CK BIRLA GROUP | ORIENT CEMENT

Through Courier

Ref:OCL/ENV/Sr.VP-(WORKS)/19-20/151 **Date: 27/08/2019**

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

Dear Sir,

Sub: - **Environment Statement Report of Plant & Mines for the financial year 2018-2019:-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** of **Captive Limestone Mines & Cement Plant** for the financial period **1st April 2018 to 31st March 2019.** Kindly find the enclosed statement report for your perusals & acknowledge the receipt of the same.

Thanking You,
Yours Faithfully,
For Orient Cement Ltd

27.8.19

Satyabrata Sharma
Sr. Vice President - Works

Copy to:

1. Additional Principal Chief Conservator of Forests (C),
   Ministry of Environment & Forest, Govt. of India
   Regional office (Southern zone)
   Kendriya Sedan, IVth Floor, E & F Wings,
   17th Main Road, II Block, Koramangala,
   Bangalore-560 034.

29/8/19

2. Environmental officer,
   Karnataka State Pollution Control Board,
   #101, F-Block, Green Park, KHB,
   Near Chor Gumbaz, Ring road,
   Kalaburagi- 585 105.

O/c - Environment dept.

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ORIENT CEMENT

ENVIRONMENTAL STATEMENT REPORT

FOR

PLANT
(FORM-V)

[YEAR 2018 - 2019]

REPORT BY

ORIENT CEMENT

(Orient Cement Ltd.)

Captive Limestone, Clinkerisation,

Cement Unit & Captive Power Plant

Itga (V), Chittapur (Tq)

CK BIRLA GROUP

ENVIRONMENTAL STATEMENT REPORT

(Form-V)

[Year 2018 - 2019]

REPORT BY

ORIENT CEMENT

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

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 Electro static 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 2018-2019 ended 31st March 2019 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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Corporate Environment, Health and Safety (EHS) Policy

We, at Orient Cement Limited are committed towards environmental protection and providing healthy & safe work environment by way of :

- Compliance with all applicable legal, social and other requirements
- Improvement in environmental performance and resource efficiency
- Reviewing objectives and targets for continual improvement in environment, work place, health & safety
- Engaging and training human capital to enhance their skills and augment resources for effective EHS performance.
- Controlling pollution
- Prevention of occupational injuries and health hazards

Rahul Deshmukh

Chief Operating Officer

Date: 01.07.2016

Orient Cement Limited
#5-9-22/57/D, 2nd & 3rd Floor, G P Birla Centre, Adarsh Nagar, Hyderabad - 500063. Telangana.
Ph: 040-2368 8700, Fax: 040-2368 8654 E-mail: info@orientcement.com
Registered Office: Unit VIII, Plot No.7, Bhoinagar, Bhubaneshwar, Odisha 751012. India www.orientcement.com
CIN No: L26940OR2017PLC029521

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: 28/09/2017 for the year (2017-2018)

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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: 08474-236716

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 waste water 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 **2018-2019** 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 2017-18 in (m^3/day)	During Current Financial Year (2018-2019) (m^3/day)
	Water consumption in m3 / d or KLD	620.66	901.66
1.	a) Process/Cooling	493.50	491.06
	b) Domestic/Gardening	127.16	410.6

Note: OCL is permitted to draw water for rainy season (Feb-July) in a year from river Kagina at the rate of 5.56 MLD, The application for renewal of permission is also filed @ WRD office.

Name of products	Process water consumption per unit of products output	
	During the Previous financial year (2017-2018)	During the current financial year (2018-2019)
Cement	0.059 (KL/Ton)	0.047 (KL/Ton)
Power	0.48 (KL/MWH)	0.32 (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 (2017-18)	During the current financial year (2018-2019)
Lime Stone	Clinker	1.438	1.427
Laterite		0.005 (Lat 2 Consd)	0.0633
Bauxite		0.075	0.070
Coal		0.037	0.074

Name of raw materials	Name of products	Consumption of raw material per unit of (Cement) output	
		During the Previous financial year (2017-2018)	During the current financial year (2018-2019)
Lime Stone	Cement (OPC & PPC)	1.19	1.11
Laterite Iron & Silica		0.04(Lat- 2Cond)	0.05
Bauxite		0.06	0.05
Coal		0.03	0.06
Petcoke		0.06	0.03
Clinker		0.81	0.78
Fly Ash		0.14	0.15
Gypsum		0.04	0.03

Name of raw materials	Name of products	Consumption of raw material per unit of (Power) output	
		During the Previous financial year (2017-2018)	During the current financial year (2018-2019)
Coal	Power	0.96 MT/MWh	1.073 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).

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.	Outlet effluent of sewage treatment plant	33.03 KL/day	----	----
1.	pH		7.5 mg/L	Within Standard
2.	BOD 3 days at 27°C		5.0 mg/L	Within Standard
3.	COD		33.9 mg/L	Within Standard
4.	Ammonical Nitrogen		2.6 mg/L	Within Standard
5.	Total Nitrogen		7.3 mg/L	Within Standard
6.	Phosphate		0.9 mg/L	Within Standard
7.	Fecal Coliforms		12.3 mg/L	Within Standard
b) AMBIENT AIR:-				
1.	Near Main Gate Concentration in µg/Nm³	PM10	76.9	Within Standard
		PM2.5	35.6	Within Standard
		SO2	6.8	Within Standard
		NOx	11.2	Within Standard
2.	Near Coal Yard	PM10	82.7	Within Standard
		PM2.5	36.6	Within Standard
		SO2	8.3	Within Standard
		NOx	13.4	Within Standard
3.	Near Dispatch Gate	PM10	74.3	Within Standard
		PM2.5	33.4	Within Standard
		SO2	7.4	Within Standard
		NOx	10.9	Within Standard
4.	Near CPP plant	PM10	81.1	Within Standard
		PM2.5	35.8	Within Standard
		SO2	8.2	Within Standard
		NOx	13.0	Within Standard

* The value represents arithmetic average of 12 months for the financial year 2018-2019.

Stack Gas Quality for Particulate Matter

CEMENT PLANT & CPP:

S.No	POLLUTANTS	QUANTITY OF POLLUTANTS DISCHARGED (m3/H)	CONCENTRATIONS OF POLLUTANTS IN DISCHARGE (Mass/Vol.) (mg/Nm3)	PERCENTAGE OF VARIATION FROM PRESCRIBED STANDARDS WITH REASONS
1.	Crusher	37210.67	26	Within Standards
2.	Kiln/Raw mill	480597.44	21	
3.	Coal mill	259511.87	22	
4.	Cement mill	129974.78	20	
5.	Packing plant	17490.65	22	
6.	Clinker cooler	395017.14	23	
7.	CPP	302977.16	19	

*** The value represents arithmetic average of 12 months for the financial year 2018-19**

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 2017-2018	**During Current Financial Year 2018-2019**
Waste oil / used oil	17.74 MT	3.51MT (Reutilized for our machineries)
Used Batteries	138 No's(Automotive-4 No's, Lead Acid-13 No;UPS-87 Nos,Lethium battreries-34 No)) with a overall approximate weight of 1.03 MT	April-18 to Sept 18 (UPS Battery-05 NO's) i.e., 0.15 MT. Oct-18 to March-19 (Lead Acid Batteries-282 NO's & UPS:- 19 NO's) Total 301 NO's with total weight of 8.20 MT

Name & Category of the waste	Qty received & Co-processed in MT
Hazardous waste(A)	
(20.3)Distillation Residue	115.075
(28.1) Organic/Process residue	3260.595
(28.2) Spent Catalyst	55.96
(28.3) Spent Carbon	56.76
(28.6) Spent Solvent	5.16
(29.1) Process Waste or residue	42.92
(35.3) Chemical Sludge from Waste water treatment	76.31
(36.1) Any Process or distillation Residue	231.89
Subtotal (A) 3844.67 MT	
Non-Hazardous/Other waste	
Carbon Black	4138.1
Subtotal (B)	**4138.1**
Grand Total A+B	**7982.77**

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 reprocessors/recyclers KM Oil Pvt Ltd, Kalaburagi in generated in huge quantity. The waste oil generated is also reutilized in our plant machineries if the quantity is very less. The details specifying the same is submitted via Form-IV to KSPCB vide our letter no Ref: OCL/ENV/Sr-VP (Works)/19-20/F-102 dated 09/04/2019.

New Batteries purchased from the dealers/agency during the period April-2018 to March-2019 has been submitted in Form VIII to Board on half yearly basis vide our letter no **OCL/ ENV/Sr.GM(Prod)/ 2018-19/ Dated: 08.10.2018 & OCL/ ENV/Sr.GM(Prod)/ 2019-20/ 103 Dated: 08.04.2019 respectively.**

PART-E

Solid Wastes

Sl.No	Solid Waste	Total Quantity	
		During the Previous financial year 2017-2018	During the current financial year 2018-2019
1. (a)	From process (Fly ash from captive Thermal Power Plant)	Nil from Cement plant. # 44,587 MT from Power Plants.	Nil from Cement plant. #68947 MT from Power Plants
(b)	Fly Ash from RTPS / NTPC/Kudgi	# 2,03,447 MT	# 270022 MT
2.	From pollution control facility	409 MT Recycled in to the main process in cement plant.	791.07 MT/Year Recycled in to the main process in cement plant
3.	Quantity recycled or reutilized Within the unit	409 MT (In process, material recycled from Pollution control equipment like ESPs /Bag House /Bag filter).	**791.07 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.

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, 2008. These stored hazardous wastes **are being sold to authorized recycler within the stipulated time.**

Solid waste:

- There is no solid waste generated during the process of cement manufacturing.
- 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 water 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 etc.
- Installed an STP of capacity 500 KLD in order to recycle or reuse the treated water for plantation purpose etc.,
- Rainwater harvesting Tank 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 to abate the pollution.

Modifications for the year 2018-19 for energy conservation and better Environment

Process

- Optimization of crusher secondary motor load because of load equally distributed between primary & secondary motor thereby reducing 200KWh.
- Optimization of Raw mill (roller press) gap increasing grindibility rate and reduced power consumption by 1unit per tonne of material.
- Optimization of Raw mill (roller press) fan flow by reducing speed and increasing the dust load thereby reducing power consumption by 1unit per tonne of material.
- Optimization of Preheater fan flow with Outlet pressure PID by which preheater fan speed reduced there by saving power of 300KWh
- Optimization of cooler vent fan flow with kiln hood pressure PID by which cooler fan speed reduced there by saving power of 50KWh
- Modification of OK mill (Cement mill) grinding aid nozzle spray wherein efficiency of grinding aid increased resulting in 1unit per tonne of material power saving
- Optimization of OK mill (Cement mill) fan flow by reducing speed and increasing the dust load thereby reducing power consumption by 1unit per tonne of material
- Optimization of fly ash compressor by reducing operating pressure from 5.5bar to 3 bar resulting in stopping 155KW compressor saving 120KWh power.
- Cement mill-2 roller and table profile build up because of which mill grinding profile improved and main motor power saving achieved upto 1.0 kWh/Mt.
- Fly ash unloading air pressure reduced to operate one compressor with two unloading points at a time and compressor pressure also reduced to 2.5Kg/ cm^2 from 4.0 kg/cm^2 due to this ideal power saving of 1.5 kWh/Mt fly ash unloading achieved.
- Permanent magnets installed on both cement mill reject belt conveyors due to this metal sensing rejection minimized & reject empty time was almost reduced by 25% & there by increasing mill output.
- VFD installed for one of the PA fan which has given reduction in power consumption and better flame operation during start-up which has saved diesel and proper flame length during operation which has given proper coating in the kiln.

- Cooler water injection nozzles angle was made to 45 degrees towards the kiln inlet side which has resulted in no coating and this has given proper ventilation of cooler vent fan and dust emission has come down
- In coal mill the table and the roller liners has been changed which has increased output and thereby reduced the specific power consumption.
- AFR system has been implemented. Carbon black and the Liquid AFR has been installed.
- SNCR system has been installed and this reduced NOx emissions protecting the environment.
- The purging air for the compressed bag filters have been reduced as per OEM without affecting the emissions.

Electrical & Instrumentation:

- Optimization of Compressors.
- Synchronization at 11KV Voltage level achieved. Idle loading if power transformer on grid is avoided.
- In place of 4 nos of 5.5 KW Screw conveyors replaced with 3 nos of 5.5 KW Screw conveyors resulting in power saving .
- 37KW Dust Collector fan removed and the same de dusting line taken with packer main bag filter 75KW for all five packers.
- PA Fan VFD Installed to control required speed.
- Optimization of Raw mix & Fuel.
- Arresting of False air Leakages leading to fuel optimization and power reduction.
- Minimization Start Stops of the systems.

Instrumentation:-

- Provision of pressure transmitters and pressure indications at DCS for PA fan axial and radial pressures for better control over burring zone and effective kiln operation.
- Installation of panel cooling fans for PC and kiln coal firing panels to avail benefits like, exhaust the dissipated heat to keep the controllers and other electronics cool. in turn failure of components and plant stoppages avoided.
  Auto control of pyrometer and stack dust monitor blowers for power saving during idle time, to avoid manual mistakes.
- Logics modification for auto switching of rejects circuit instead of regular manual continuous run at LS Crusher resulting in power optimization.
- PID controller for weigh feeder with respect to bin weight for optimization of LS Crusher running resulting in power optimization.
- Auto tripping of feed/auxiliary circuit during idle running condition in PP resulting in power optimization.
- Installation and commissioning of remote calibration system for CEMS as per PCB norms.

- Speed reference of raw mills Fan is reduced to 20% whenever mills trip due to any reason. This is for power optimization.

- Speed reference of Cement Mill Fan is reduced to 20% whenever mills trip due to any reason. This is for power optimization.

Power Plant:

- Installed VFD for Condensate extraction pump and reduced Energy consumption of 1000Kwh/day
- We have developed a logic for auto conveying of ash depending on transport pressure and reduced Energy consumption by 400KWH/day
- We have stopped one Service air compressor for ash conveying and utilizing Instrument Air compressor (which is under loaded) for the same which resulted into energy saving of 1800 Kwh/day

Mechanical:-

Following Modifications were done @ Cement Mill Area towards betterment of Environmnet & reducing power consumption

- Table and roller liner segments refurbishment work @ 532RM100 has been carried out to increase the production & to achieve power saving.
- Rubber Curtain for Lime stone dump hopper area to arrest fugitive emission are installed.
- Fan impeller refurbishment work @ 531FN400 has been carried out to improve the efficiency & to achieve Power Saving
- Discharge chutes modification done @ 133BC720 to reduce the spillages
- Discharge chutes modification done @ 133BC750 to reduce the spillages
- Discharge chutes modification done @ 133BC760 to reduce the spillages
- Discharge chutes modification done @482BC250 to reduce the spillages
- Rubber curtains provided at backside of skirt boards in clinker extraction gates in tunnel to arrest fugitive emission.
- Rubber curtain provided @ 482BC350 manual feeding hopper to arrest fugitive emission.
- Spillage chute provided to collect the fine materials from snub pulley area @ 531BC030
- Mechanical Developmental works towards betterment of Environmnet & reducing power consumption in Pyro section.
- Water Sprinkler Arrangement @ Limestone Dump Hopper has been done to arrest fugitive emission.
- Water Sprinkler Arrangement @ Limestone BC 260 Conveyor been done to arrest fugitive emission.

- Modification of venting arrangement has been done @111BC570 additive feeding belt causing reduction in emission.
- Coal feed end of 211BC050 impact idler replacement done with impact pads to reduce spillage.
- 3-4 Grizzly fabricated & erected over the ground Hopper of solid waste to reduce spillage.
- 02 Permanent magnets erected @ BC400 & 410 to trap the unwanted metal pieces going through coal increasing efficiency & reduction in power by reducing Trippings.
- Hazardous waste handling area barrication /Side gladding being done to restrict the waste in the allocated premises reducing land pollution.
- Additive, surge hopper & Samson feeder building Side cladding work carried out to reduce fugitive emission.
- Treated Wastewater from STP being utilised for Dust Suppression and gardening.
- In-house full dust proof feeding system erected & Commissioned to feed AFR.
- Effective cleaners have been installed @ tail ends & Head Ends to reduce fine dust spillage.
- Clinker Silo De-dusting line modification by replacing normal pipe with wear resistant pipe carried out to reduce spillage

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.
- New Additive shed for storage of Raw materials with a capacity of 50000M3 and dimension of 150x47.5x23)
- Regularly we are monitoring ambient air quality, Noise level and stack along with water quality analysis.
- Constructing of internal 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)
- Actions are taken to utilize Hazardous wastes like Paint sludge, ETP Sludge & other alternate fuels like Carbon powder, tyre chips, plastic waste, agro 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 **150266 plants in 98 Ha areas have been** planted surrounding Boundary Zone, of the total plant & Mines area.

Proposed modifications for the year 2019-20 for Energy Conservation and Better Environment:

Process

a) Installing one more VVFD for the PA fan in order to reduce the power consumption.
b) Water injection system in the cooler to be optimised by reducing the water nozzle size.
c) Optimizing the coal mill operation by reducing the dam ring height.
d) Heat radiation paint to be done for the pyro system which will reduce the heat consumption and save the fuel.

Power plant:-

- Water Sprinklers arrangement on coal belt conveyors for Dust suppression.

Mechanical:-

- Coal Crusher shed of dimension 2mx20mx7m will be erected for arresting fugitive emissions avoiding nuisance.
- Complete side cladding for off specific silo to prevent fugitive emission.
- In-house design & manufacturing of shredder & feeding arrangement of MSW/RDF in pre Calciner will be done to replace coal with AFR at higher rate.
- Separate Bag filter for carbon Black bin hopper will be provided to arrest fugitive dust.

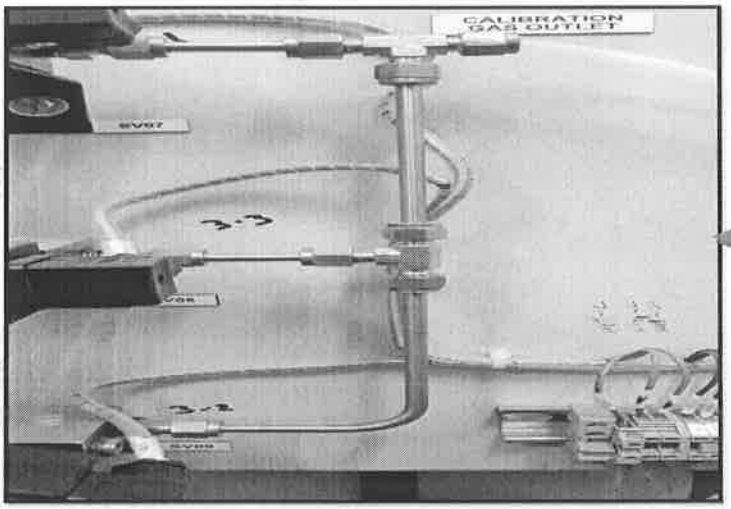
Electrical & Instrumentation:

- Power of approx. 20Lakh unit /month purchased from open access of Renewable power sources leading to Cost Optimization & Coal Saving.

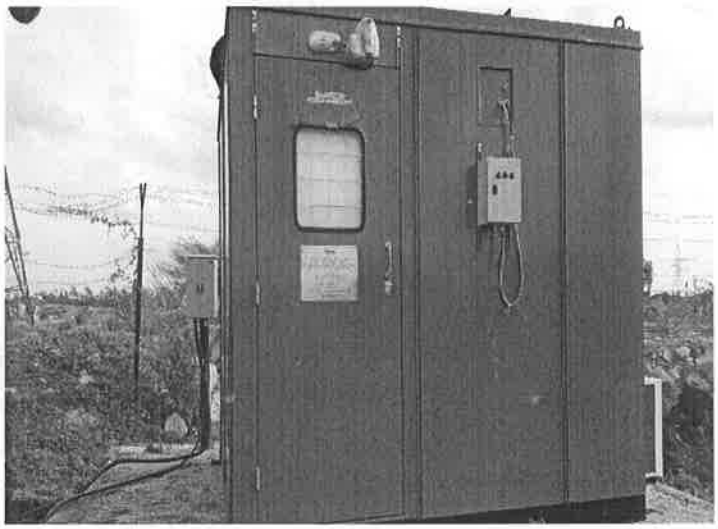
PART- I

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.
- 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.



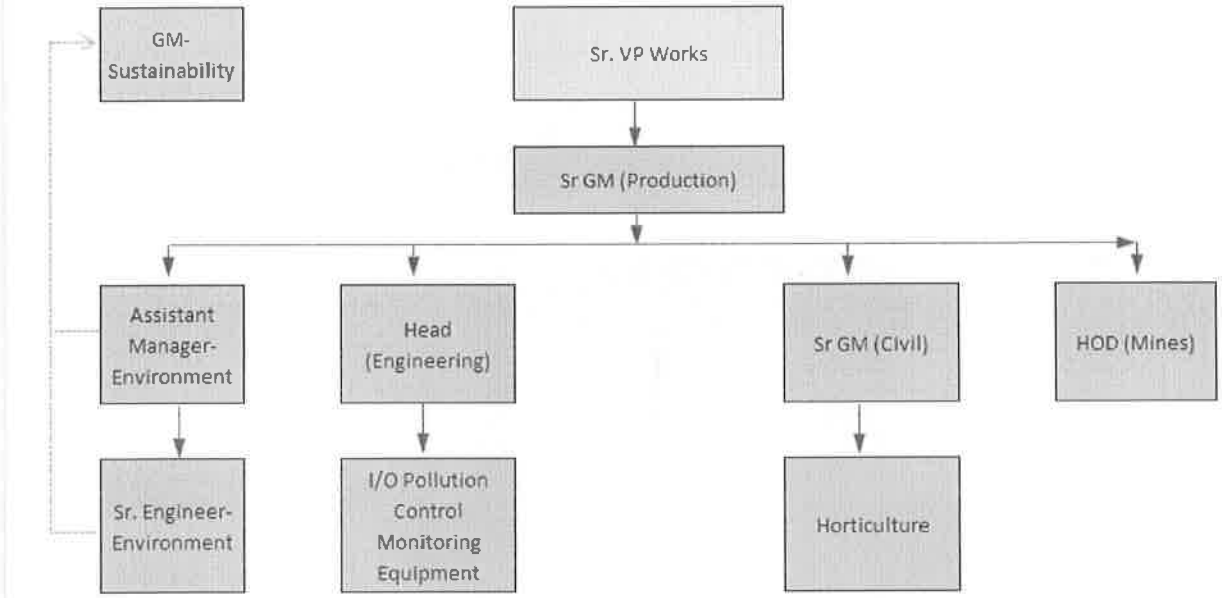
Remote calibration Setup



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 -2019

Environmental Awareness:

World Environment Day 2019 was celebrated at M/s Orient Cement Ltd, Chittapur, from 5th June 2019 to 10th June-2019@ 10:00 AM .This year theme for World Environment day was: **"BEAT AIR POLLUTION," with a Slogan "We can't stop breathing, but we can do something about the quality of our air"** for which Environment Department along with staff of Orient Cement Ltd commenced an opening program at OCL Mines area with mass plantation of around 400 saplings.

Then from 6th June to 9th June-2019 , OCL Chittapur has conducted an awareness program, Quiz completion, Essay Competitions , Drawing competitions involving school children's of surrounding villages, workmen & OCL Staff. Saplings were distributed to Schools for plantation.

Finally on 10th June 2019,OCL Chittapur organized a closing ceremony program involving the Chief Guests from KSPCB ,Forest Department & Reputed Institution namely Mr.Venkatesh Shekar-SEO,Mr.Manjappa-EO from Pollution Control Board,Mr.Baburao Patil-Assistant Conservator of Forest,Mr.Mujeebuddin-RFO Forest Department, Dr.S.R Mise & Dr.S.R Patil –Prof Environmnet Engg. Dept,PDA College of Engineering Kalaburagi. The programme was chaired by Shri. Satyabrata Sharma-Unit Head, Shri.Santosh Kumar Sharma-Sr.GM-Production & other delegates.

The Welcome Note along with World Environment Day Speech was addressed by Mr.Mallikarjun.S.D from Environment Department & then the Speech was addressed by Delegates from KSPCB & Forest Department with a concluding speech 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 chair persons suggested few visions to be included to make remarkable changes in the environment to combat the Air pollution and also addressed the people to change their thoughts to change an environment. A prize distribution program was also carried out rewarding the inners, who have participated in the World Environmnet day Events (Quiz,Essay,Skit& drawing).

Later all the staff of OCL ,delegates from Pollution Control Board, Forest Department & Engineering College along with School Children's & Workers carried out a plantation programme at Raw Meal area, where 1000 No's of Honge,neem,pongemia,peepal,etc Saplings were planted.

Glimpses of World Environment Day-2019 celebrations at Orient Cement Ltd,Karnataka.

- **Plantation Involving School Children at Raw Mill Area**

- **Plantation Involving School Children at Raw Mill Area**

- **Plantation by Assistant Conservator of Forest**

- **Plantation Involving Pollution Control Board, Forest Dept official and OCL Staff**

- **WED Celebration and Speech @ OCL Premises**

- **WED Celebration and Speech @ OCL Premises**

- **WED Celebration and Prize Distribution @ OCL Premises**

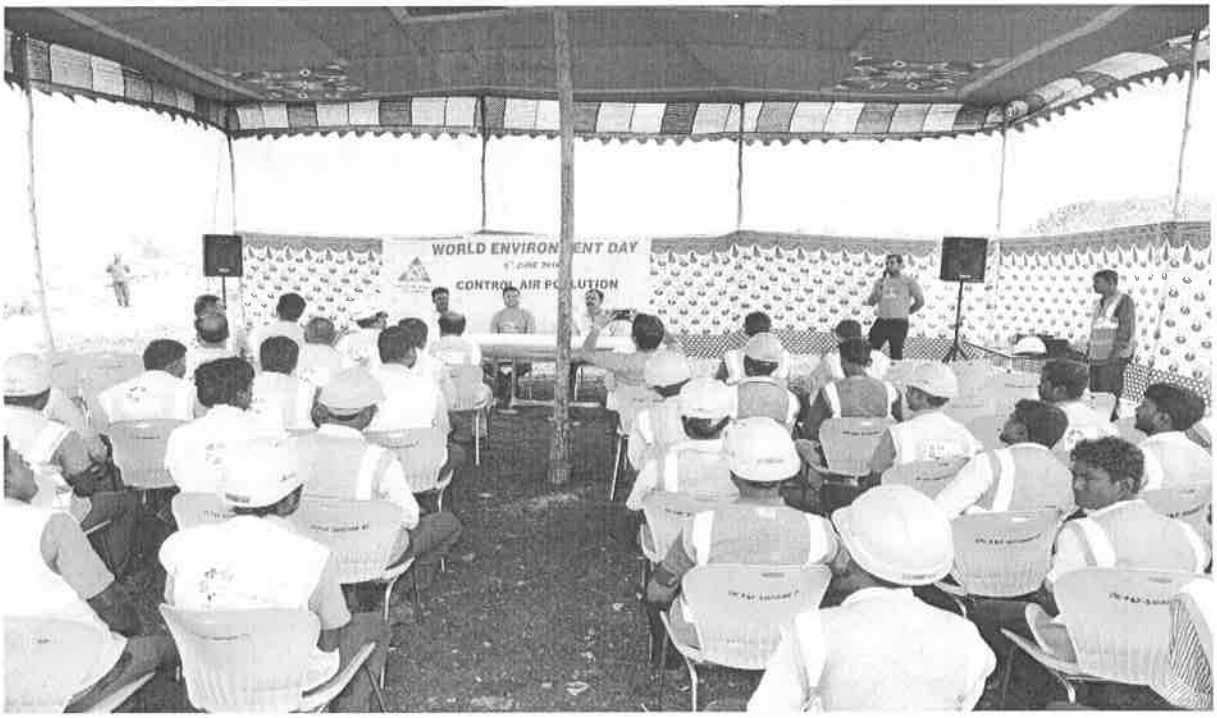
- **Distribution of Saplings @ Govt School of Itga Village**

- **Distribution of Saplings @ Govt School of Chittapur Village**

- **Conducting Awareness Session at Chittapur Govt Girl's High School**

- **Distribution of Saplings @ Govt School of Diggaon Village**

- **Glimpse of WED Commencement Program held at Mines area**



- **Plantation being carried out by our Unit Head Mr. Satyabrata Sharma**

- **Plantation by Sr-GM Production- Santosh Kumar Sharma**

- **Plantation by Sr.GM-Civil, Mr. Shivabassappa Nandyal**

ಮಾಲಿನ್ಯ ನಿಯಂತ್ರಿಸಲು ಸಲಹೆ

ಪ್ರಜಾವಾಣಿ ವಾರ್ತೆ

ಚಿತ್ತಾಪುರ: 'ಜಾಗತಿಕ ತಾಪಮಾನ ಏರುಗತಿಯಲ್ಲಿ ಸಾಗುತ್ತಿದೆ. ಪರಿಸರ ಮಾಲಿನ್ಯ ಹೆಚ್ಚುತ್ತಿದೆ. ಕೈಗಾರಿಕೆಗಳು ಪರಿಸರ ಮಾಲಿನ್ಯ ನಿಯಂತ್ರಣಕ್ಕೆ ಹೆಚ್ಚಿನ ಒತ್ತು ನೀಡಬೇಕು' ಎಂದು ಕರ್ನಾಟಕ ಮಾಲಿನ್ಯ ನಿಯಂತ್ರಣ ಮಂಡಳಿ ವಲಯ ಕಚೇರಿಯ ಹಿರಿಯ ಅಧಿಕಾರಿ ಎಸ್. ವೆಂಕಟೇಶ ಶೇಖರ್ ಅವರು ಹೇಳಿದರು.

ತಾಲ್ಲೂಕಿನ ಇಟಗಾ ಗ್ರಾಮದ ಹತ್ತಿರದ ಓರಿಯಂಟ್ ಸಿಮೆಂಟ್ ಕಂಪನಿಯಲ್ಲಿ ಸೋಮವಾರ ವಿಶ್ವ ಪರಿಸರ ದಿನಾಚರಣೆಯ ಸಮಾರಂಭದಲ್ಲಿ ಮುಖ್ಯ ಅತಿಥಿಯಾಗಿ ಅವರು ಮಾತನಾಡಿದರು. 'ಯುರೋಪ್ ಮತ್ತು ಪಾಶ್ಚಿಮಾತ್ಯ ದೇಶಗಳಲ್ಲಿ ಪರಿಸರ ಸಂರಕ್ಷಣೆಗೆ ಹೆಚ್ಚಿನ ಆದ್ಯತೆ ನೀಡಲಾಗಿದೆ. ಆದರೆ, ಇಲ್ಲಿ ಅದಕ್ಕೆ ತದ್ವಿರುದ್ಧ ವಾತಾವರಣ ಇದೆ. ಹಿಂದೆ ಹಚ್ಚ ಹಸಿರಿನ ದೇಶ ಎನಿಸಿಕೊಂಡ ಭಾರತ ಇಂದು ಹಸಿರು ಮಾಯವಾಗಿ ಪರಿಸರ ಮಾಲಿನ್ಯದಿಂದ ನರಳುತ್ತಿದೆ' ಎಂದು ಅವರು ಬೇಸರ ವ್ಯಕ್ತ ಮಾಡಿದರು.

ಕಂಪನಿಯ ಘಟಕದ ಮುಖ್ಯಸ್ಥ ಸತ್ಯವ್ರತ ಶರ್ಮಾ, ವಲಯ ಅರಣ್ಯಾಧಿಕಾರಿ ಮುಜೀಬುದ್ದೀನ್, ಕಂಪನಿಯ ಜನರಲ್ ಮ್ಯಾನೇಜರ್ ಶಿವಾನಂದ ಪಾಟೀಲ್ ಅವರು ಮಾತನಾಡಿದರು.

ಕಾರ್ಯಕ್ರಮದಲ್ಲಿ ಪರಿಸರ ಮಾಲಿನ್ಯ ನಿಯಂತ್ರಣ ಮಂಡಳಿಯ ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಧಿಕಾರಿ ಮಂಜಪ್ಪ, ಅರಣ್ಯ ಇಲಾಖೆಯ ಬಾಬುರಾವ್ ಪಾಟೀಲ್, ಕಲಬುರ್ಗಿ ಪಿಡಿಎ ಎಂಜಿನಿಯರಿಂಗ್ ಕಾಲೇಜಿನ ಪ್ರೊ.ಡಾ.ಎಸ್.ಆರ್ ಮೈಸ್. ಡಾ.ಎಸ್.ಬಿ ಪಾಟೀಲ್, ಕಂಪನಿಯ ಹಿರಿಯ ಜನರಲ್ ಮ್ಯಾನೇಜರ್ ಸಂತೋಷಕುಮಾರ ಶರ್ಮಾ, ಮಲ್ಲಿಕಾರ್ಜುನ ಡೆಂಗಿ ಅತಿಥಿಗಳಾಗಿದ್ದರು.

ಚಿತ್ತಾಪುರ ತಾಲ್ಲೂಕಿನ ಓರಿಯಂಟ್ ಸಿಮೆಂಟ್ ಕಂಪನಿಯಲ್ಲಿ ಸೋಮವಾರ ವಿಶ್ವ ಪರಿಸರ ದಿನಾಚರಣೆ ಕಾರ್ಯಕ್ರಮದಲ್ಲಿ ಕರ್ನಾಟಕ ಮಾಲಿನ್ಯ ನಿಯಂತ್ರಣ ಮಂಡಳಿಯ ಎಸ್.ವೆಂಕಟೇಶ ಶೇಖರ ಮಾತನಾಡಿದರು

ಬಹುಮಾನ ವಿತರಣೆ: ಪರಿಸರ ಮಾಲಿನ್ಯ ನಿಯಂತ್ರಣ ಮತ್ತು ಸಂರಕ್ಷಣೆ ಕುರಿತು ಕಂಪನಿಯ ವಿವಿಧ ವಿಭಾಗಗಳ ಅಧಿಕಾರಿ, ಸಿಬ್ಬಂದಿ, ಕಾರ್ಮಿಕರು ಹಾಗೂ ಕಂಪನಿಯ ಶಾಲೆ, ಇಟಗಾ, ದಿಗ್ಗಾಂವ, ಚಿತ್ತಾಪುರದ ಸರ್ಕಾರಿ ಪ್ರಾಥಮಿಕ ಪ್ರೌಢ ಶಾಲೆಯ ವಿದ್ಯಾರ್ಥಿಗಳಿಗಾಗಿ ಆಯೋಜಿಸಿದ್ದ ಕನ್ನಡ ಮತ್ತು ಇಂಗ್ಲಿಷ್ ಮಾಧ್ಯಮದಲ್ಲಿ ಪ್ರಬಂಧ ಸ್ಪರ್ಧೆ ಮತ್ತು ಘೋಷವಾಕ್ಯ ರಚನೆ ಸ್ಪರ್ಧೆಗಳಲ್ಲಿ ವಿಜೇತರಾದವರಿಗೆ ಬಹುಮಾನ ನೀಡಲಾಯಿತು.

AMBIENT NOISE LEVEL (PLANT) [Leq Value in dB(A)] FY-2018-19

Particular	Tolerance Limit dB(A) in day time	Actual Avg Values Max dB(A) Day Time
Near Power Plant	75	**70.4**
Near Coal Yard	75	**70.4**
Near Water Reservoir	75	**68.5**
Near Main Gate	75	**69.4**

Particular	Tolerance Limit dB(A) in Night time	Actual Avg Values Max dB(A) Night Time
Near Power Plant	70	**63.7**
Near Coal Yard	70	**63.6**
Near Water Reservoir	70	**60.3**
Near Main Gate	70	**62.7**

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-2018 to Mar-2019

MONTH	POWER CONSUMPTION (KWh)
	KPTCL/CPP
Apr-17	1,15,54,359
May-17	1,59,15,901
June-17	1,19,65,993
July -17	83,86,509
Aug-17	1,33,56,778
Sept-17	1,06,99,097
Oct-17	95,76,180
Nov-17	1,00,27,063
Dec-17	1,33,04,864
Jan-18	1,55,61,012
Feb-18	1,13,81,343
Mar-18	1,33,62,467
TOTAL	**14,50,91,566**

Statement Showing Power Consumption Mines for the Year April-2018 to Mar-2019

MONTH	POWER CONSUMPTION ((KWh))
	KPTCL/CPP
Apr-17	2,28,907
May-17	4,60,699
June-17	3,29,685
July -17	2,17,429
Aug-17	3,70,731
Sept-17	3,07,632
Oct-17	2,82,611
Nov-17	2,79,404
Dec-17	3,67,641
Jan-18	4,98,058
Feb-18	3,02,301
Mar-18	3,50,470
TOTAL	**39,95,567**

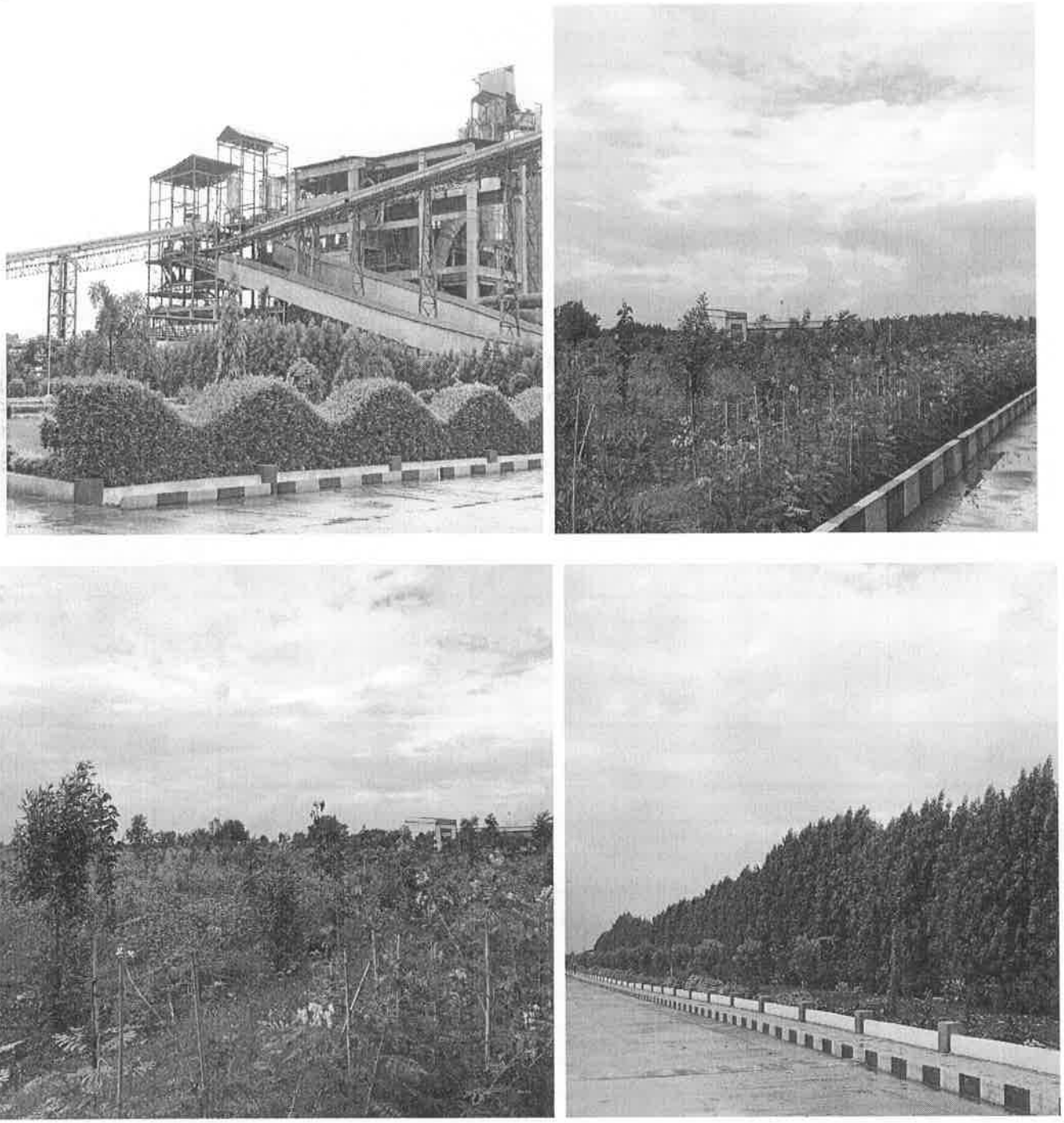
Year wise plantation details carried at Orient Cement Ltd

The Details of Tree Plantation in Orient Cement Factory and Mines area from 2013-14 to 2018-2019 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
2013-2014	25000	-	-	25000	50%
2014-2015	25000	-	-	25000	50%
2015-2016	30000	1220	-	31220	70%
2016-2017	49000	4780	-	53780	66%
2017-18	21266	3159		24425	75%
2018-19	13631	3963	15233	32827	80%
Total:	**163897**	**13122**	**15233**	**192252**	**66%**

Total plant area: 266 Ha.
Total GBD to be developed: 33%of plant are=87.78 Ha.(to be developed in five years)
Total area of Green Belt Development in factory & Colony: 144 Ha with survival rate of 66 %. (Until March 2019)
Total Area of Green Belt Developed in FY 2018-2019: 26 Ha.
Total area planned during current FY-2019-20: 35Ha.

Types of Species planted:
Acacia, Neem, Tamarind, Honge trees, Eucalyptus, Ashok, Peeple tree, Hercules fermc, Gilmore tree, Subabul tree, Hatti tree, Concorpus(Dubai Tree) Feltoform, Bamboo, matti, badam, alstonia, keshiaseema, keshiya-java, mango, kaaljamun, alma, gauva, cesalpinnia and Others.



Green Belt Development inside the plant premise

DETAILS OF EPM EXPENDITURE

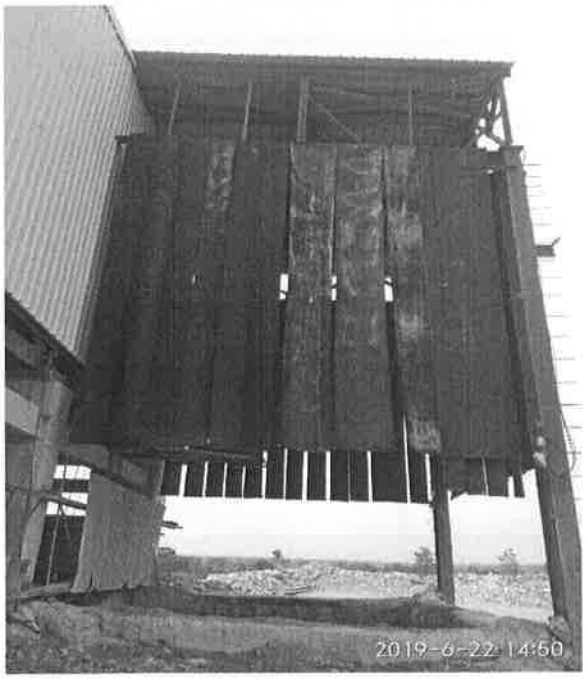
ASSET DESCRIPTION	Amount	Amount in Lakhs
DUST SUPRESSION SYSTEM	43,58,474	43.58
BAG FILTER & ESP FOR STACKS	34,54,39,089	3,454.39
CPP - RCC CHIMEY	2,87,14,293	287.14
WATER RESERVOIR	25,87,57,199	2,587.57
WATER TREATMENT PLANT	12,85,41,299	1,285.41
SEWAGE TREATMENT PLANT	7,28,00,825	728.01
ROAD & DRAIN	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	2,71,51,754	271.52
Total	**1,71,88,31,460**	**17,188**

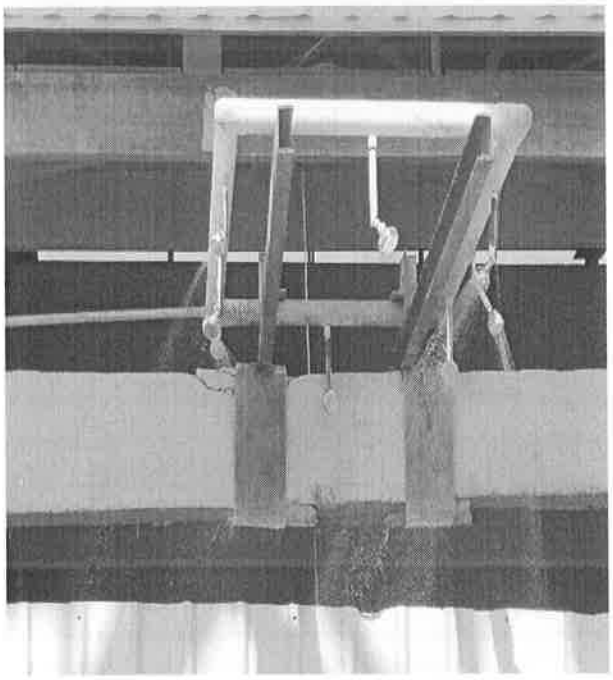
CSR Activities carried out FY 2018-19

Sl. No	Description	Amount (Rs. In Lakhs)
1)	**villagers training programme**	
	Teachers development training	60,000
	providing plyaing tools	66,682
	Baby sitting chairs	73,317
	woman literacy	21,000
	sports material for school	82,460
	sewing machines distribution	1,37,500
	stationery & prog.tools & misc. exp	83,353
2)	computer training for student	3,11,500
	solar light composing	2,08,000
	support shg's group	50,000
	physical challenged people	1,75,000
	agricultural activities	25,000
	uniform to kids	14,720
	stationery & prog.tools & misc. exp	1,25,475

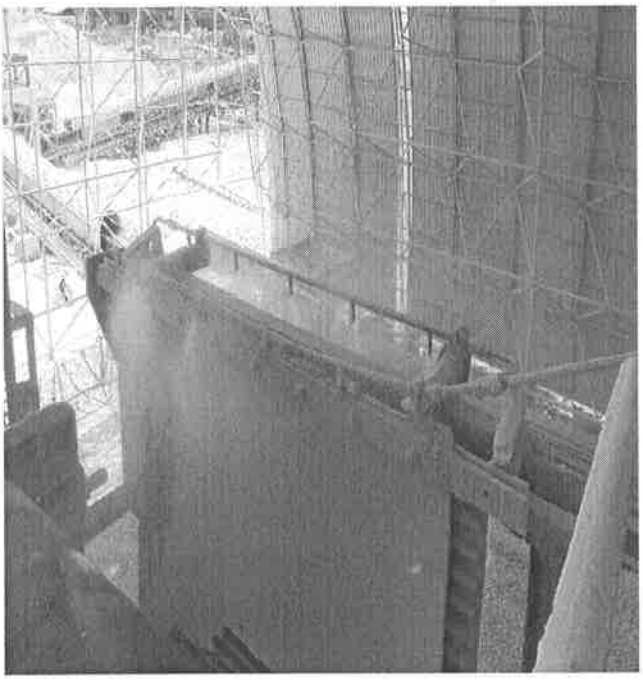
3	common health checkup in 5 village	1,00,000
	eye camp	30,000
	dental care camp	30,000
	women health & screening camp	20,000
	computer training for student	38,500
	solar light composing	1,12,000
	agricultural activities	1,97,627
	women literacy	51,000
	providing shishu ahar	2,01,225
	stationery & prog.tools & misc. exp	1,24,856
4	providing shishu ahar	2,61,045
	gardening maintenance & tech.	1,00,000
	stationery & prog.tools & misc. exp	57,767
	swatchta pakhwada exp	30,000
	contribution towards sevalal jayanthi 15.2.19	25,000
	contribution to karnataka rakshine vedike	10,000
	construction & establishment of school	2,97,25,560
	school operation expenses for for fy 18-19	11,29,560
	construction & establishment of hospital	1,35,29,269
Total Expenses FY 2018-19		**4,72,07,417**

Initiatives on Environment

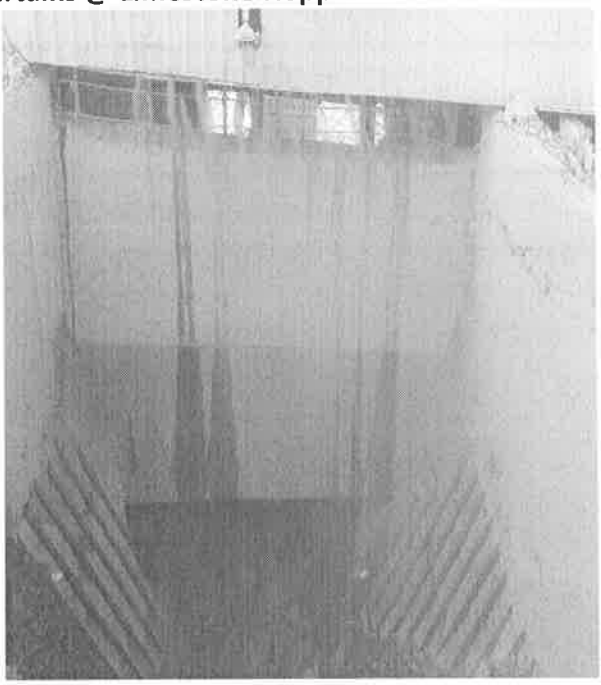




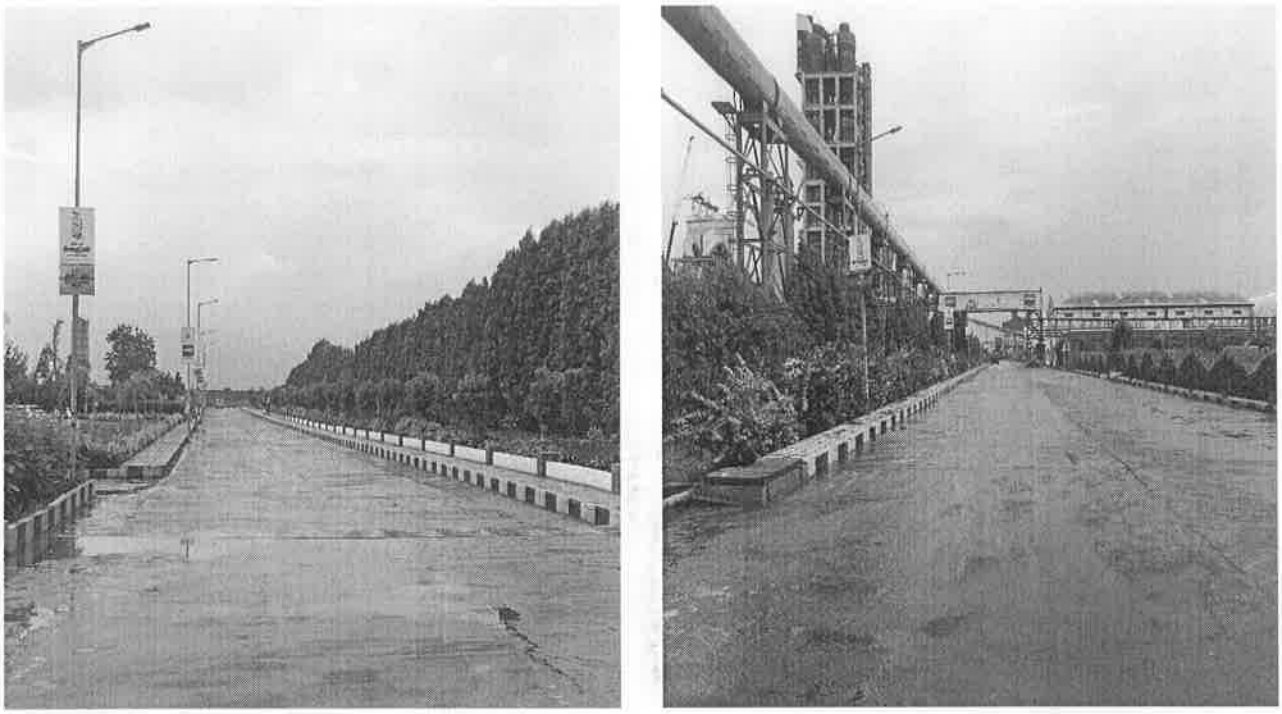
Water sprinkling & rubber Curtains @ Limestone Hopper



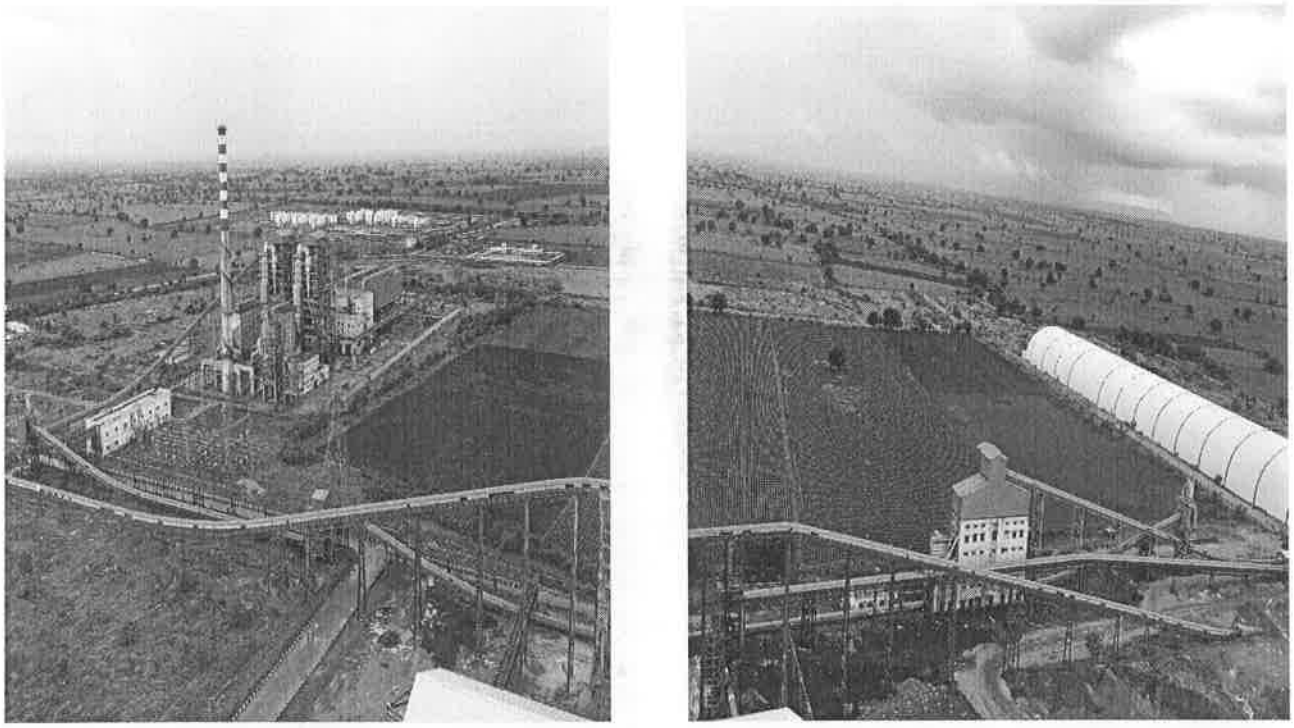
Fogging System on Belt Conveyors



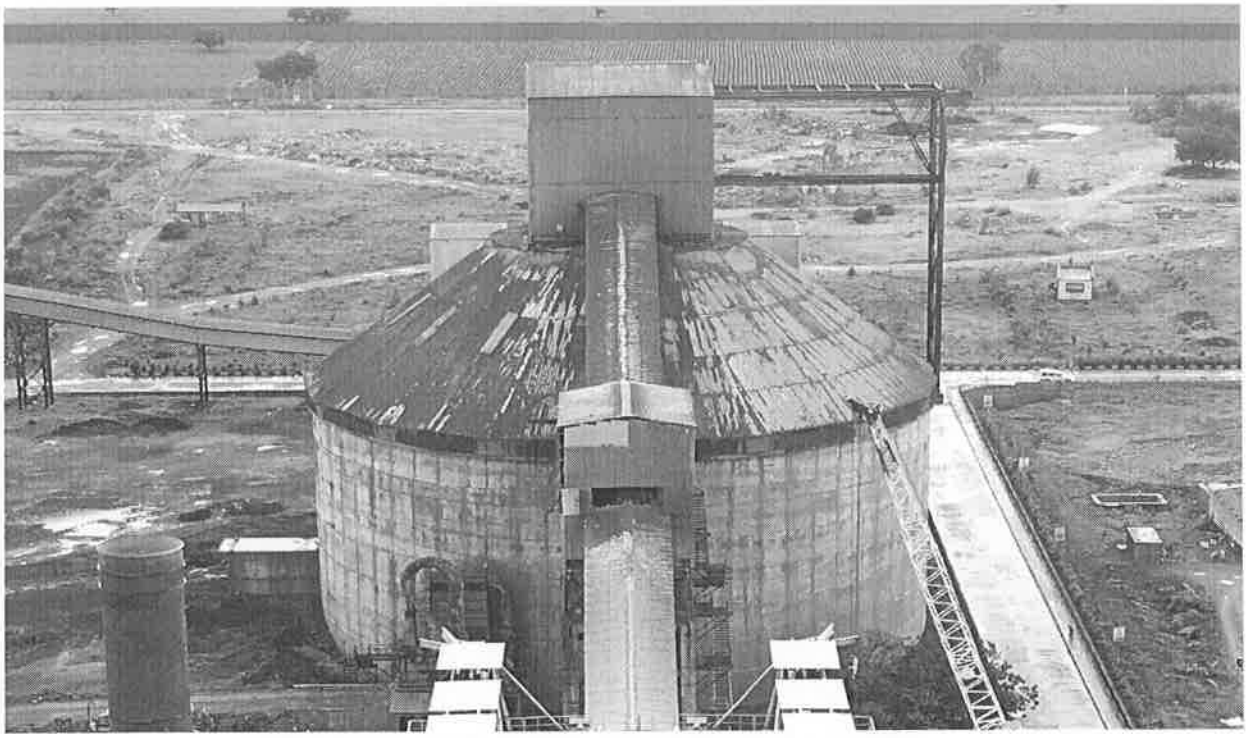
Water Sprinkling (Fogging system) in Limestone Hopper



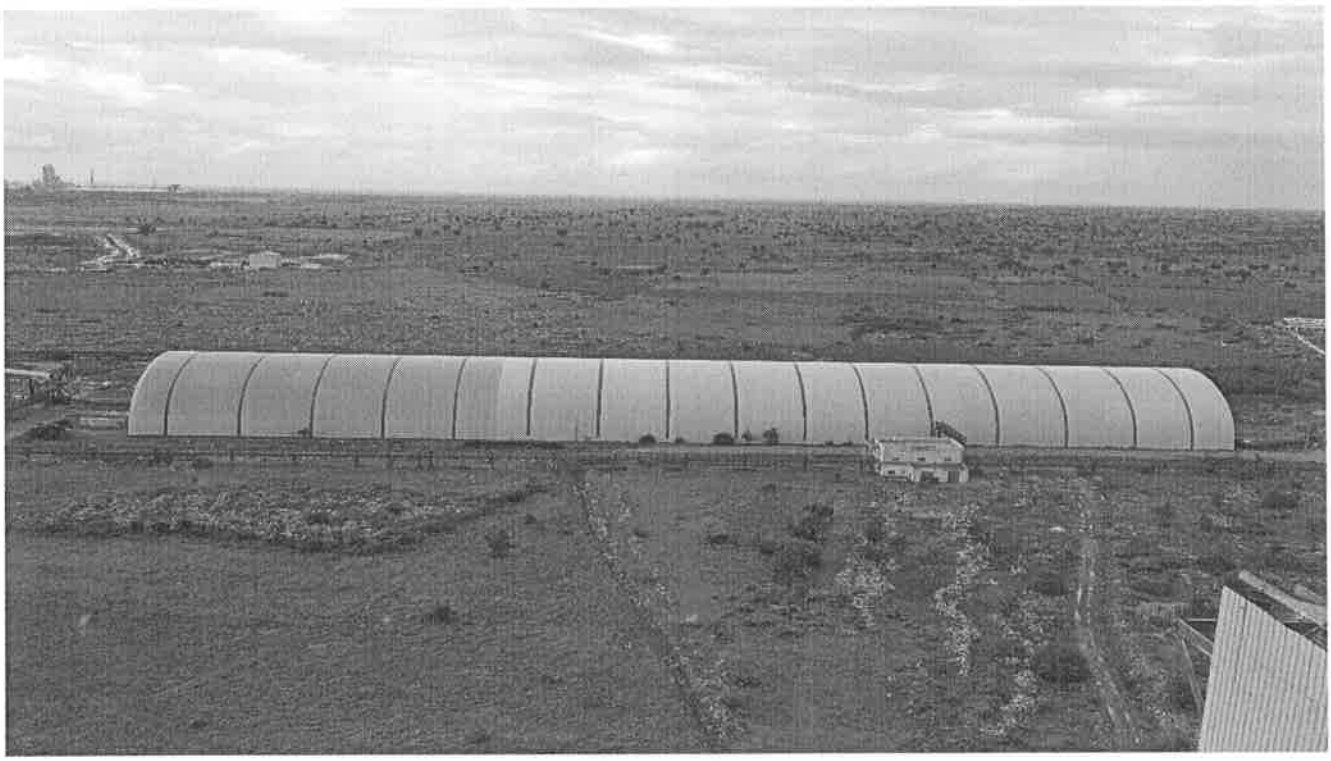
Concrete road inside the plant to avoid fugitive dust



Belt Conveyors are fully covered

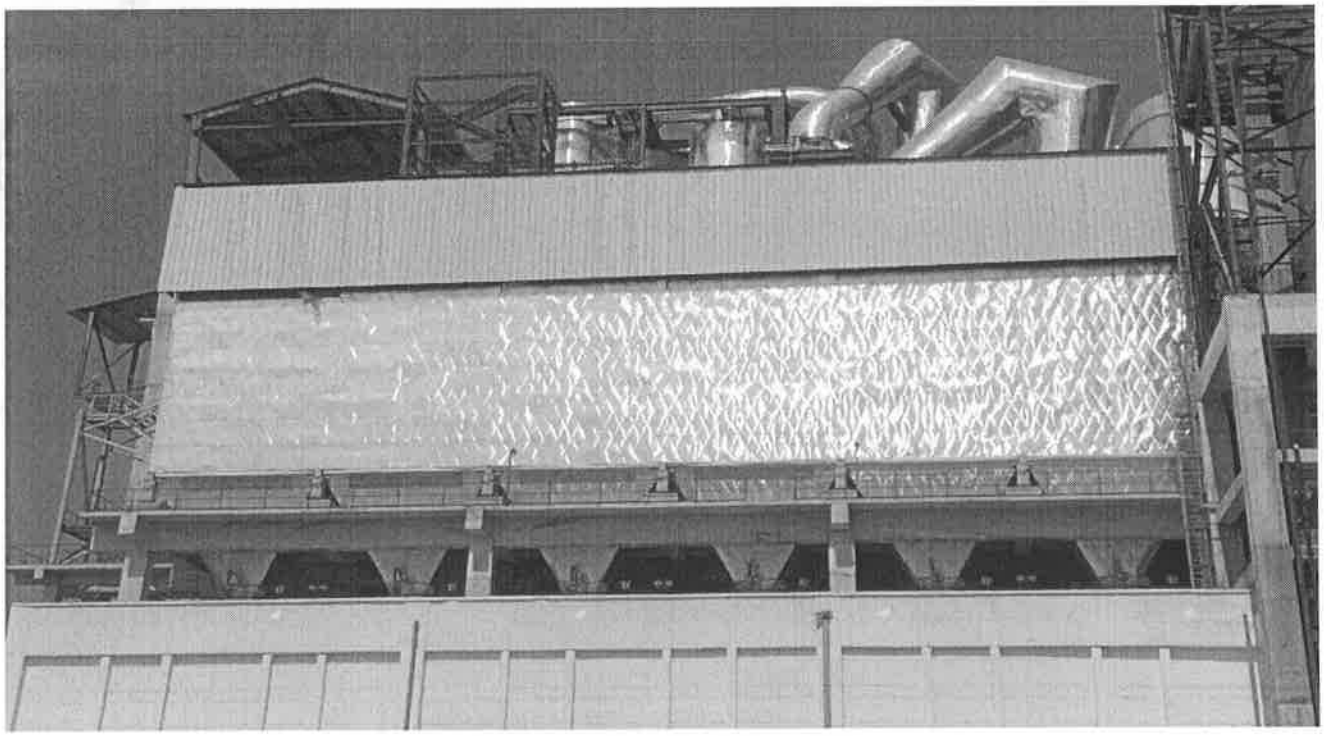


Clinker Silo is fully covered



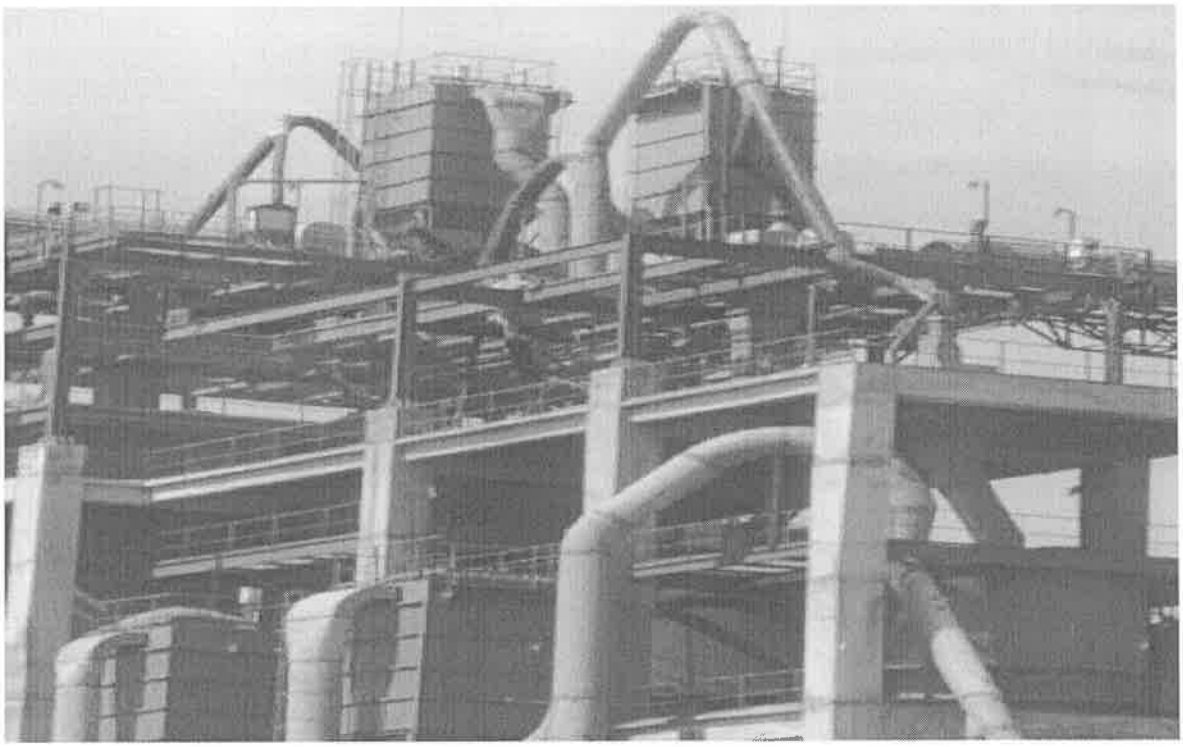
Covered Shed for Raw Material storage

Raw materials Storage Yard are covered



Bag House for Kiln & Raw Mill

ESP for Cooler and CPP



Bag Filters at all transfer points

Water Storage Reservoir & Rainwater Harvesting

WTP & STP

CK BIRLA GROUP

ORIENT CEMENT

ENVIRONMENTAL STATEMENT REPORT

FOR

MINES
(FORM-V)

[YEAR 2018 - 2019]

REPORT BY

ORIENT CEMENT

(Orient Cement Ltd.)

Captive Limestone, Clinkerisation,

Cement Unit & Captive Power Plant

Itga (V), Chittapur (Tq)
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 behaviour 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-2018 to March-2019.

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 lime stone 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 2017-2018 ended 31st March 2018 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 is 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 grad/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.

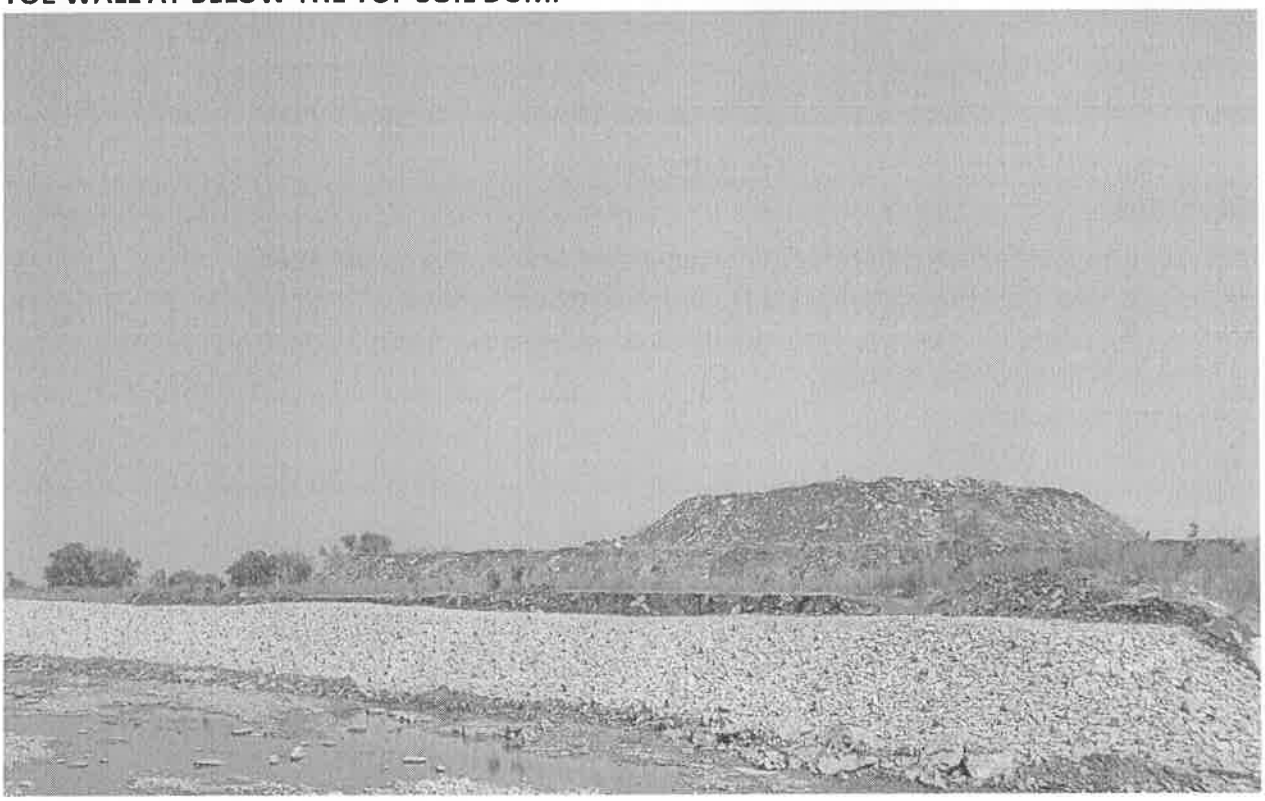
1.3 ENVIRONMENT MANAGEMENT:

Top soil management:

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

TOP SOIL MANAGEMENT

TOE WALL AT BELOW THE TOP SOIL DUMP



B C SOIL DUMP WITH PROTECTION

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 also for dust suppression.

Monitoring Locations of Ground water Level.

Sl.No	Location Name	Water Level in (m-BGL)
1	Itga Village	10.1
2	Moghla Village	15.55
3	Diggaon Village	7.91
4	Chittapur Village	4.62

AFFORESTATION:

FY 2018-19 trees planted are 3963. Types of species are Acacia, Neem, tamarind, Ashok, People tree, Concorpus (Dubai Tree), Honge trees, and others.

Areas of trees planted are as follows

a) Along the Nalla bund
b) Behind the mines office
c) Along the mine haulage road
d) Near the mine office avenue plantation
e) Near the view point
f) Along the Ml lease boundary near the view point

The Details of Tree Plantation in Orient Cement Factory and Mines area from 2013-14 to 2018-2019 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
2013-2014	25000	-	-	25000	50%
2014-2015	25000	-	-	25000	50%
2015-2016	30000	1220	-	31220	70%
2016-2017	49000	4780	-	53780	66%
2017-18	21266	3159		24425	75%
2018-19	13631	3963	15233	32827	80%
Total:	**163897**	**13122**	**15233**	**192252**	**66%**

DETAILS OF EPM EXPENDITURE

ASSET DESCRIPTION	Amount	Amount in Lakhs
DUST SUPRESSION SYSTEM	43,58,474	43.58
BAG FILTER & ESP FOR STACKS	34,54,39,089	3,454.39
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
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AMBIENT AIR QUALITY MONITORING	2,20,13,783	220.14
SNCR FOR NOX REDUCTION	2,71,51,754	271.52
Total	**1,71,88,31,460**	**17,188**

CSR Activities carried out FY 2018-19

Sl. No	Description	Amount (Rs. In Lakhs)
1)	**villagers training programme**	
	Teachers development training	60,000
	providing plyaing tools	66,682
	Baby sitting chairs	73,317
	woman literacy	21,000
	sports material for school	82,460
	sewing machines distribution	1,37,500
	stationery & prog.tools & misc. exp	83,353
2)	computer training for student	3,11,500
	solar light composing	2,08,000
	support shg's group	50,000
	physical challenged people	1,75,000
	agricultural activities	25,000
	uniform to kids	14,720
	stationery & prog.tools & misc. exp	1,25,475
3	common health checkup in 5 village	1,00,000
	eye camp	30,000
	dental care camp	30,000
	women health & screening camp	20,000
	computer training for student	38,500
	solar light composing	1,12,000
	agricultural activities	1,97,627
	women literacy	51,000
	providing shishu ahar	2,01,225
	stationery & prog.tools & misc. exp	1,24,856
4	providing shishu ahar	2,61,045
	gardening maintenance & tech.	1,00,000
	stationery & prog.tools & misc. exp	57,767
	swatchta pakhwada exp	30,000
	contribution towards sevalal jayanthi 15.2.19	25,000
	contribution to karnataka rakshine vedike	10,000
	construction & establishment of school	2,97,25,560
	school operation expenses for for fy 18-19	11,29,560
	construction & establishment of hospital	1,35,29,269
Total Expenses FY 2018-19		**4,72,07,417**

PLANTATION ALONG NALA BANK




Plantation Near the view point

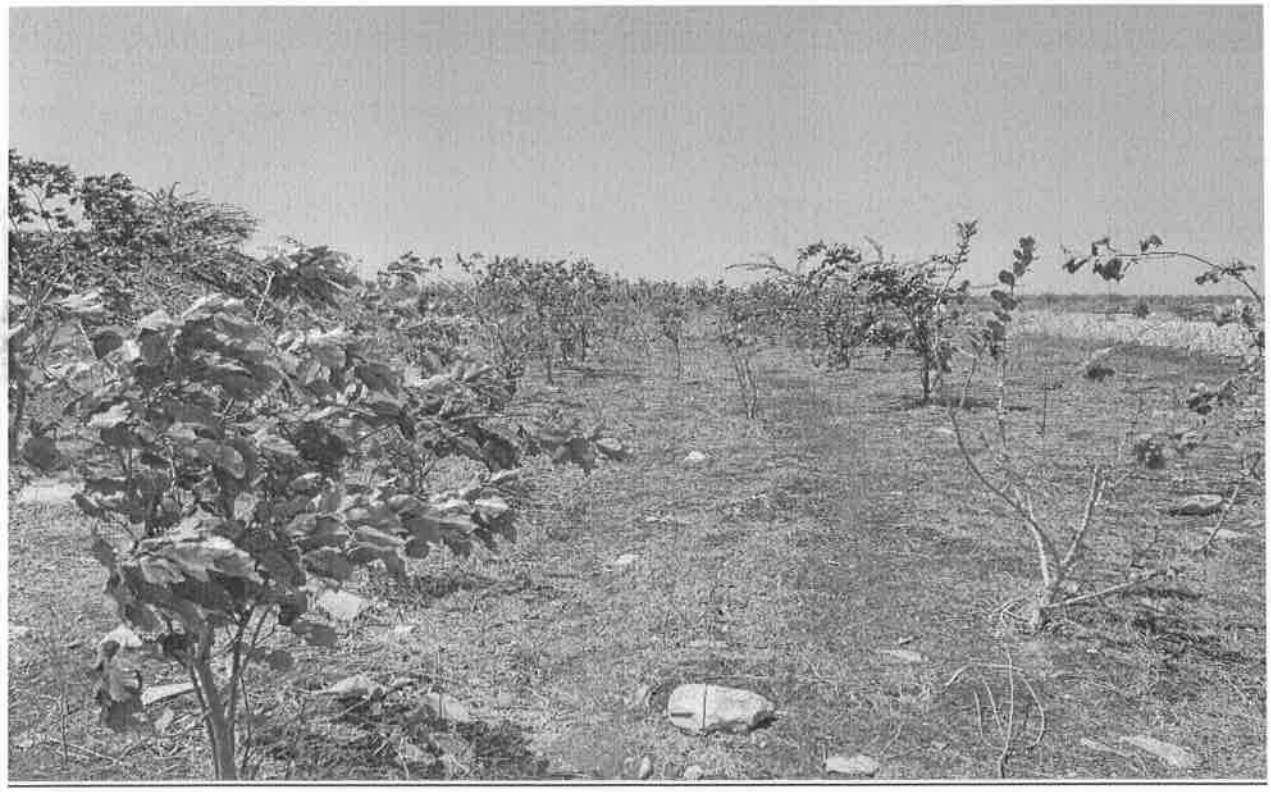
1. Dubai Plants and Drip irrigation are planted in Mines for better Survival rate.
2. Ever green & will not shed the leaves in any season
3. Alternate leaf arrangement with short petioles
4. Having dense foliage & leathery leaves
5. Fast growing & will reach 6 feet in a year

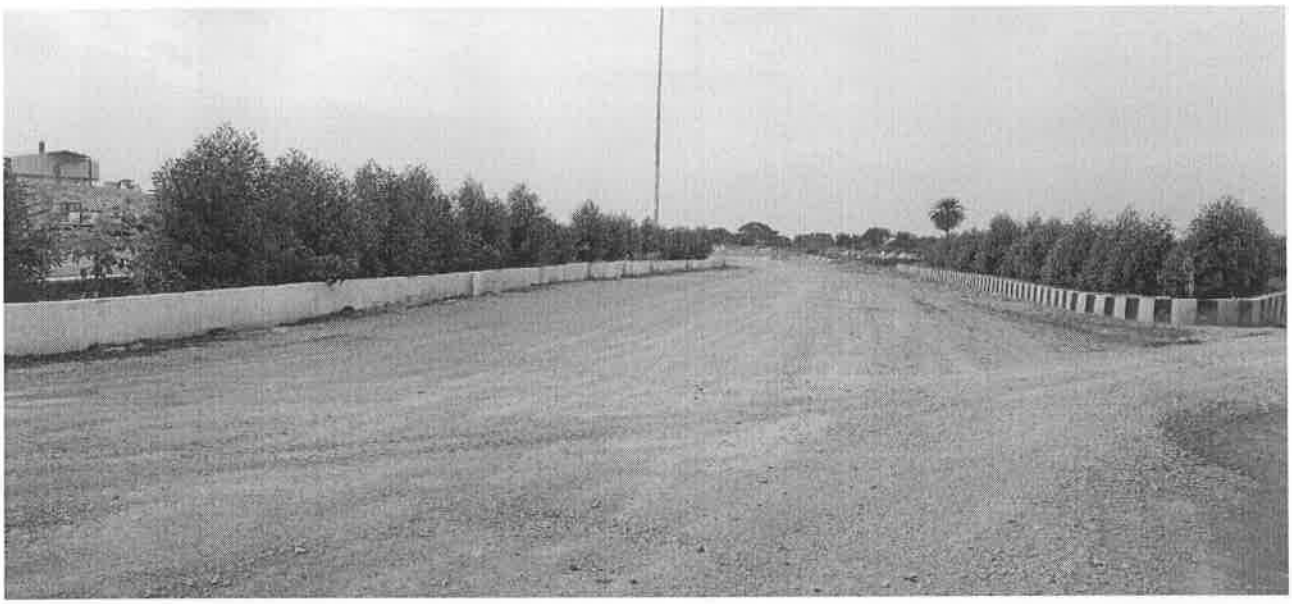
Year wise plantation at Mines

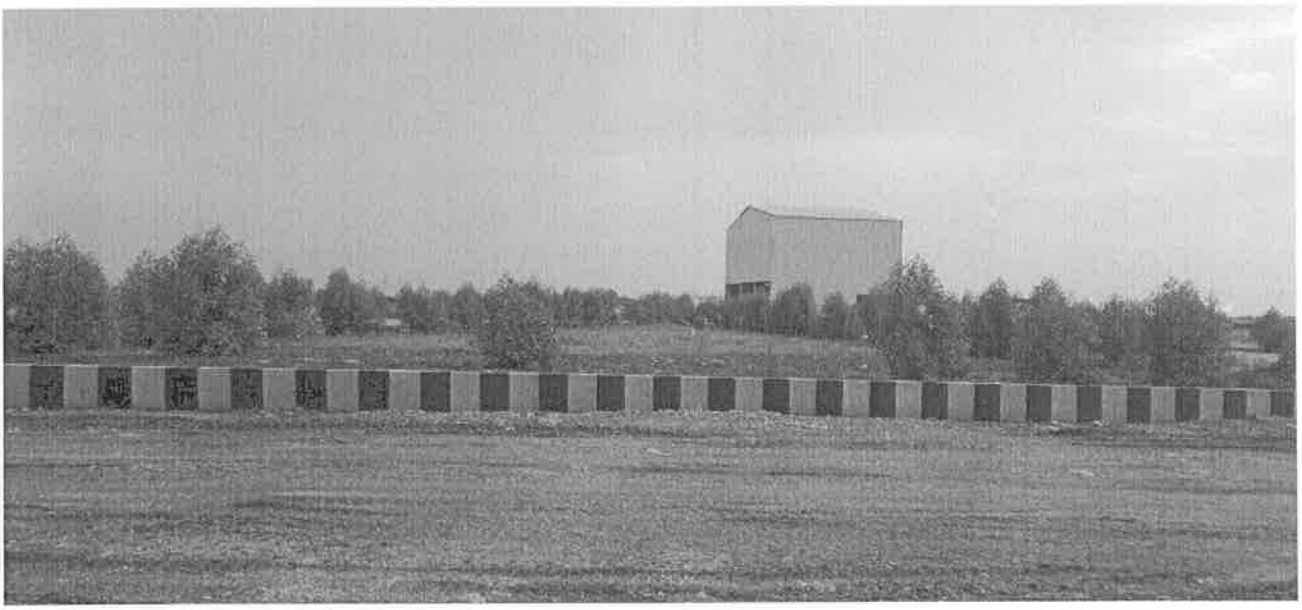
SL No	Financial Year	Location	Area in Ha.	Number of trees Planted	No. of plants survived	Survival (%)	Types of Species
1	2015-16	Reclaimed Black cotton dump area and Behind Mines Office	1.3	1220	610	50%	Acacia, Neem, tamarind, Ashok, People tree, Concorpus (dubai Tree), Honge trees.
2	2016-17	Safety zones, Magazine Roads, Mineral stock area and Along the nala banks	2.35	4780	2390	50%	Acacia, Neem, tamarind, Ashok, People tree, Concorpus (dubai Tree), Honge trees.
3	2017-18	Safety zones, Behind office & Garage and near view point	2.13	3159	2527	80%	Accasia, Conacorpous, 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%	Accasia, Conacorpous, Bougain villa, Badam, Honge, Tapsi, Sankeswar, Peltoform, Neem, Nelli, Shubham trees
Total			**10.08**	**13122**	**9173**	**69%**	

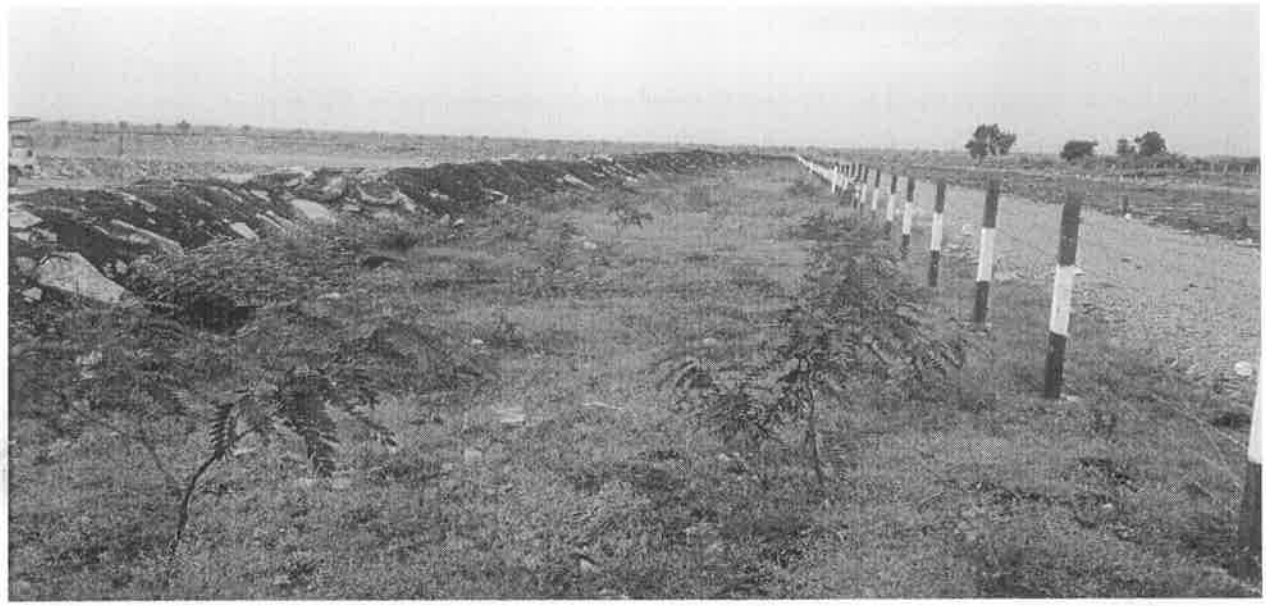
Total area: 519 Ha.
Active Mining Area: 22.73 Ha

Green Belt Development Pictures









Environmental Monitoring details as under.

Monitoring is carried out by M/S Cosmo Conscious Research laboratory, Bellary in all four season. 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 each 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)	QUANTITY OF POLLUTANTS DISCHARGED (m3/H)	CONCENTRATIONS OF POLLUTANTS IN DISCHARGE (Mass/Vol.) (mg/Nm3)	Tolerance Limit (mg/Nm3)
01	New Crusher stack	37210.67	26	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-2018-19

	Tolerance Limit dB(A) in day time	**Actual Values Min dB(A)**	**Actual Values Max dB(A)**
Crushing & Screening	75	58	73
Mining Area	75	59	68
CCR Office	55	43	51
Labor Colony	55	45	53

Particular	Tolerance Limit dB(A) in Night time	Actual Values Min dB(A)	Actual Values Max dB(A)
Crushing & Screening	75	56	67
Mining Area	75	55	63
CCR Office	45	42	44
Labor Colony	45	40	42

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	: 28/09/2017 FY 2017-18

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 (2017-2018)	During Current Financial Year (2018-2019)
	(m^3/day)	(m^3/day)
Process/Dust suppression	44.16	44
Domestic/Gardening	0.16	1.89

Name of products	Process water consumption per unit of products output	
	During the previous financial year (2017-2018)	During the current financial year (2018-2019)
	(m^3/day)	(m^3/day)
Lime Stone	0.0074 m^3/MT of Limestone	0.0062 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 current financial year (2017-2018)	During the current financial year (2018-2019)
Lime Stone	Lime stone	1.43	1.44

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	70µg/m3 19 µg/m3	Within Standards
b.	Haulage		66 µg/m3 19µg/m3	Within Standards
c.	Crushing & Screening		71 µg/m3 18µg/m3	Within Standards
d.	Labor Colony		66µg/m3 19 µg/m3	Within Standards

* The value represents arithmetic average of 12 months for the financial year 2018-19

Ambient Air Quality Report in µg/m³ Mines FY 18-19

Mining Area		Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Average
	PM 10	68	63	65	76	73	72	71	64	73	72	77	69	**70**
	PM 2.5	21	20	18	17	19	17	16	21	21	21	18	17	**19**
	SO2	14	14	14	14	15	13	13	13	14	13	15	14	**14**
	Nox	13	15	15	15	15	14	15	13	14	16	15	14	**14**
	CO	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**ND**
Haulage														
	PM 10	68	64	63	70	70	65	67	64	70	59	70	70	**66**
	PM 2.5	19	21	18	19	19	21	17	18	21	20	18	19	**19**
	SO2	16	14	14	14	14	14	14	14	12	13	14	14	**14**
	Nox	14	14	14	15	14	14	15	12	14	14	15	13	**14**
	CO	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Crushing & Screening														
	PM 10	74	65	65	64	70	73	67	66	79	76	83	65	**71**
	PM 2.5	19	20	19	19	16	18	14	19	19	20	20	19	**18**
	SO2	15	13	13	14	13	13	14	14	14	13	14	13	**14**
	Nox	14	14	14	14	15	13	13	12	14	15	13	14	**14**
	CO	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Labor Colony/Near Surgebin														
	PM 10	58	61	66	71	67	67	72	63	62	74	70	59	**66**
	PM 2.5	18	17	19	18	17	15	18	19	19	21	22	21	**19**
	SO2	16	15	14	14	15	14	13	13	12	14	13	14	**14**
	Nox	13	15	14	15	15	13	14	13	14	14	15	14	**14**
	CO	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Mines Pit Water Quality Monitoring Data FY 18-19

Parametrs	Unit	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Avg
Total Dissolved Solids	mg/l	370	330	380	340	360	360	360	290	360	524	430	390	374.50
pH	-	8.2	8.1	7.9	8.1	7.9	7.8	7.65	8	7.73	7.57	6.7	7.4	7.75
Total Suspended Solids	mg/l	1	2	1	1	6	1	10	6	14	1	4	5	4.33
Total Hardness	mg/l	276	288	330	360	252	362	272	178	302	296	436	290	303.50
Chloride as Cl	mg/l	42.13	44.09	39.19	39.19	31.84	48.07	43.26	35.27	49.98	39.59	45.03	51.96	42.47
Sulphate as SO_4	mg/l	58	51	62	59	72.5	54.5	58	47.51	70	93	53	61.5	61.67
Floride Fl	mg/l	1.04	1.4	1.29	1.34	1.14	1.25	1.21	0.69	1.21	1.17	0.78	1.31	1.15
Iron as Fe	mg/l	0.07	0.08	0.175	0.234	0.196	BDL	0.183	BDL	0.171	0.116	0.242	BDL	0.16
Total Coliform count	MPN/100ml	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
E-coli count	MPN/100ml	ND	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 (2016-2017)	During the Current Financial year (2017-2018)
(a) From Process	(a) Spent/ Used Oil (Category 5.1) (Including CPP)	0	Nil
(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)	
	During the previous financial year (2017-18)	During the current financial (2018-2019)
(a) From process	96259 MT (Over burden)	40940 MT (Over burden)
(b) From pollution control facility	3.06 MT (from LS Crusher Bag filter)	4.226MT (from LS Crusher Bag filter)
(c) Quantity recycled or re-utilized	3.06 MT	4.226MT

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.
- Lime Stone Crusher Gear box oil will be stored and disposed for authorized person

Solid waste:

- Generated and disposed during 2018-19: 40940MT of over burden is used making bunds for green belt development.

PART-G

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

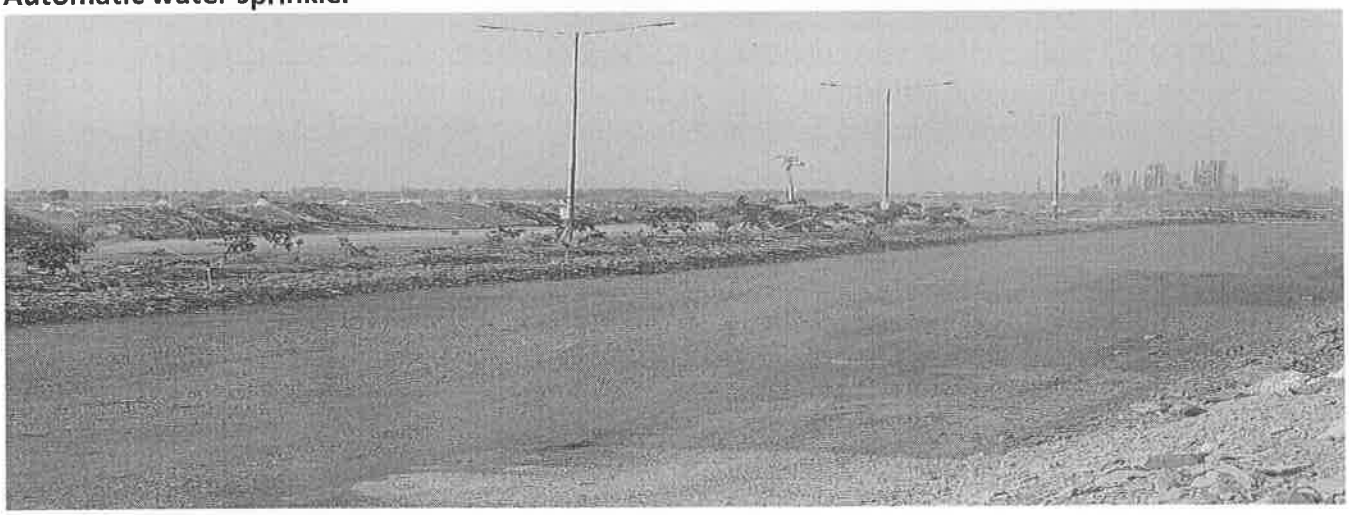
- 0.71 ha of Overburden soil dump area has been reclaimed and rehabilitated by plantation.

- Total 3963 saplings have been planted in 4.3 ha area till March 2019 along the statutory barrier, along the road, nalla safety zone and mines safety zone.
- Constructed Embankment and garland drain around the pit to avoid surface water into mines.
- Stone pitching has been made along the slopes of nala stream both side.
- Automatic water sprinkler has been installed on main haul road to reduce dust Emission.

Embankment and garland drain around the pit

Garland drain around the pit

Automatic water sprinkler



Automatic water sprinkler

Modifications for the year 2018-19 for energy conservation and better Environment

- To avoid the Run – Off of top soil from the dump, Toe wall is constructed along with garland drain for a length of about 310 mts below the top soil dump.
- Constructed Embankment and garland drain around the pit to avoid surface water into mines
- 10 No's of Random rubble check barrier in garland drain within the ML area

Rubble Check Barrier

- 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. 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/-

PART-H

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

- Proposed to plant 3750 saplings covering an area of 1.50 ha within ML area for the year 2019-20 as a measure of green belt development.
- Construction of Sediment settling tank and Rainwater Harvesting pit
- Random rubble check barriers in garland drain within and outside ML area(Balance 44 No's proposed in the FY 18-19)
- Existing plantation maintenance.
- Formation of bund with 5m height along the village boundary side with plantation - 580m length.

➢ 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	34,54,39,089	3,454.39
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AMBIENT AIR QUALITY MONITORING	2,20,13,783	220.14
SNCR FOR NOX REDUCTION	2,71,51,754	271.52
Total	**1,71,88,31,460**	**17,188**

Details of Expenses (in Rs) made towards Environment Protection in Mines for the year 2018-19

Sl no.	Particulars	2018-19
1	Expenses for B C Soil Handling & Use for Afforestation	12,89,610.00
2	Expenses for Afforestation	4,53,750.00
3	Expenses for Garland Drain Cutting/ Rain Water harvesting	-
4	Expenses for Desilting of Check Dam	75,050.00
5	Expenses for Dust Suppression operation & maint cost of Water Tanker	11,28,000.00
6	Expenses for operation & maint cost of permanent water sprinkler in Haul road, view Point and floating fountains in mine pit	1,20,000.00
7	Expenses for Use of NONEL, Electronic Detonators, Wooden Spacers and Stem Plugs.	5,62,702.00
8	Expenses for Environmental Monitoring Expenses	9,00,000.00
9	Expenses for Ear Plugs & Ear Muffs	40,000.00
10	Expenses for Oil Separation Tank Maintenance	-
11	Expenses for Handling of Waste Oil, Scrap Batteries, Used Cotton Waste, Filters	-
12	Expenses for fitting of Rain gun to water tanker for mud pile spraying	95,000.00
	Total	46,64,112.00
Rs in Lakhs		**46.64**

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.

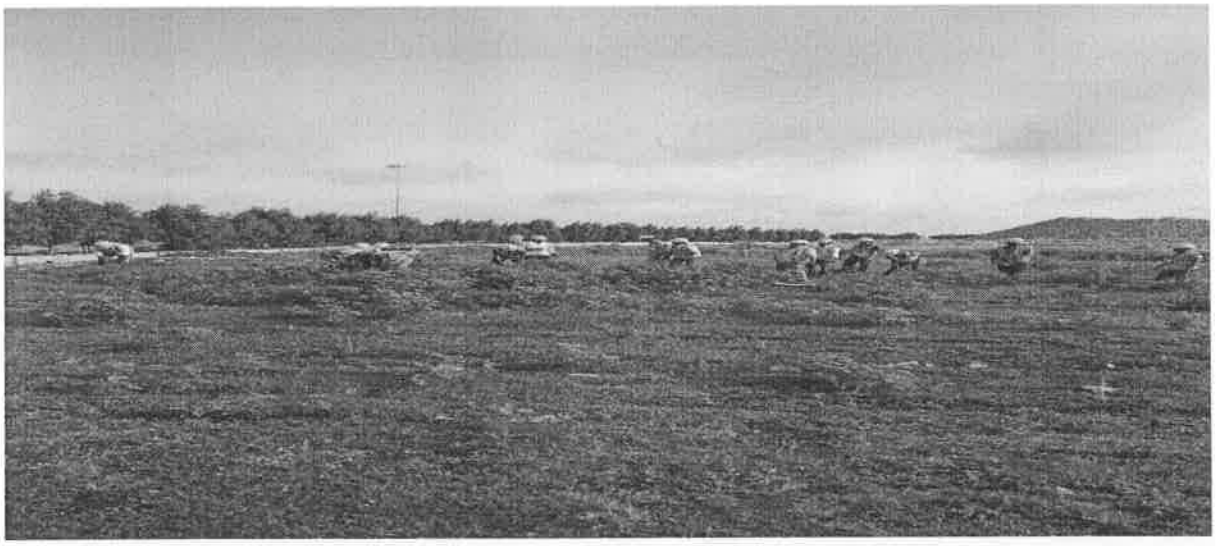
MISCELLANEOUS

- Carried out Swachhta Pakhwada Program @ our Limestone Mines & Surrounding villages to create awareness among Villagers,Workmen & School Childrens on adjoining villages to make ODF,Necessity of Hygiene and Waste utilistaion & Swachhta Shramdhan and mass plantation .

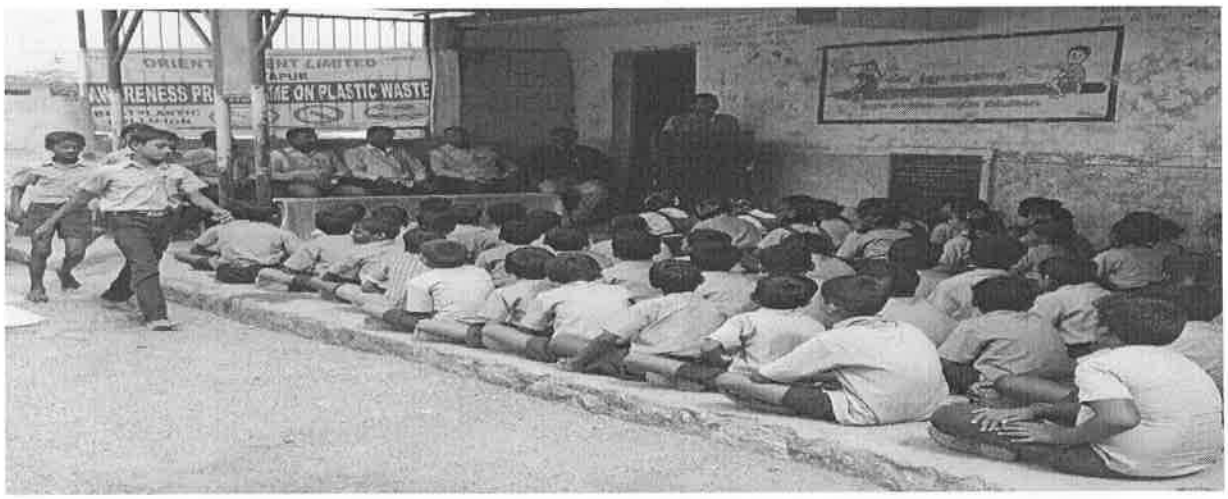
  Glimpses of Swachhta Pakhwada Program celebrations at Orient Cement Ltd,Karnataka.

- **Awareness of cleanliness in mines, workshop and office areas**

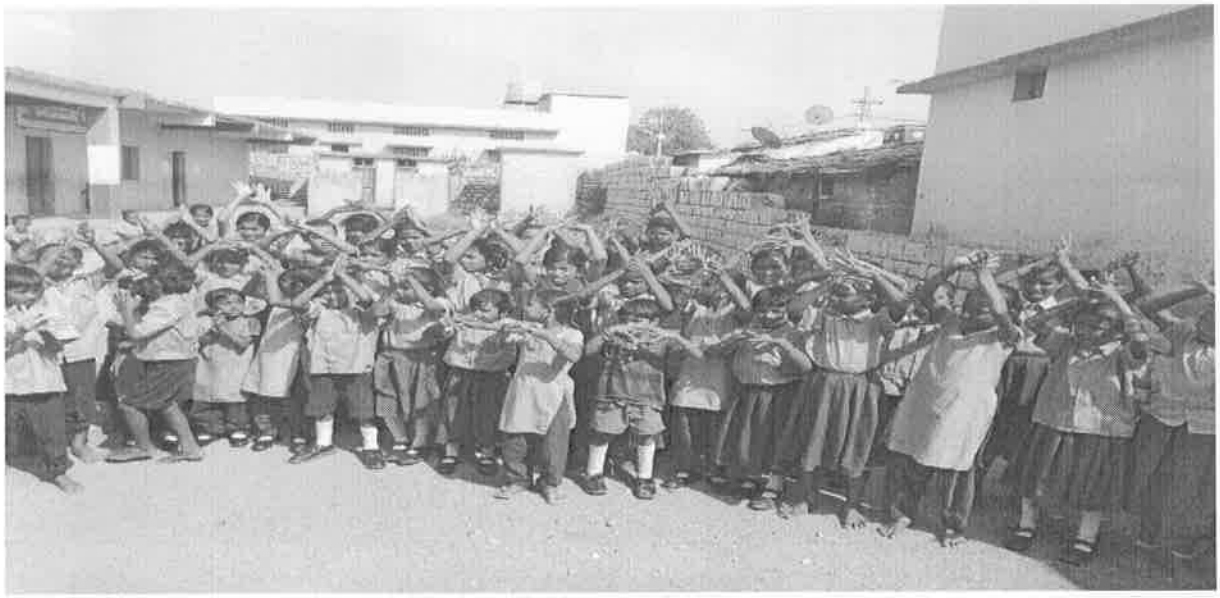
- **Clean and Green office and Garage area**



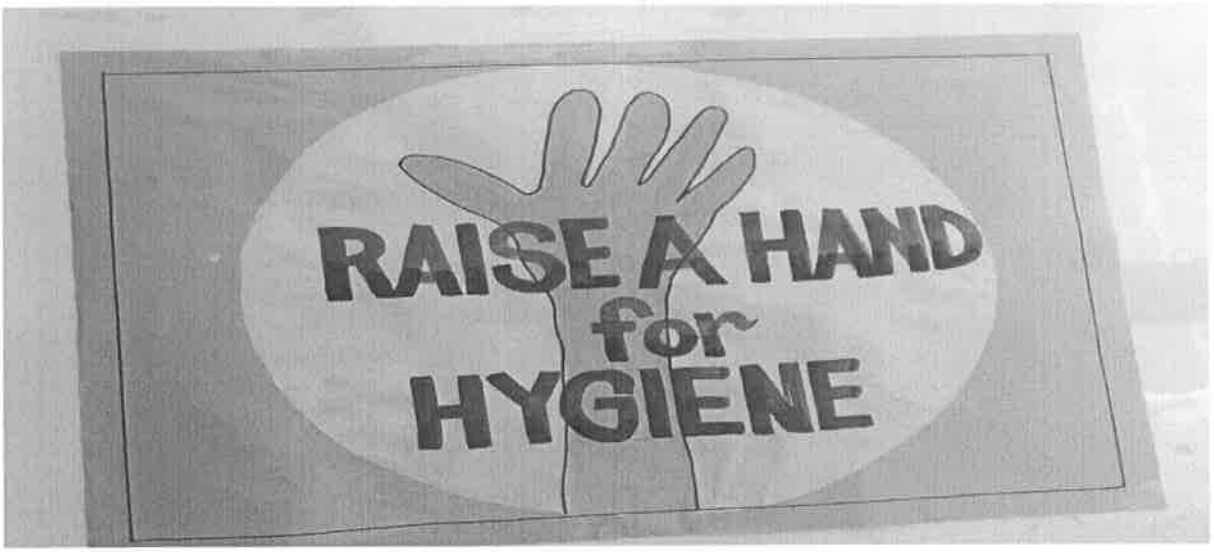
- **Awareness on Identification and piloting of Plastic free village and Clean & Green of School area**



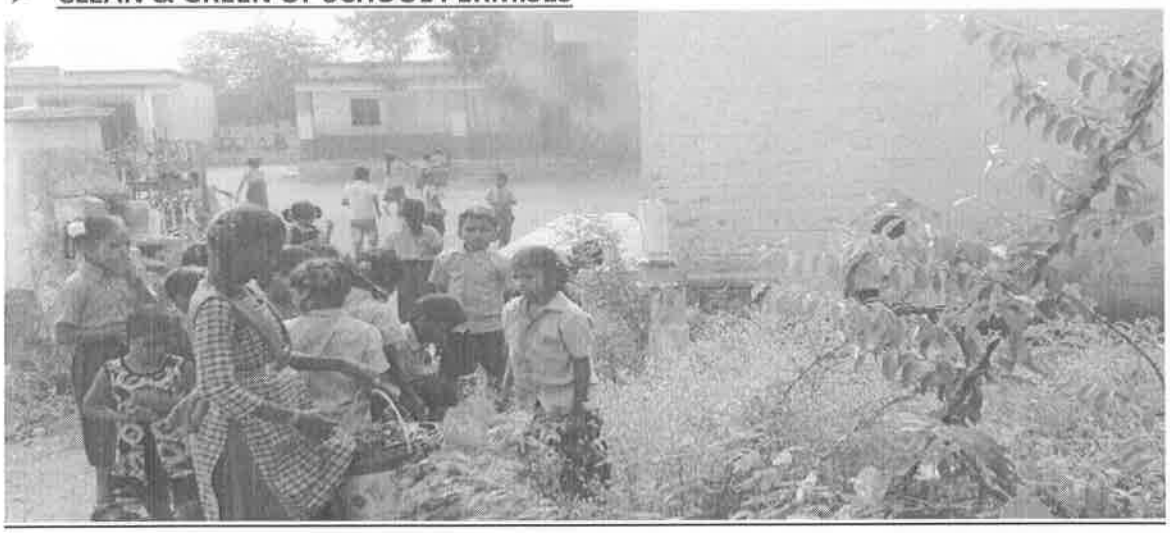
- ***Promotion of Hand washing, disease prevention, and massive hygiene promotion activities***

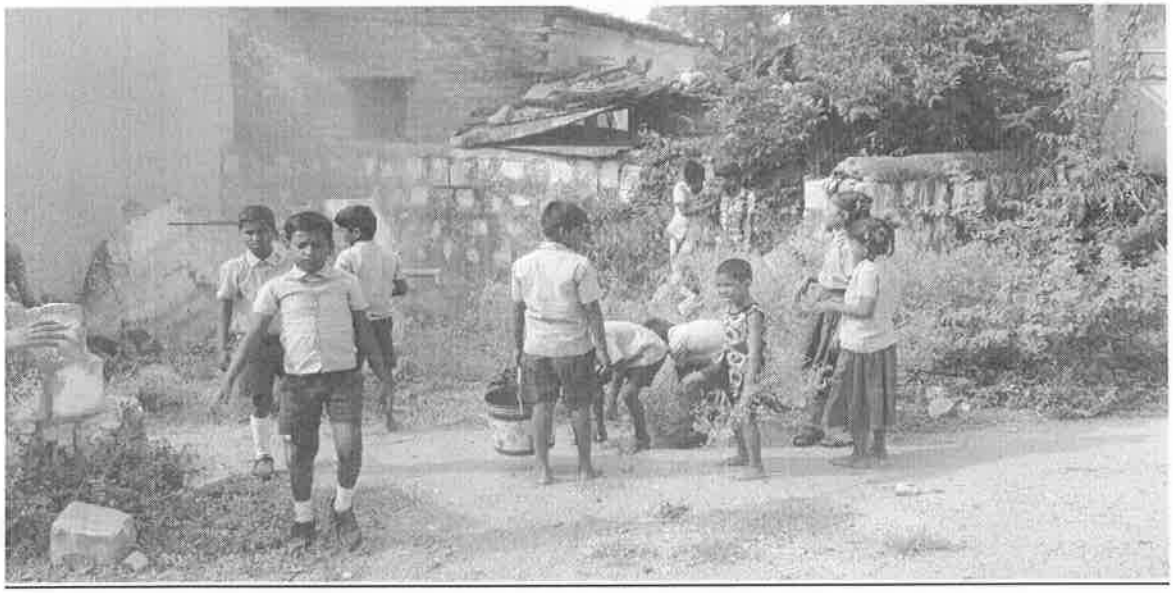


- **Sanitation And Hygiene Awareness Program**



- **CLEAN & GREEN OF SCHOOL PERMISES**



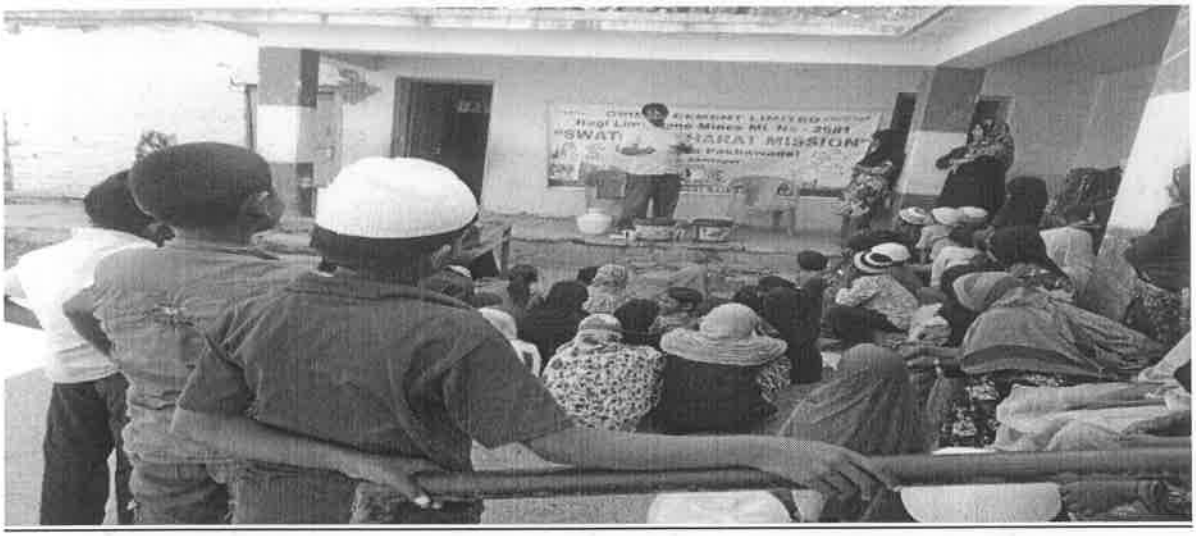


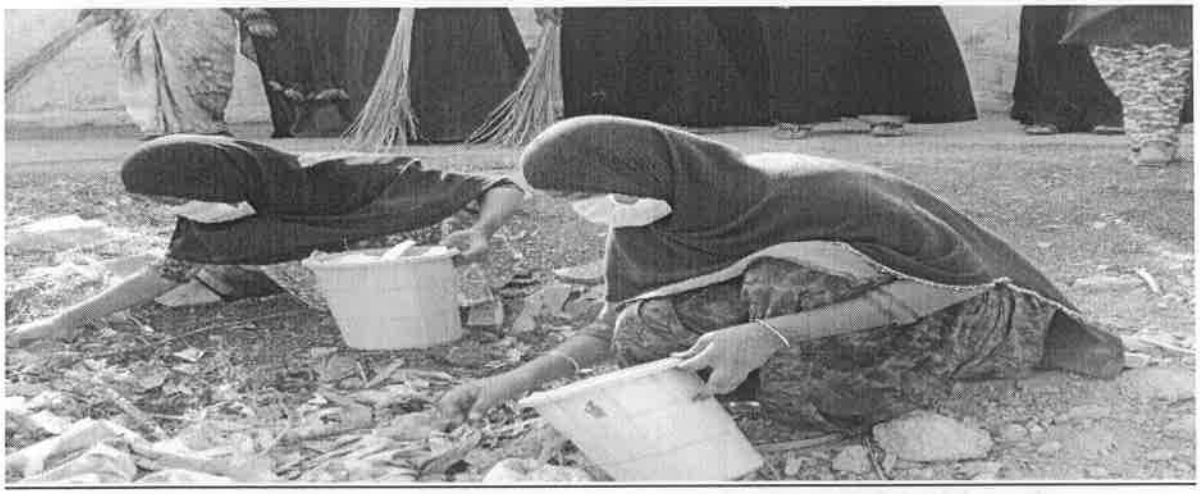
- ***Sanitation and Hygiene related Drawing competition***

➢ **Shramdhan & Clean And Green**

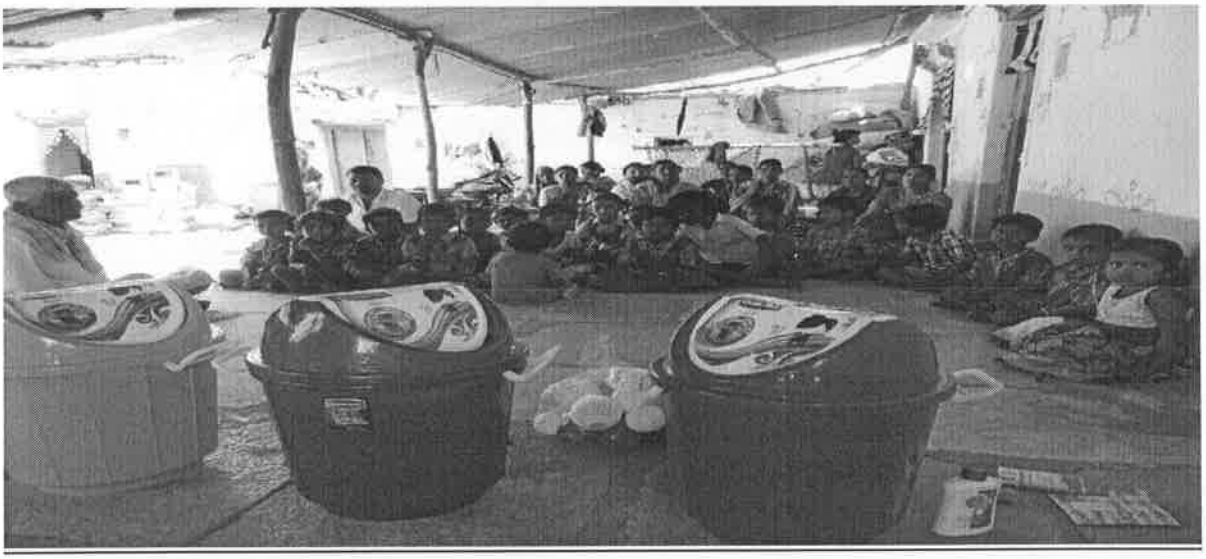
➢ ***Awareness And Essay Competition On Plastic Usage And Swatchh Abhiyana***

➢ ***Sanitation And Hygiene With Awareness Of Cleanness And Usage Of Plastic***





➢ ***Sanitation And Hygiene Program Awareness Of Cleanness***




ORIENT CEMENT LIMITED
Itagi Limestone Mines ML No - 2681
"SWATCHH BHARAT MISSION
(Swatchhta Pakhawada)
Tq. Chittapur

ವಿಶ್ವವಾಣಿ

ಸ್ವಚ್ಛತೆ, ಪರಿಸರ ರಕ್ಷಣೆ ಎಲ್ಲರ ಹೊಣೆ

ವಿಶ್ವವಾಣಿ ಸುದ್ದಿಮನೆ ಚಿತ್ತಾಪುರ

ಪ್ರತಿಯೊಬ್ಬರು ಸ್ವಚ್ಛತೆ, ಉತ್ತಮವಾದ ಪರಿಸರ ಕಾಪಾಡಿ ಆರೋಗ್ಯದಿಂದ ಬಾಳಬೇಕು. ದೇಶವನ್ನು ಸ್ವಚ್ಛವಾಗಿಡುವುದು ಮತ್ತು ಪರಿಸರದ ಸಂರಕ್ಷಣೆ ಮಾಡುವುದು ಪ್ರತಿಯೊಬ್ಬರ ಹೊಣೆಯಾಗಿದೆ ಎಂದು ಓರಿಯಂಟ್ ಸಿಮೆಂಟ್ ಕಂಪೆನಿ ಘಟಕದ ಮುಖ್ಯಸ್ಥ ಸತ್ಯಬ್ರತ್ ಶರ್ಮಾ ಹೇಳಿದರು.

ತಾಲೂಕಿನ ಇಟಗಾ ಗ್ರಾಮದ ಹತ್ತಿರದ ಓರಿಯಂಟ್ ಸಿಮೆಂಟ್ ಕಂಪೆನಿಯಲ್ಲಿ ಸ್ವಚ್ಛ ಭಾರತ ಅಭಿಯಾನ ಮಿಷನ್ ಪ್ರಯುಕ್ತ ಅ.16 ರಿಂದ 31ರ ವರೆಗೆ ಹಮ್ಮಿಕೊಳ್ಳಲಾಗಿದ್ದ ಸ್ವಚ್ಛತಾ ಪಕ್ವಾಡ ಆಚರಣೆಯ ಸಮಾರೋಪ ಸಮಾರಂಭದಲ್ಲಿ ಅವರು ಮಾತನಾಡಿ, ಚಿತ್ತಾಪುರ ಪುರಸಭೆಯವರು ಹಾಗೂ ಸುತ್ತಲಿನ ಗ್ರಾಮ ಪಂಚಾಯಿತಿಯವರು ಬಯಸಿದರೆ ಪರಿಸರ ನೈರ್ಮಲ್ಯ ಕಾಪಾಡುವ ಸ್ವಚ್ಛ ಪರಿಸರದ ದೃಷ್ಟಿಯಿಂದ ಪ್ಲಾಸ್ಟಿಕ್ ಉಸ್ತು ಕಂಪೆನಿಯಲ್ಲಿ ಸುಡುವುದಕ್ಕೆ ನಾವು ಸಿದ್ಧರಿದ್ದೇವೆ ಎಂದರು.

ಜನರಲ್ ಮ್ಯಾನೇಜರ್ ಶಿವಾನಂದ ಪಾಟೀಲ್ ಮಾತನಾಡಿ, ನಿಸರ್ಗದತ್ತವಾದ ಪುಣ್ಯ ಪರಿಸರ ಸಂರಕ್ಷಣೆ ಮಾಡುವ ಜವಾಬ್ದಾರಿ ಎಲ್ಲರೂ ನಿರ್ವಹಿಸಬೇಕು. ಪರಿಸರ ರಕ್ಷಣೆ ಮತ್ತು ನೈರ್ಮಲ್ಯ ಕಾಪಾಡುವ ಕುರಿತು ಕಂಪೆನಿಯ ಹತ್ತು ಗ್ರಾಮಗಳಲ್ಲಿ ಹಾಗೂ ಚಿತ್ತಾಪುರದ ಕಾಲೇಜಿನಲ್ಲಿ ಸ್ವಚ್ಛತೆ ಕಾರ್ಯಕ್ರಮ ಮಾಡಲಾಗಿದೆ.

ವಿದ್ಯಾರ್ಥಿಗಳಲ್ಲಿ ಜನರಲ್ಲಿ ಸ್ವಚ್ಛತೆ ಕುರಿತು ಅರಿವು ಮೂಡಿಸುವ ಕೆಲಸ ಮಾಡಲಾಗಿದೆ ಎಂದರು.

ಕಾರ್ಯಕ್ರಮದಲ್ಲಿ ಪರಿಸರ ಸ್ವಚ್ಛತೆ ಮತ್ತು ಸರಂಕ್ಷಣೆ ಕುರಿತು ಆಯೋಜಿಸಿದ್ದ ಘೋಷ ವಾಕ್ಯ ರಚನೆ, ನಿಬಂಧ ಸ್ಪರ್ಧೆ, ಚಿತ್ರ ಕಲೆ ಸ್ಪರ್ಧೆಯಲ್ಲಿ ವಿಜೇತರಾದ ಕಾರ್ಯಾನೆಯ ಸಿಬ್ಬಂದಿ ವೈಭವ ಮುತಕೋಟಿ, ಟಿಪು ರಾಘವೇಂದ್ರ, ಕೃಷ್ಣಶಂಕರ ಜಾಧವ, ನರೇಶ ಅವರಿಗೆ ಬಹುಮಾನ ವಿತರಣೆ ಮಾಡಿದರು.

ಸ್ವಚ್ಛ ಭಾರತ ಅಭಿಯಾನ ಮಿಷನ್ ಪ್ರಯುಕ್ತ ಶಾಲೆಗಳಲ್ಲಿ ಮಕ್ಕಳಿಗೆ ಚಿತ್ರಕಲಾ ಸ್ಪರ್ಧೆ ಏರ್ಪಡಿಸಲಾಗಿತ್ತು, ಮಕ್ಕಳ ಚಿತ್ರಕಲೆಯನ್ನು ಕಾರ್ಯಕ್ರಮದಲ್ಲಿ ಪ್ರದರ್ಶನ ಮಾಡಲಾಯಿತು.

ಅಕ್ಷತಿ ಟ್ರಸ್ಟ್ ಮುಖ್ಯಸ್ಥ ಮಂಜುಳಾ ಭಾನು ಪ್ರಕಾಶ, ಸಂಪನ್ಮೂಲ ವಿಭಾಗದ ಮ್ಯಾನೇಜರ್ ಸಾಜೀಕುಮಾರ, ಗಣಿ ವಿಭಾಗದ ಮುಖ್ಯಸ್ಥ ಅರುಣಾಚಲಂ, ಶ್ರೀಕಾಂತ ಸೇರಿದಂತೆ ಕಂಪನಿ ಸಿಬ್ಬಂದಿ ಇದ್ದರು.

ಚಿತ್ತಾಪುರ ತಾಲೂಕಿನ ಇಟಗಾ ಗ್ರಾಮದ ಓರಿಯಂಟ್ ಸಿಮೆಂಟ್ ಕಂಪೆನಿಯಲ್ಲಿ ಸ್ವಚ್ಛ ಭಾರತ ಅಭಿಯಾನದ ಸ್ವಚ್ಛತಾ ಪಕ್ವಾಡಾ ಆಚರಣೆ ಸಮಾರೋಪ ಸಮಾರಂಭ ಜರುಗಿತು.