

cement! sugar! refractories! power!

DCBL/ENV/MoEFCC/PLANT/EC/COMPL/052023/01

Date: 01.05.2023

Additional Principal Chief Conservator of Forests Ministry of Environment, Forest & Climate Change Regional Office (West Central Zone) Ground Floor, East Wing, New Secretariat Building, Civil Lines, NAGPUR - 440001

- Sub: Compliance of Environmental Clearance issued for, 2.0 MTPA of Clinker Plant, 2.16 MTPA of OPC and 2.86 MTPA PPC and Captive Power Plant of 50 MW at village Naranda, District – Chandrapur Maharashtra for the period of October-22 to March 23.
- Ref: Environmental Clearance F. No. J-11011/319/2006 -IA II (I), Date: 28th June 2007 & EC Change of Company Name F. No. - J-11011/319/2006 -IA II (I), Dated 14th Dec 2021

Dear Sir,

With respect to the subjected referred above, we are submitting herewith the point wise half yearly compliance of above referred Environmental Clearance for our Integrated Cement plant and Captive Power Plant for the period from **October 22 to March 2023**. Soft copy of the compliance report is sent on your email ID <u>eccompliance-mh@gov.in</u>

Submitted for your kind information please.

Thanking you

Yours Faithfully, For Dalmia Cement (Bharat) Ltd.

Subbaraidu Ayyagari (Unit Head)

CC: 1. The Regional Director, Central Pollution Control Board (CPCB), Regional Office, Jog Centre, 3rd Floor, Mumbai Pune Road, Wakdewadi, Pune, Maharashtra – 411003.

2. The Member Secretary, Maharashtra Pollution Control Board, Kalpataru Point, 3rd and 4th floor, Opp. CineMax Theatre, Sion (E), Mumbai - 400 022.

3. Regional Officer, Maharashtra Pollution Control Board (MPCB), 1st Floor, Udyog Bhawan, Railway Station Road, Chandrapur – 442401

Dalmia Cement (Bharat) Limited

Chandrapur Cement Works, Village, Naranda, Taluka – Korpana, District - Chandrapur – 442916, Maharashtra, India Corporate Office -11th & 12th Floor, Hansalaya Building, 15 Barakhamba Road, New Delhi - 110 001, Delhi, India T +91 11 2346 5100 Toll Free 1800 2020 W www.dalmiacement.com CIN: U65191TN1996PLC035963 Registered Office: Dalmiapuram, District Tiruchirappalli - 621 651, Tamil Nadu, India A Dalmia Bharat Group company. www.dalmiabharat.com

ENVIRONMENTAL CLEARANCE COMPLIANCE REPORT

Ref: Environmental Clearance F.No. - J-11011/319/2006 -IA II (I), Date: 28th June 2007 & Dated 14th Dec 2021, Amendment Dated 28.06.2007, EC Transfer Dated 14.12.2021 & EC Transfer Dated 26.09.2022

Name of the Company: Dalmia Cement (Bharat) Ltd, Unit Chandrapur Cement Works

Project Name – Environmental Clearance for 2.0 MTPA of Clinker Plant, 2.16 MTPA of OPC and 2.86 MTPA PPC and Captive Power Plant of 3 x 16.5 MW at village Naranda, District – Chandrapur, Maharashtra.

Sr. No.	Specific Conditions	Compliance								
i.	The gaseous emissions from various units shall conform to the standards prescribed by the Maharashtra State Pollution Control Board. Bag filters and Electrostatic Precipitator of highest efficiency shall be installed and Particulate Emissions from the cement plant shall be less than 50 mg/Nm3 and for CPP, the same will be less than 80-100 mg/Nm3. Particulate emissions from DG House will be restricted to 40 mg/Nm3.	 Pollution Control Board & CPCB. Efficient bag filters and ESPs have been installed to meet more stringent standard than prescribed in EC. Air pollution control Equipments are modified to meet the standard than prescribed in EC. 						ntra State standards meet the		
			Location			Nov-22	Dec-22			Mar-23
			Raw mill + kiln	30 mg/Nm ³	20.56	23.14	22.2	20.76	23.91	19.69
			Coal Mill	30 mg/Nm ³	18.04	21.33	20.2	18.49	17.75	20.75
			Clinker Cooler	30 mg/Nm ³	16.94	19.34	18.40	21.70	20.38	23.93
			Cement Mill 1	30 mg/Nm ³	19.25	22.57	21.72	26.79	24.09	21.73
			Cement Mill 2	30 mg/Nm ³	18.31	20.5	19.6	17.24	18.12	21.24
			Packer-1	30 mg/Nm ³	17.82	20.81	19.08	21.14	19.13	23.78
			Packer-2	30 mg/Nm ³	19.20	23.35	20.46	23.22	21.7	18.17
			Packer-3	30 mg/Nm ³	16.52	19.89	17.47	20.40	18.16	24.48
			СРР	50 mg/Nm ³	46.21	49.02	47.28	41.36	43.72	48.31
		*/	All values are in m	g/NM ³						

Compliance Period - October 2022 to March 2023

ii.	Five stacks of the prescribed height (as presented before the Environmental clearance ECI) shall be erected to disperse SOx and NOx. All the major stacks shall be provided with continuous emission monitoring for particulate matter.	•						
			Sr No	Stack Name	Material of construction	Stack Height (m)		
			1	Raw Mill & Kiln Stack	Mild steel	110		
			2	Clinker Cooler	Mild steel	54		
			3	Coal Mill	Mild steel	118		
			4	Cement Mill -01	Mild steel	35		
			5	Cement Mill -02	Mild steel	35		
			6	CPP Boiler Stack	RCC	83		
111.	 Continuous On-line monitors for particulate emissions, SO₂ and NO_x in Raw/kiln mill, clinker cooler, coal mill, cement mill etc. shall be provided and shall make necessary arrangements for submission of On-line real 			ve installed Continuous he listed parameters Stack	Emission Monitoring System Air Pollution Control Equipment	m (CEMS) at all major stacks Monitoring Parameters		
	time emission data to CPCB website. NO_X burners shall		1	Raw Mill & Kiln Stack	Jet Pulse Bag House	PM, SO ₂ & NOx		
	be installed to control NO _x emissions. Interlocking		2	Clinker Cooler	ESP	PM		
	facility shall be provided between pollution control		3	Coal Mill	Bag House	PM		
	equipment and the process operation so that in the		4	Cement Mill -01	Bag House	PM		
	event of the pollution control equipment not working,		5	Cement Mill -02	Bag House	PM		
	the respective unit (s) is shut down automatically.		6	CPP Boiler Stack	ESP	PM, SO ₂ & NOx		
		•	stacks, Contro the pri Interlo	the data is being upload I the NOx emission at R mary emission control m cking facility has been p	ded to MPCB and CPCB serv aw Mill & Kiln Stack and Bo neasures which includes Lo	piler stack we have taken all w NOx burner. ntrol equipment to stop the		

iv.	Regular Ambient Air Quality Monitoring shall be carried out. The monitoring stations will be set up in consultation with the Maharashtra Pollution Control Board. It will be ensured that at least one monitoring station is set up in up-wind & in down-wind direction along with those in other directions. On-line data for air emissions shall be transferred to the CPCB and MPCB regularly. The instruments used for ambient air quality monitoring shall be calibrated regularly.	 laboratory and data is being submitted to MPCB on monthly basis. Continuous Ambient Air Quality Monitoring stations have set up in consultation with Maharashtra State Pollution Control Board. On-line data for Continuous emissions and Ambient Air Quality Monitoring Station is being transferred to the CPCB and MPCB regularly. Calibration of Monitoring Instruments is being done at regular intervals. 					
			Month	PM 2.5 (ug/m ³)	- PM 10 (ug/m ³)	SO ₂ (ug/m ³)	NO _x (ug/m ³)
			Standard	60	100.0	80.0	80.0
			Oct-22	27.08	58.84	7.84	13.35
			Nov-22	30.41	63.55	9.35	16.60
			Dec-22	29.58	61.91	8.59	14.70
			Jan-23	28.74	69.92	13.27	18.46
			Feb-23	34.99	66.27	12.51	17.58
			Mar-23	38.74	70.79	10.75	20.18
			AMBIENT AIR STAT				
			Oct-22	29.58	56.50	11.19	17.80
			Nov-22	31.34	60.48	12.62	20.98
			Dec-22	30.41	58.54	11.64	19.34
			Jan-23	30.82	70.71	15.10	20.39
			Feb-23	35.41	67.06	14.03	19.48
			Mar-23	36.66	64.52	12.81	24.62
			AMBIENT AIR STAT				
			Oct-22	32.08	67.41	11.76	17.80
			Nov-22	71.41	34.58	13.48	19.52
			Dec-22	33.74	69.96	12.52	18.23
			Jan-23	34.57	71.66	14.80	20.01
			Feb-23	35.41	67.89	13.98	18.71
			Mar-23	38.74	69.81	15.35	21.56
v.	Raw material will be properly covered and clinker shall be stored in a dome with all round high sidewalls to control fugitive emissions. Fugitive emissions from	 Covered sheds are provided for Raw material storage. Clinker, fly ash and Cement is being stored in closed Silos. Efficient bag filters are provided at Cement mill, packing area and Coal handling section to control the fugitive dust emission. 					

vi.	cement mill, packing area and coal yard shall also be controlled. Dust collectors and extraction system (suction apparatus) shall be installed to control fugitive dust emissions at coal and lime stone unloading points, at all the transfer points, stockpiles to arrest free release of dust.	 Water sprinklers are provided at material storage and unloading points. Mechanical Road Sweeper deployed for the road cleaning. Photographs of the mechanical Road sweeper enclosed as Annexure -02. Efficient Bag filters are installed at all material transfer points, unloading points to arrest the fugitive dust emission.
vii.	Materials will be transported in tippers, covered trucks, covered containers, covered rail wagons etc.	 Noted and being complied. Materials is being transported in tippers, covered trucks, covered containers. Fly ash is being transported in the closed bulkers.
viii.	Windbreakers will be installed to restrict fugitive dust.	 Relevant control methods are installed/deployed in dust prone areas. 03 tier Plantation is being done around plant boundary.
ix.	Water sprinkling arrangement should be made in the raw material stock yard and dust collectors in cement bag loading areas.	 Water sprinkling systems have been installed at Limestone crusher and material storage yard to minimize the dust generation. Efficient bag filters are provided at raw Material conveyer system and Material transfer points. Efficient Bag Filter are provided at Packing Plant
x.	Totalwaterrequirementfrom Wardha/Pen Ganga River shall not exceed 6020 m³/d as per thepermission granted by State Irrigation Department.	Noted and being complied
xi.	Minimum Cycle of Concentration (COC) for the CPP will be 5.0.	 We maintain the Minimum 05 cycle of concentration for the CPP
xii.	be treated in Effluent Treatment Plant (ETP) and Sewage Water Reclamation Plant (SWRP) respectively and recycled/reused in cement plant for make-up, in CPP for cooling, dust suppression, other plant related activities and green belt development. No wastewater will be released outside the premises. Zero discharge shall be strictly adopted. During monsoon, the wastewater will be stored in the mine pit.	 No effluent is being /will be discharged outside the plant premises. Wastewater from CPP is treated in ETP (neutralization pit) and treated water is recycled back to process/Reused in dust suppression and cooling at cement plant. The Domestic wastewater is being treated in Sewage Treatment Plant and treated water is being utilized for greenbelt development. Photographs of Sewage treatment plant are enclosed as Annexure -03
xiii.	Solid waste generated shall be 100 % recycled and reutilized in the process itself and no solid waste shall be	• The solid waste i.e. dust collected from air pollution control equipment is being recycled back to process.

	disposed off outside the plant premises. The fly ash generated will be used in-house for the manufacture of PPC. Bottom ash shall be used in the raw mill and used	 The Fly ash generated from CPP is being utilized for manufacturing of PPC. Bottom Ash generated from CPP is being used in cement manufacturing or sold to brick manufacturing agency.
	for land filling. Treated STP sludge shall be used as manure for green belt development. Waste oil sludge shall be reused in the plant and finally burnt in the kiln or sold to authorized recyclers/ re-processors.	 Treated STP Sludge from STP is being utilized as manure for greenbelt development. The waste oil, grease generated during plant operation is being /will be sold to authorized recycler.
xiv.	The company shall strictly follow all the recommendations mentioned in the Charter on Corporate Responsibility for Environmental Protection (CREP).	 Noted and Being Complied.
xv.	As agreed, green belt shall be developed in 17 ha area.	 Being Complied Green belt is being developed in and along the periphery of plant premises. We have covered 12 Ha of area under green belt. We are doing the planation in and around plant area to cover the 17 Ha land under
		 green belt compliance period plantation along with the photographs are enclosed here with as Annexure -04
xvi.	The company must harvest surface as well as rainwater from the rooftops of the buildings proposed in the expansion project and storm water drains to recharge the ground water and use the same water for the various activities of the project to conserve fresh water.	 Storm/Rain Water accumulated is being harvested in the mined-out pits and the harvested water is being utilized for plant operation and various activities to conserve fresh water. We are constructing 06 number of rain water harvesting structures to recharge the ground water.
	GENERAL CONDITIONS	
i.	The project authorities must strictly adhere to the stipulations made by the Maharashtra Pollution Control Board (MPCB) and the State Government.	• We are committed to follow the stipulations made by Maharashtra Pollution Control Board (MPCB) and the State Government.
ii.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.	 Noted and will be complied No expansion and modifications in the plant will be carried out without prior approval from MoEF&CC.
iii.	Adequate number of influent and effluent quality monitoring stations shall be set up in consultation with the MPCB. Regular monitoring shall be carried out for relevant parameters.	 Influent and effluent quality monitoring stations set up in consultation with the MPCB. For relevant parameters Regular monitoring is being carried out by NABL accredited authorized agency and data is being submitted to the MPCB on monthly basis. Quality of ETP outlet is for the Period of Oct 22 to Mar 23 is given below

			Parameter	рН	TDS	TSS	BOD	COD	Oil and Grease
			Unit		mg/L	mg/L	mg/L	mg/L	mg/L
			Standard	5.5 to 8.5	2100 max	100	30	100	10 max
			Oct-22	8.10	1081.1	17	9.3	35	2.0
			Nov-22	8.25	1088	21	9.7	30	2.66
			Dec-22	7.94	1008	14	8.8	30	2.4
			Jan-23	7.03	996	18	9.3	30	BQL
			Feb-23	7.68	927	16	9.0	30	BQL
			Mar-23	7.51	943	21	7.0	25	BQL
iv.	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report.		Complied an	u Agree to (comply.				
v.	Industrial wastewater shall be properly collected and treated so as to conform to the standards prescribed under GSR 422 (E) dated 19 th May 1993 and 31 st December, 1993 or as amended from time to time.	and treated wastewater conforms to the standards prescribed under GSR 422 (E) as							
	The treated wastewater shall be utilized for plantation		Parameter	pH	TDS	TSS	BOD	COD	Oil and Grease
	purpose.		Unit	рп	mg/L	mg/L	mg/L	mg/L	mg/L
			Standard	5.5 to 8.5	2100 max	100	30	100	10 max
			Oct-22	8.10	1081.1	17	9.3	35	2.0
		1							
		ļ	Nov-22	8.25	1088	21	9.7	30	2.66
			Nov-22 Dec-22	8.25 7.94	1088 1008	21 14	9.7 8.8	30 30	
							_		2.66
			Dec-22	7.94	1008	14	8.8	30	2.66 2.4
			Dec-22 Jan-23	7.94 7.03	1008 996	14 18	8.8 9.3	30 30	2.66 2.4 BQL
		•	Dec-22 Jan-23 Feb-23 Mar-23	7.94 7.03 7.68 7.51	1008 996 927 943	14 18 16 21	8.8 9.3 9.0 7.0	30 30 30 25	2.66 2.4 BQL BQL

vi.	The overall noise levels in and around the plant area shall be limited within the prescribed standards (85 dBA)	8 , , ,								
	by providing noise control measures including acoustic							und		
	hoods, silencers, enclosures etc. on all sources of noise	Noise Level Monitoring results are given below								
	generation.		Location Lime Stone Stacker CPP Area				Area	Main gate		
			Time	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	l
			Standard	75 (dB)		75 (dB)	70 (dB)	75 (dB)	70 (dB)	I
			Oct-22	66.6	55.1	67.1	54	65.5	54.3	I
			Nov-22	67	54.83	67	54.83	64.80	54.91	I
			Dec-22	59	43.3	58.7	40.1	59	43.6	I
			Jan-23	71.8	62.2	70.4	61.7	72.2	61.7	l
			Feb-23	72	63	71.1	62.8	70.7	62.1	I
			Mar-23	72	63.2	71	64	71	62.7	I
vii.	health programmes shall be taken up. Regular Occupational Health Surveillance Programme shall be carried and records shall be maintained properly for at least 30-40 years. The programme shall include lung function and sputum tests once in six months. Sufficient preventive measures shall be adopted to avoid direct exposure to dust etc.	 Adequate Occupational health programmes are being taken up and will be continued in future too. As the company has been recovered from Insolvency through NCLT route, the olde documents are not available. Occupational Health Surveillance program is being taken up and records will be maintained for at least 30-40 years. Pre-Occupational Health Check-ups have been carried out for all the employee 						lder I be vees		
viii.	A separate environment management cell with full fledge laboratory facilities to carry out various management and monitoring functions shall be set up under the control of a Senior Executive.						lled			

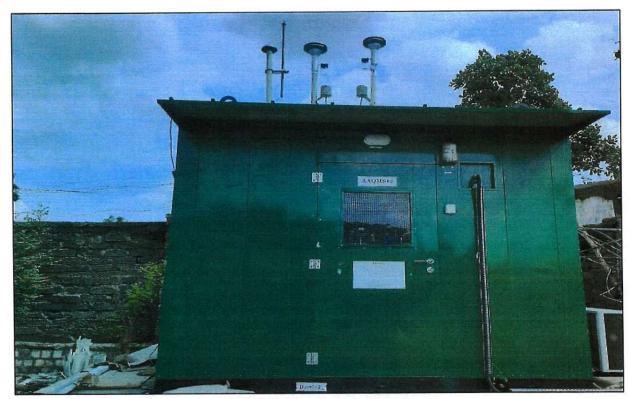
ix.	As proposed in the EIA/EMP, Rs. 31.08 Crores and Rs. 0.313 Crores/annum shall be earmarked to meet the capital cost and recurring cost/annum for the environmental protection measures shall be used judiciously to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. The funds so provided shall not be diverted for any other purpose.	 During the revival of the plant company has invested more than 32 Crores for the installation and upgradation of Pollution Control Equipment's. The funds earmarked towards recurring cost will not be diverted for any other purpose.
х.	Regional Office of this Ministry at Bhopal /Maharashtra Pollution Control Board / Central Pollution Control Board shall monitor the implementation of the stipulated conditions. Six monthly compliance status report and monitoring data along with statistical interpretation shall be submitted to them regularly.	 Six monthly compliance status report along with monitoring data is being submitted to concern authority on regular basis. Last Six-monthly compliance status and monitoring report for April 2022 – Sep 22 was submitted to regional office, MoEFCC, Nagpur & MPCB vide letter No. DCBL/ENV/MoEFCC/PLANT/EC/COMPL/112022/01 Dated 05.11.2022
xi.	The Project Proponent should advertise in at least two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned informing that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the Maharashtra Pollution Control Board / Committee and may also be seen at Website of the Ministry and Forests at http://envfor.nic.in. The advertisement should be made within 7 days from the date of issue of the clearance letter and a copy of the same should be forwarded to the Ministry's Regional Office at Bhopal.	Noted and Complied.
xii.	The Project Authorities shall inform the Regional Office as well as the Ministry the date of financial closure and final approval of the project by the concerned authorities and the date of start of land development work.	Noted and Complied.

5	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	• Noted.
6	The Ministry reserves the right to stipulate additional conditions if found necessary. The company will implement these conditions in a time bound manner.	• Noted.
7	The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Public Liability Insurance Act, 1991, Hazardous Waste (Management & Handling) Rules, 1989 and Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 along with their amendments and rules.	• Noted.

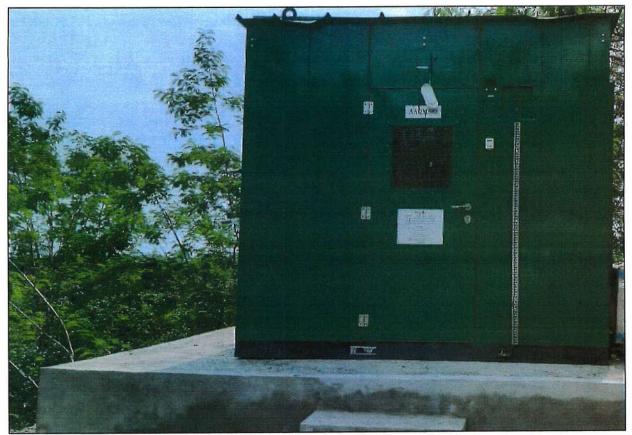
INSTALLATION OF CAAQMS AND CEMS



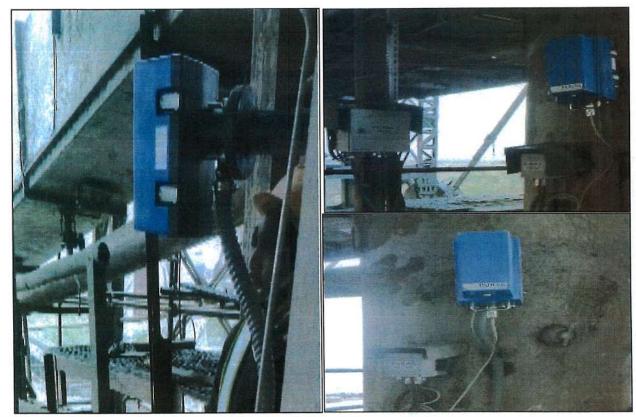
CAAQMS -01 installed at Plant Main Gate



CAAQMS -02 installed at CPP Area

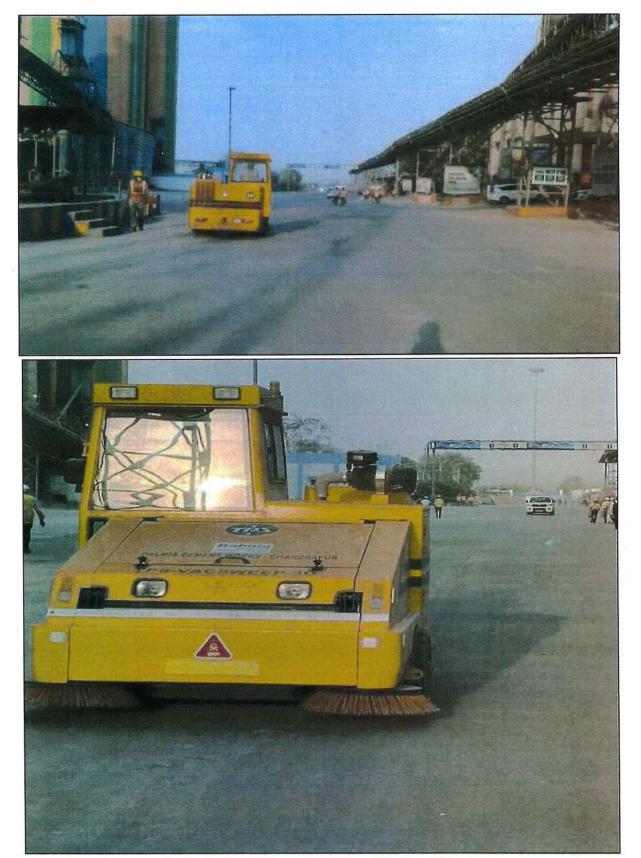


CAAQMS -03 Installed at Crusher Area (Mines)



Installation of Opacity Meter for PM Monitoring at Major Stacks

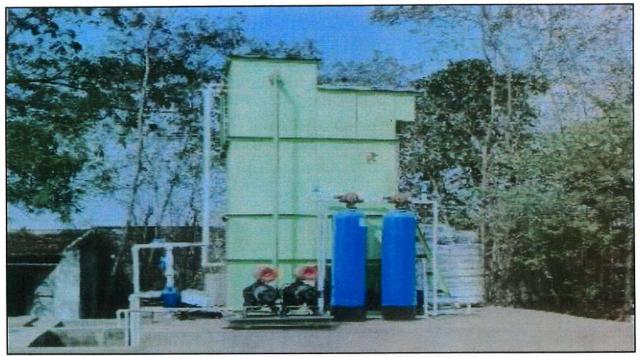
ROAD SWEEPING MACHINE



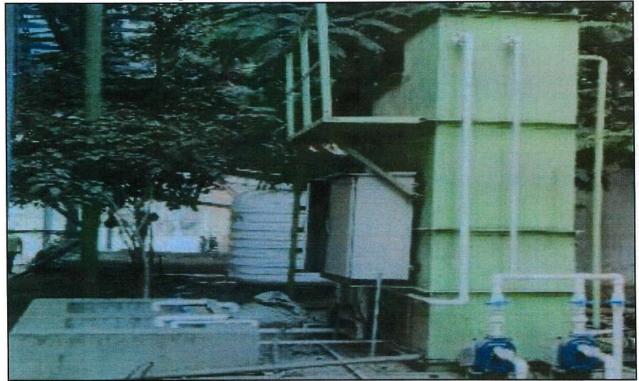
Mechanical Road Sweeper deployed for Road Cleaning

Annexure 03

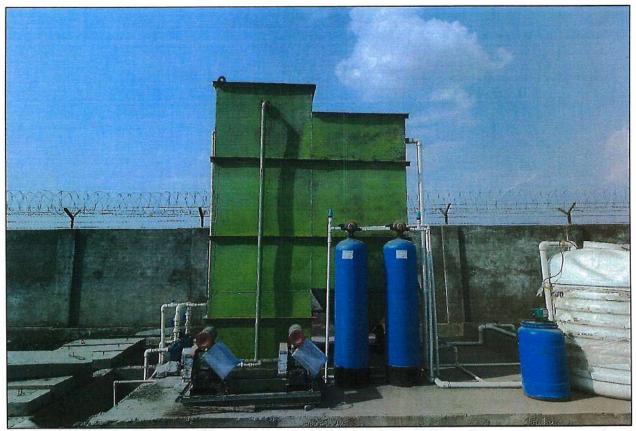
Sewage treatment plant



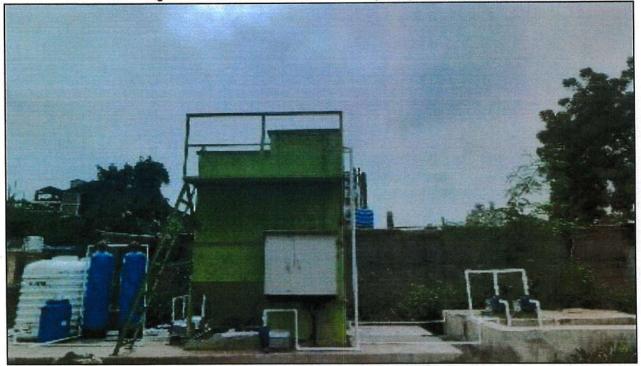
Sewage Treatment Plant Installed at Packing Plant Area



Sewage Treatment Plant Installed at Packing Plant Area



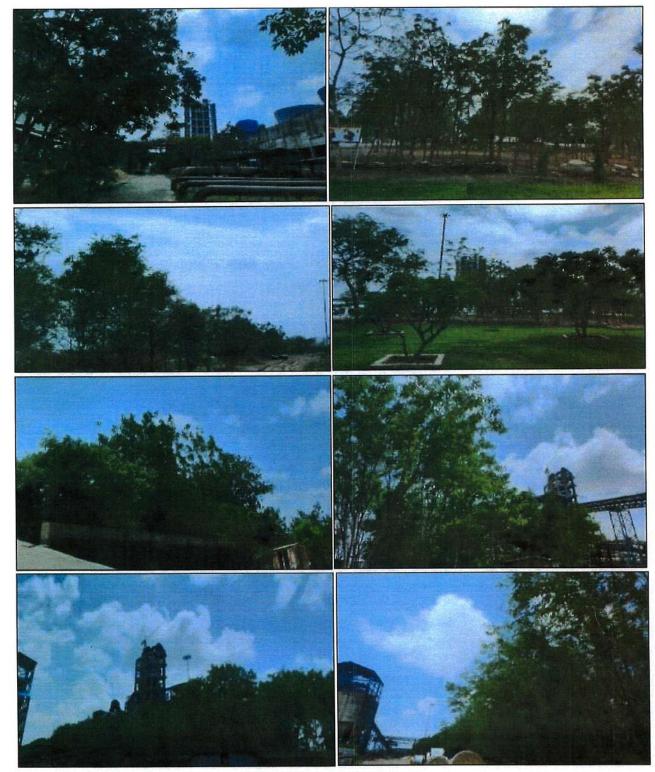
Sewage Treatment Plant Installed at Temperory Hutment Area



Sewage Treatment Plant Installed at Admine Building Main Gate

ANNEXURE -04

GREEN BELT DEVELOPMENT



Plantation at Plant Area

PLANTATION DETAILS

	Plantation Oct- 2022-Mar 2023				
Sr. No	Particular	Total			
1	Karanj	3030			
2	American tree	652			
3	Mango	231			
4	Custard apple	65			
5	Shivan	34			
6	Tamarind	113			
7	Jamun	179			
8	Neem	128			
9	Shiras	7			
10	Foxtail Palm	10			
11	Rose	210			
12	Conocarpus	60			
13	Mehndi	300			
	Total	5019			

ANNEXURE-5

ENVIRONMENT LABORATORY

