modernized & developed society. Now the Villagers are very much happy about the Orient Cement initiatives

ORIENT CEMENT

Great Place To Work.

Orient Cement Ltd., Chittapur has taken initiative of Driving Training & License distribution program, the Licenses are being distributed by our Plant Head to all 30 beneficiaries of Itaga & Diggaon villagers. Further our Unit Head boosted all the un-employed young beneficiaries to start joining jobs and also start their own car-hiring business. All the beneficiaries are very happy & shown their gratitude to our Orient Cement for facilitating and boosting them.

ORIENT CEMENT

Great Place To Work.

Orient Cement Ltd., Chittapur has taken initiative of Dust-bin given to villagers in view of Swach-Bharath-Abhiyan to clean and green India to the villagers of Itaga Total 600 dust-bins each for dry & wet wastage should be dumbed, further Orient Cement Ltd., has educated all the villagers how to use the dust-bins to clean their houses and surrounding area . All the villagers are very happy & shown their gratitude to our Orient Cement for facilitating them by providing dust-bins.

ORIENT CEMENT

Great Place To Work.

Orient Cement Ltd., Chittapur has taken initiative of Distribution of Abacus course completed Certificates to Government School Students of Itaga Village . The total 115 number of beneficiaries who all learned the Abacus course. This helps in encouraging excellent performance in Mathematics, the students easily told tables upto 48 and any calculations. The Villagers, Parents -Students & Teachers are shown their gratitude to our Orient Cement for facilitating them this unique courses, which the poor childrens cannot afford to study in cities by paying huge fees, whereas Orient Cement made this facility free of cost.