JAYPEE CHURK INDUSTRIAL COMPLEX

JAIPRAKASH
ASSOCIATES LIMITED
Cement Division

August 06, 2021

JCIC/ENV/UPPCB-ES/304/2021

To,

The Member Secretary,
U.P. Pollution Control Board,
TC-12 V, Vibhuti Khand,
Gomti Nagar,
Lucknow- 226010.

Sub: Environmental Statement for the financial year ending 31st March, 2021 for 1 MTPA Cement Grinding Unit of M/s Jaypee Churk Industrial Complex (Unit of Jaiprakash Associates Limited), Sonbhadra, (U.P.).

Ref:
EC vide letter no. J -13012/106/2009-IA II (T) dated 18.12.12.

Dear Sir,

With reference to the above cited subject, please find enclosed Environmental Statement in Form- V prescribed under Rule 14 of the Environment (Protection) Rules 1986, for 1 MTPA Cement Grinding Unit of M/s Jaypee Churk Industrial Complex (A Unit of Jaiprakash Associates Limited), Churk, Sonebhadra, (U.P) for the financial year ending 31st March 2021.

Thanking You.

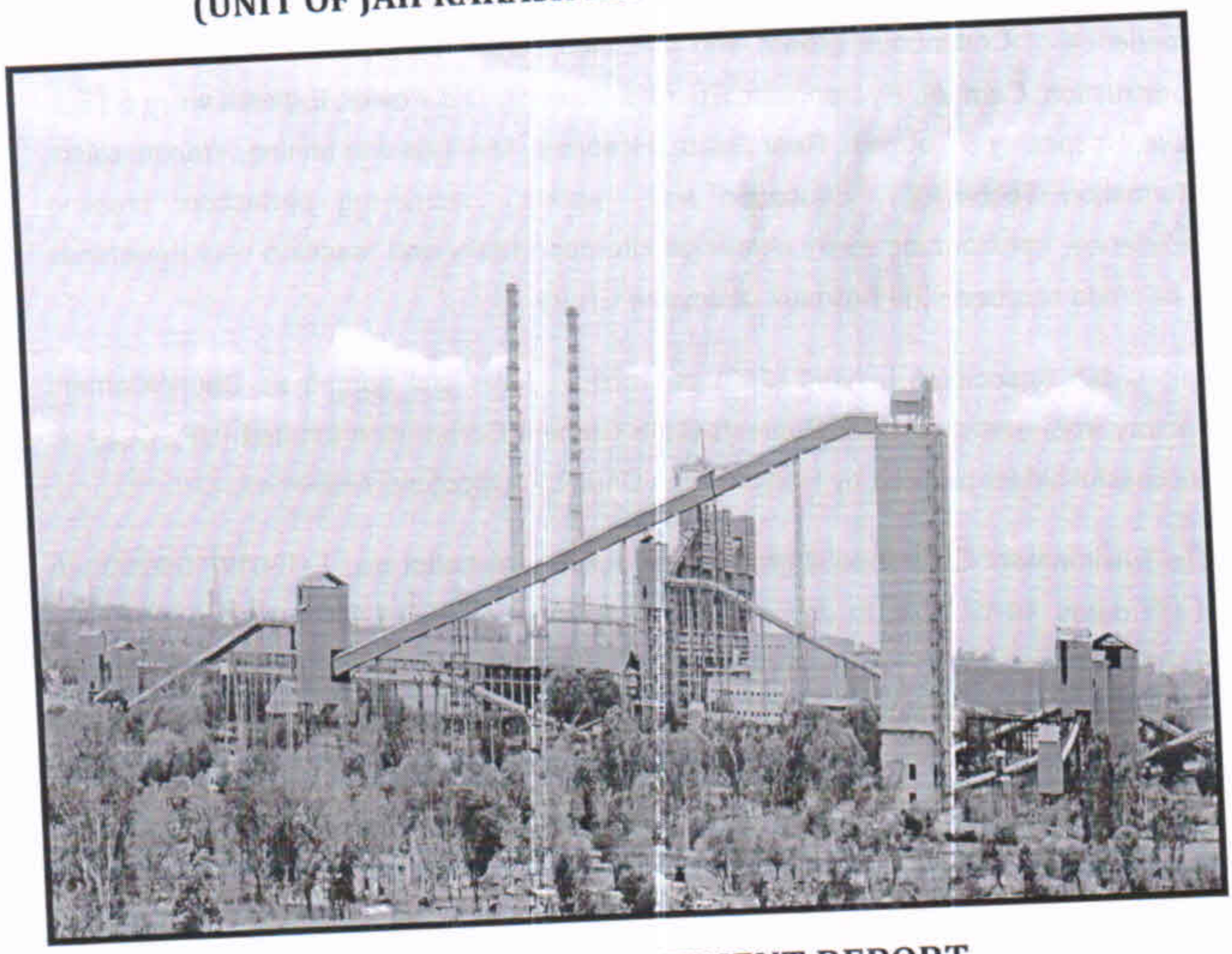
Yours Sincerely,
For Jaypee Churk Industrial Complex
(A Unit of Jaiprakash Associates)

Mukesh Garg
(Sr. Vice President)

Encl: As Above.

CC: - Regional Officer, U.P. Pollution Control Board, Robertsganj, Sonebhadra (UP)

JAYPEE CHURK INDUSTRIAL COMPLEX
(UNIT OF JAIPRAKASH ASSOCIATES LIMITED)



ENVIRONMENT STATEMENT REPORT
[2020-21]

SUBMITTED TO

UTTAR PRADESH POLLUTION CONTROL BOARD

INTRODUCTION

The Jaypee group is a blue chip diversified industrial conglomerate with a four decade experience of Continuous growth and diversification in the fields of Engineering and Construction, Cement, Hydropower, Thermal Power, Wind Power, Express ways & High ways, Hospitality & Tourism, Real Estate, Hospitals, Minerals and Mining, Transmission, Information Technology, Education and sports. Achieving perfection, creating excellence, transforming every challenge into opportunity and reaching new milestones in its stride has been the hallmark of Jaypee Group.

Jaiprakash Associates Limited (JAL) has acquired the unit named as Churk Cement Factory from erstwhile Uttar Pradesh State Cement Corporation Limited (UPSCCL) as successful bidder ordered by Hon'ble High Court of Judicature, Allahabad.

The Environment Clearance is granted by MoEF, vide Letter no. J -13012/106/2009-IA II (T) dated 18.12.2012 to Jaypee Churk Industrial Complex for 4 x 60 MW Power Generation & 1.00 MTPA Cement Grinding unit at Village- Churk, Tehsil-Robertsganj, District–Sonbhadra (UP). Currently the unit has installed capacity of 3x60 MW Captive Power Plant. Out of 3 units of CPP only 1 unit of 60 MW & 1.00 MTPA Cement Grinding unit is in operation.

"FORM – V"

ENVIRONMENTAL STATEMENT FOR THE FINANCIAL YEAR ENDING

WITH 31st MARCH 2021

PART – A

(I)	Name & Address of the Owner / Occupier of the Industry Operation or Process	Jaypee Churk Industrial Complex (A Unit of Jaiprakash Associates Limited) Village & Post: Churk, Tehsil – Robertsganj Distt : Sonebhadra (UP) – 231206 Ph. 05445-252110
(II)	Industry Category	Red Category and Large (Cement and Thermal Power)
(III)	Production Capacity	**Cement Grinding Unit- 1.0 MTPA.** (EC has been granted for 4x60 MW captive power plant &1.0 MTPA Cement Grinding unit.)
(IV)	Year of Establishment	2013
(V)	Date of last Environmental Statement Submitted	12/09/2020

PART – B

Water & Raw Material Consumption

A. Water

(i) Water Consumption (m^3/Day):-

Industrial Water Consumption
Process – N.A. (As the plant is based on dry process technology)
Cooling - 16.51 m^3/Day

Consumption per unit of production:-

Name of the Product	Process water consumption per unit of product output (KL/MT of cement)	
	During the Previous Financial Year (2019-20)	During the Current Financial Year (2020-21)
Cement	0.029	0.025

B. Raw Material Consumption

Name of Raw Materials	Name of the Product	Consumption of Raw Material (Metric tons) per unit ton of product (cement)	
		During the Previous Financial Year (2019-20)	During the Current Financial Year (2020-21)
Clinker	Cement (PPC)	0.753	0.74200
Fly Ash		0.213	0.23400
Gypsum		0.034	0.02300
GA		~	0.00009

PART- C

Pollution discharges to environment/ unit of output.

(Parameter as specified in the consent issued)

S. No.	Pollutants	Quantity of Pollutants Discharged (Mass / day) (MT/day)	Concentration of Pollutants in discharged (mg/Nm^3)	Percentage of variation from prescribed standard with reasons
(A)	**Water**			
	Industrial & Domestic Waste Water	ETP & STP treated water is fully re-used for dust suppression & green belt development.		
(B)	**Air**			
Air	Ambient air quality data is enclosed as Annexure –I			
Stack Emission	Cement Mill	.016	18.44	All parameters are within the prescribed limits stipulated by concerned regulatory body

PART – D

As specified under Hazardous waste & other waste (Management & Transboundary Movement) Rules, 2016.

Hazardous Waste	Total Quantity (ltr.)	
	During the previous Financial Year (2019-20)	During the current Financial Year (2020-21)
(a) From process - Used & Waste Oil	600 ltr	550 ltr
(b) From pollution control facilities	Nil	Nil

PART- E

(SOLID WASTES)

	Solid Waste	Total Quantity Generated	
		During the Previous Financial Year (2019-20)	During the Current Financial Year (2020-21)
a	from Process	Nil	Nil
b	Pollution Control Facilities	Dust collected in the Bag House and Bag filters are recycled to the system.	
	Dust Quantity recycled or reutilized		
i	Sold	Nil	Nil
ii	Reutilized	100 %	100 %
iii	Disposed	Nil	Nil

PART- F

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

Hazardous Waste (generated from entire premises)

Used Oil & Waste Oil

Hazardous Waste: The hazardous waste i.e. used Oil and waste oil generated during various processes in the plant is being collected in empty drums & then stored at Hazardous waste storage area. Authorization for disposal of Hazardous waste has been obtained from UPPCB. The used oil & waste oil shall be disposed off through authorized recyclers/vendors by UPPCB as per the provisions mentioned in Hazardous waste & other waste (Management & Transboundary Movement) Rules, 2016.

PART- G

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

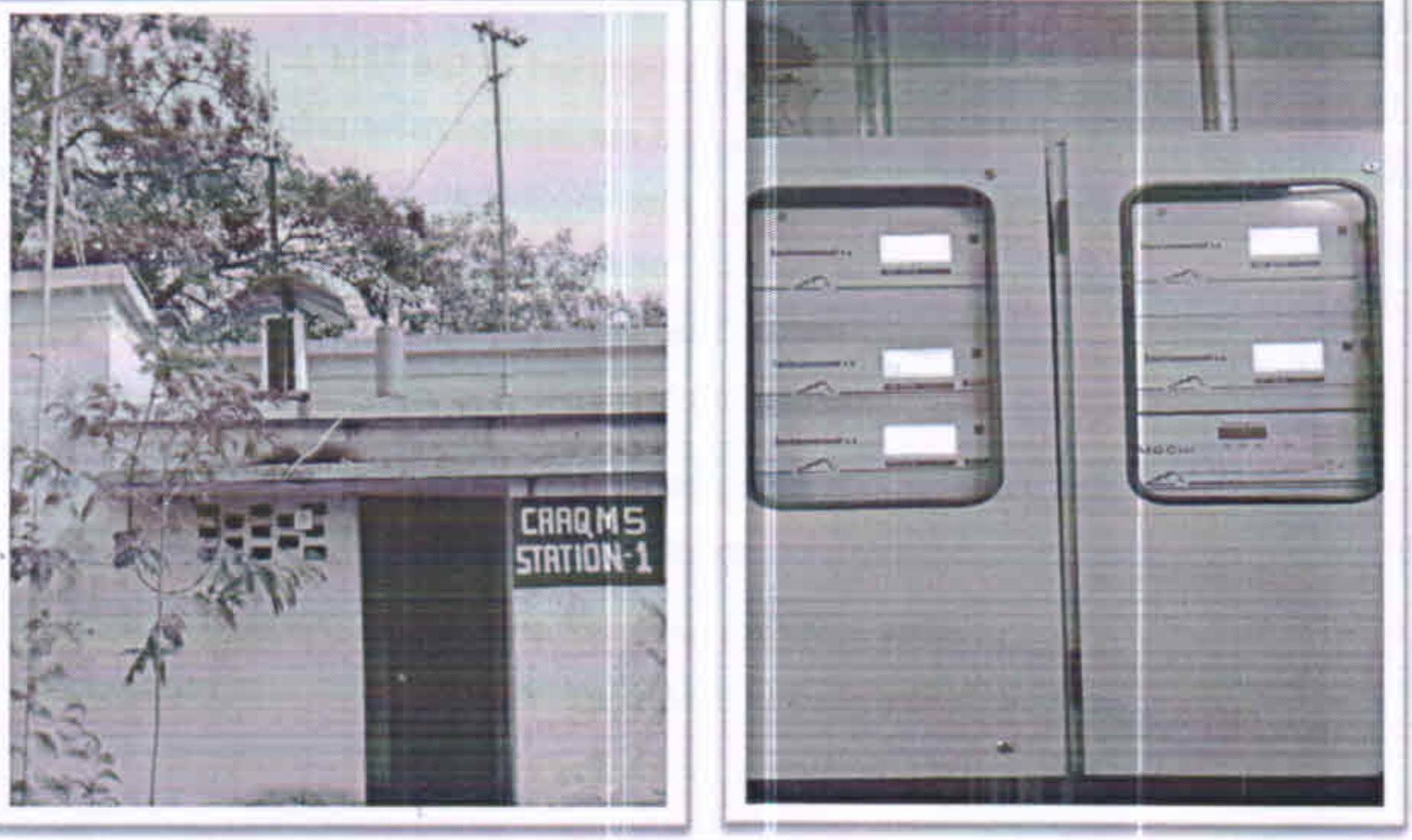
- Greenbelt strengthening is an ongoing process. Greenbelt plays an important role in the control of air pollution and also gives and aesthetic look to the site. Selected species of plants have been planted in and around the premises to control the fugitive dust.
- Latest state of the art APCEs have been installed in the Unit to capture the dust covering all the point source emissions and material transfer points. There is 1Bag House to capture the particulate matter. Also more than 20 Bag Filters installed in the process at various material transfer points to capture the Particulate Matter having efficiency more than 99%. The material captured by the APCEs is automatically recycled back, which in turn enhances the process economy.
- Roads in and around the plant is being concreted which in turn reduces the fugitive dust emissions due to vehicular movement.
- Water sprinklers have been installed at required transfer points in plant. 100% treated ETP water is being re-used in dust suppression.
- Treated water from STP is being utilized in colony & plant for green belt development.

PART- H

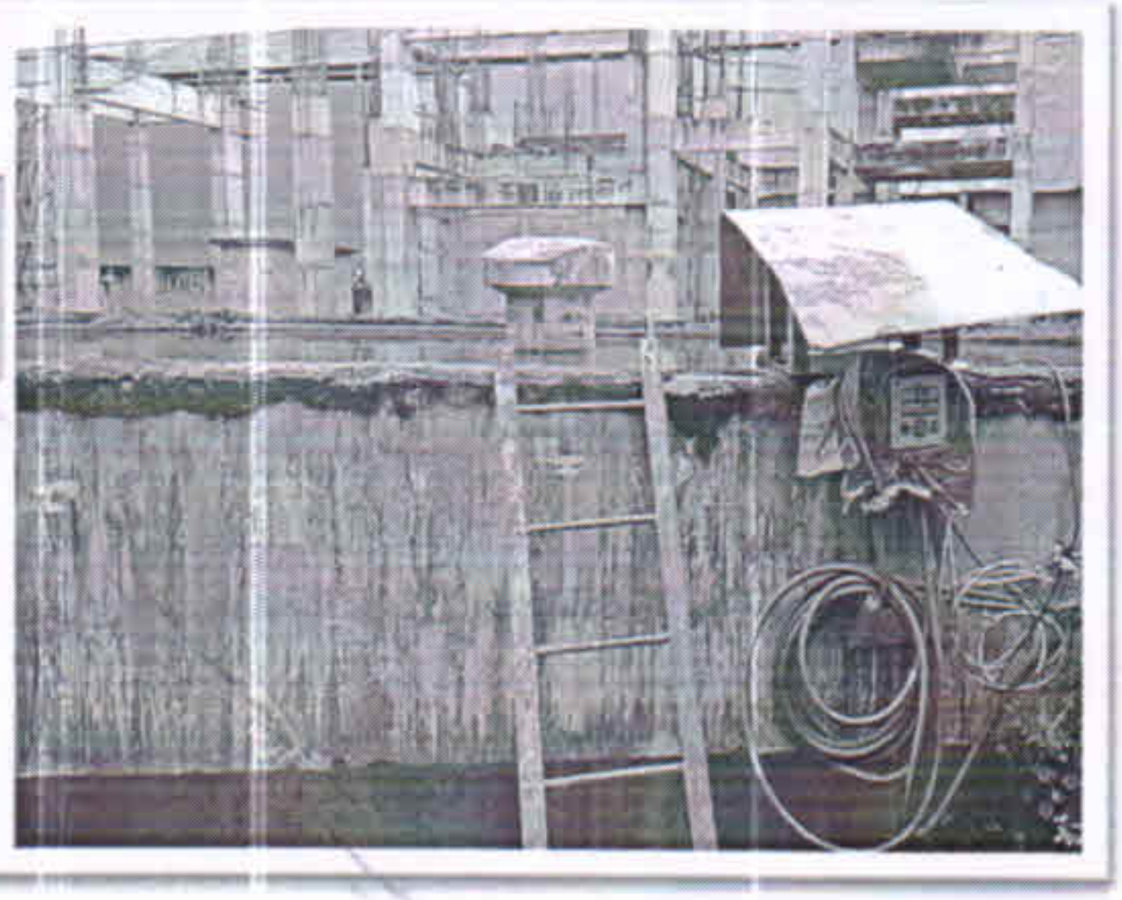
Additional measures/ investment proposal for environmental protection including abatement of pollution.

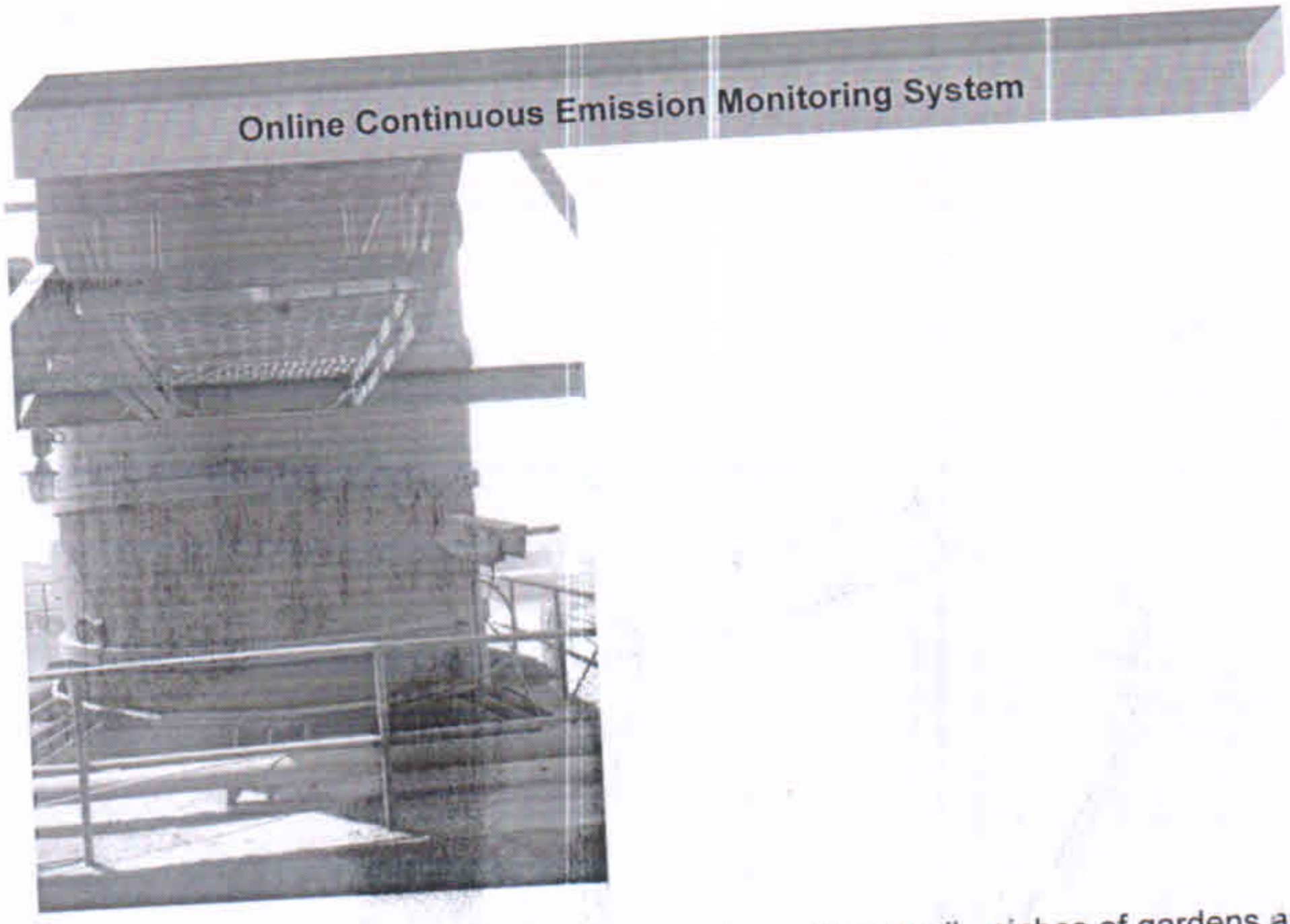
1. Continuous Ambient Air Quality Monitoring System, Continuous Emission Monitoring System & Online Effluent Monitoring system have been installed in the unit.

Continuous Ambient Air Quality Monitoring System



Online Effluent Monitoring System

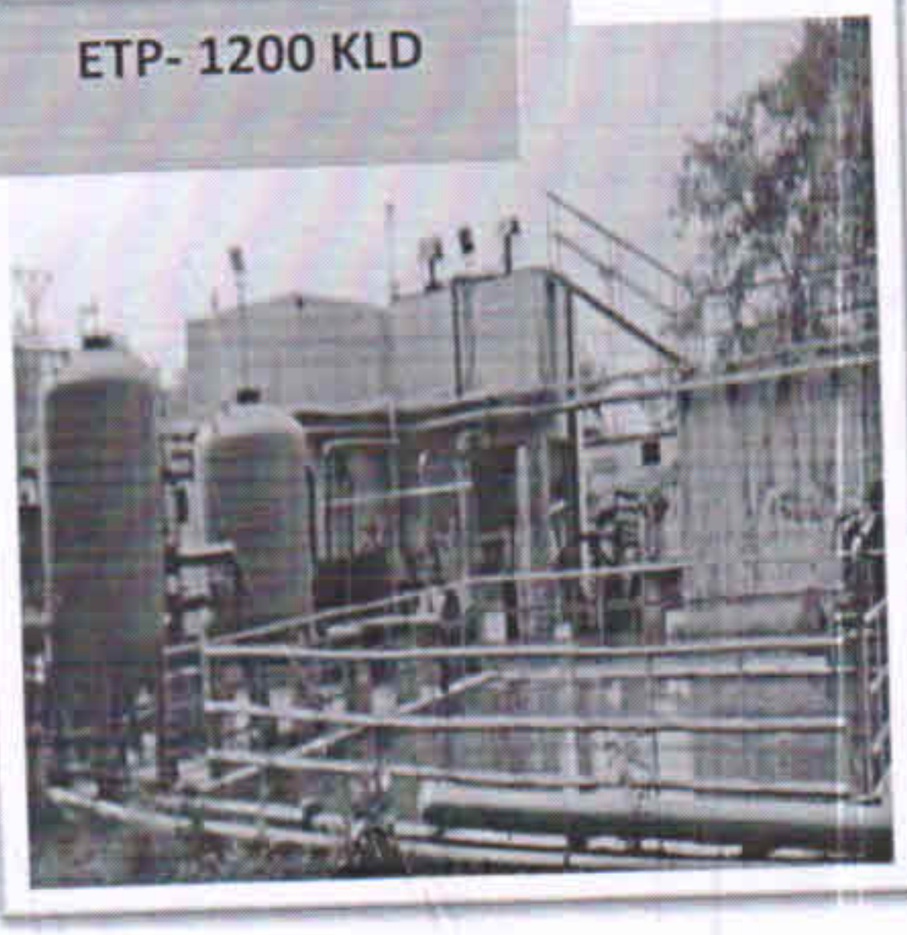


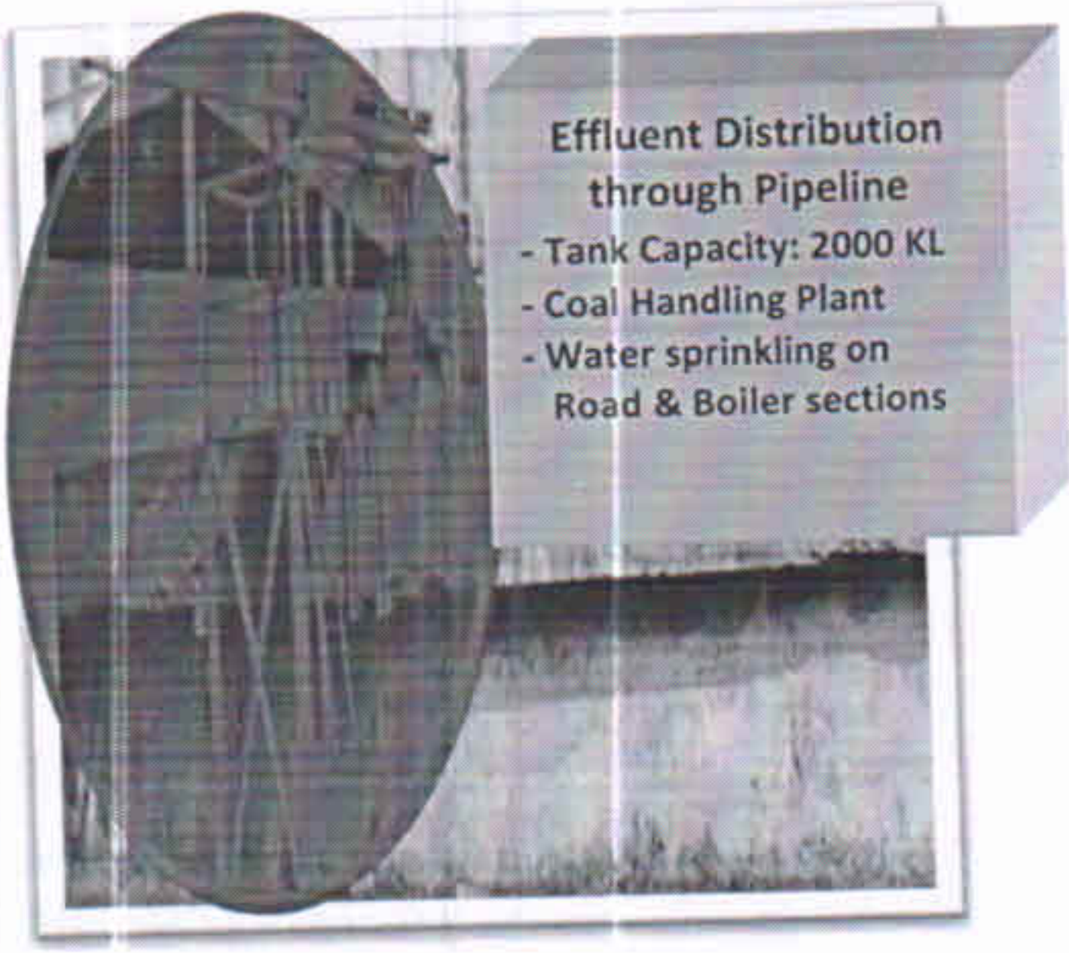


2. Tree plantation is in **progress** inside **the** premises. Also small patches of gardens are being developed inside **of the** plant **premises** & township wherever the open space is available to improve **the plant** beautification.

3. Plant is designed on zero discharge principle. Effluent generated from various processes e.g. cooling tower blow down, Boiler blow down & DM Plant backwash etc. is collected in neutralization pit & pumped to ETP for further treatment. As of now total waste water is used for spraying in the Coal Handling Plant to inhibit dust from flying, including transfer points on conveyor belts & coal unloading points.

ETP- 1200 KLD



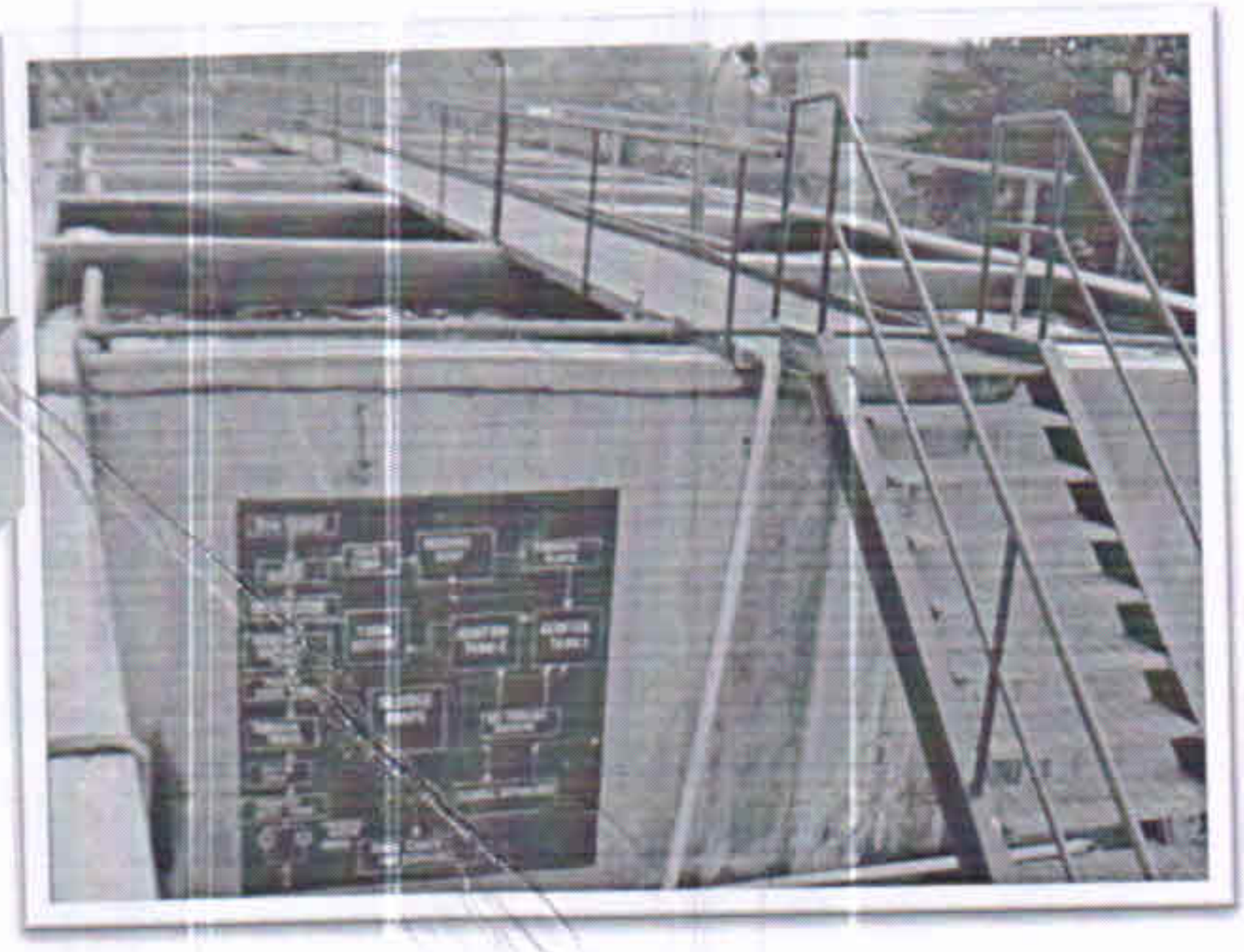


Effluent Distribution through Pipeline

- Tank Capacity: 2000 KL
- Coal Handling Plant
- Water sprinkling on Road & Boiler sections

4. A sewage treatment plant has been installed in the plant for treatment of domestic waste water & it is being reused in green belt development.

STP- 300 KLD

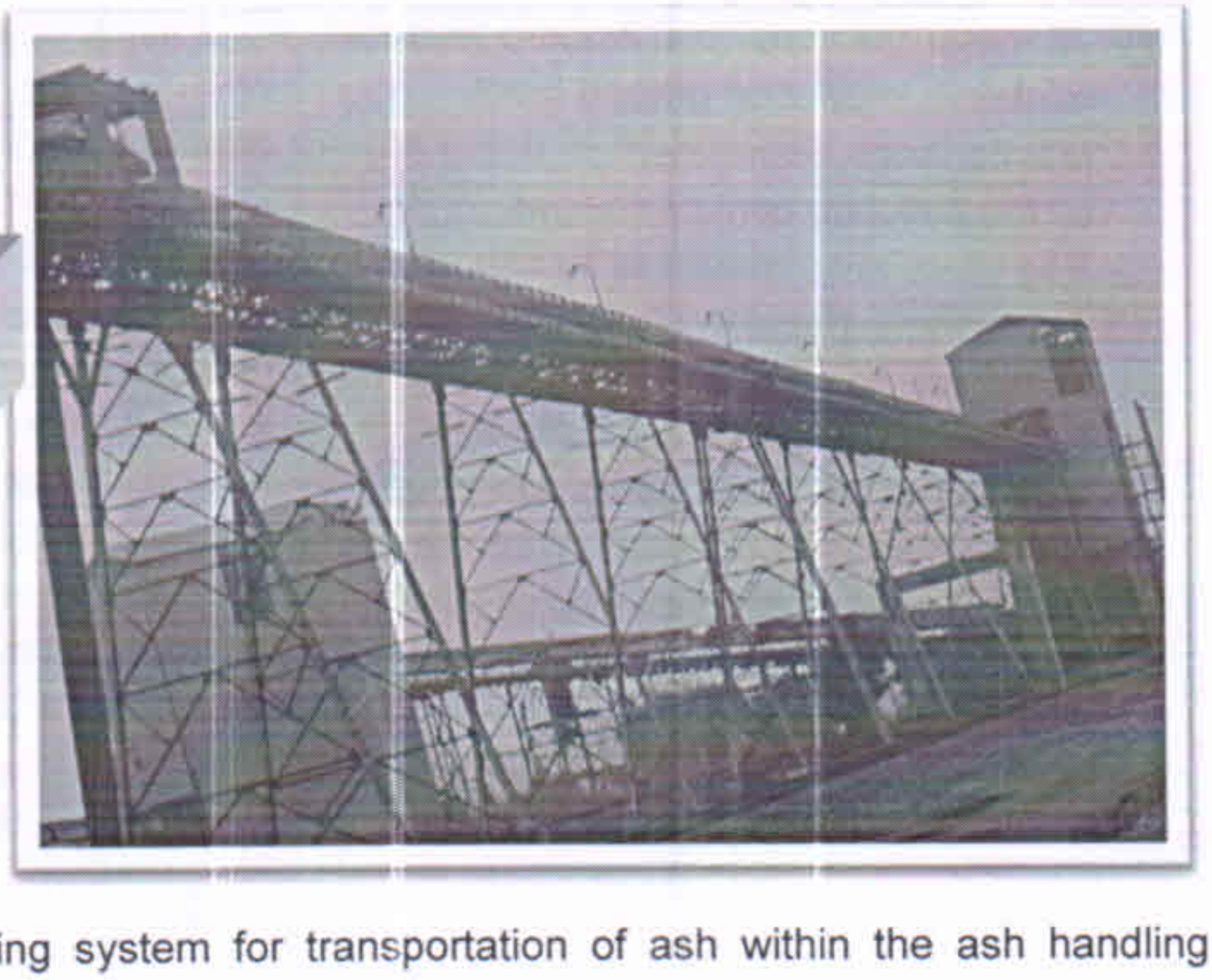


5. Dust suppression system at wagon tippler & belt conveyors installed to control fugitive dust emissions during unloading.

Dust Suppression System at Wagon Tippler

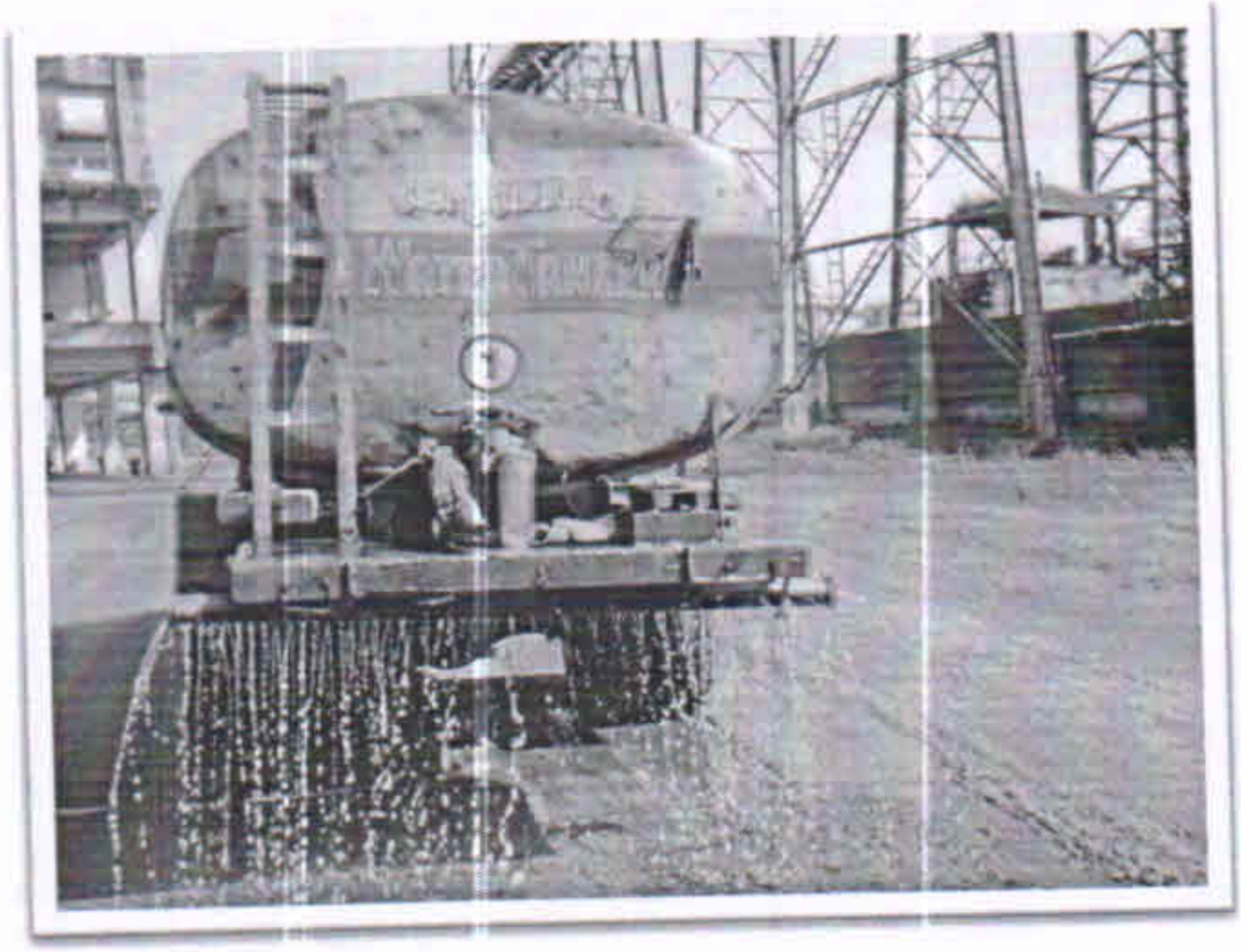
6. All the conveyor belts and transfer points are fully covered with GI sheet.

Fully covered conveyor belts



7. Closed pipe conveying system for transportation of ash within the ash handling system in the plant.

8. Dust suppression arrangement has been provided on approach road by using mobile water tanker.



9. Continuous water sprinkling is being carried out on the top of the heap at regular intervals to prevent dusting.
10. 70 meter tall stack constructed to disperse the stack emission in wide area to have minimum impact on ground level.
11. Maintenance department is doing regular checking and scheduled maintenance of all the pollution control devices.
12. Bag filters are installed at fly ash silos to control the dust emissions.
13. Appropriate transfer chutes have been provided at coal transfer points, unloading points etc. to minimize the discharge height and spread of air borne dust.
14. A fly ash management is done through dry ash collection system.
15. Housekeeping is taking on top priority and engaged sufficient no. of manpower for maintaining neat & clean environment in the plant premises.
16. World Environment day was celebrated at JCIC, Churk on 5th June, 2021 with full zeal and enthusiasm. All the employees have attended the function.

MISCELLANEOUS:

Any other particulars in respect of environmental protection and abatement of pollution.

Details of step taken for improvement of environment:

- Installation of cold fog system at Clinker, Gypsum, and Wagon Tippler with transfer points in significant reduction of fugitive dust emission for conductive environment.
- All internal roads are either concreted or blacktopped to reduce the fugitive dust emission inside the plant premises.
- Green belt development in and around the Plant premises is being continue.
- Dried STP sludge is being utilized in horticulture as organic manure.
- Online Continuous Monitoring system has been installed to monitor Ambient Air Quality and Process stacks for Dust concentration and Gaseous on continuous basis.
- Provision has been made for potable water to the nearby community through dedicated water tankers & networks of water pipelines.

Dated: 05/08/2021

for Jaypee Churk Industrial Complex
(A Unit of Jaiprakash Associates Limited)

Mukesh Garg
(Sr. Vice President)

Annexure-1

JAYPEE CHURK INDUSTRIAL COMPLEX

(A Unit of Jaiprakash Associate Limited)

AMBIENT AIR QUALITY MONITORING REPORT

Period : April 2020 - March 2021

Month	Particulars	Location- Near Main Gate				Location- Near Store			
		PM10 ($\mu g/m^3$)	PM2.5 ($\mu g/m^3$)	SO_2 ($\mu g/m^3$)	NO_X ($\mu g/m^3$)	PM10 ($\mu g/m^3$)	PM2.5 ($\mu g/m^3$)	SO_2 ($\mu g/m^3$)	NO_X ($\mu g/m^3$)
Apr-20	Monthly Average	Shutdown due to COVID-19							
May-20		63.51	17.51	11.98	13.03	60.12	15.50	11.58	12.64
Jun-20		63.21	25.77	13.02	12.06	59.81	23.77	12.62	11.67
Jul-20		62.88	26.15	13.60	12.04	59.49	24.14	13.20	11.65
Aug-20		62.32	26.95	14.58	11.90	58.93	24.94	14.18	11.50
Sep-20		61.62	27.02	14.58	11.82	58.23	25.01	14.18	11.42
Oct-20		62.16	27.02	14.58	11.83	58.77	25.01	14.18	11.43
Nov-20		63.03	26.80	15.09	11.82	59.51	25.59	14.18	11.42
Dec-20		61.86	28.02	15.31	11.67	58.46	26.01	14.91	11.27
Jan-21		61.60	28.72	15.84	11.55	58.21	26.71	15.44	11.16
Feb-21		61.75	28.73	16.20	11.52	58.36	26.72	15.80	11.12
Mar-21		61.85	28.88	15.99	11.56	58.46	26.87	15.59	11.17
Min		61.60	17.51	11.98	11.52	58.21	15.50	11.58	11.12
Max		63.51	28.88	16.20	13.03	60.12	26.87	15.80	12.64
Average		62.35	26.50	14.61	11.89	58.94	24.57	14.17	11.50

JAYPEE CHURK INDUSTRIAL COMPLEX

(A Unit of Jaiprakash Associate Limited)

AMBIENT AIR QUALITY MONITORING REPORT

Period : April 2020 - March 2021

Month	Particulars	Location- Near Rear Gate				Location- Near Dispatch Gate			
		PM10 ($\mu g/m^3$)	PM2.5 ($\mu g/m^3$)	SO_2 ($\mu g/m^3$)	NO_X ($\mu g/m^3$)	PM10 ($\mu g/m^3$)	PM2.5 ($\mu g/m^3$)	SO_2 ($\mu g/m^3$)	NO_X ($\mu g/m^3$)
Apr-20	Monthly Average	Shutdown due to COVID-19							
May-20		61.58	16.34	13.03	14.09	63.94	18.43	12.62	13.68
Jun-20		61.27	24.61	14.07	13.12	63.64	26.70	13.66	12.71
Jul-20		60.95	24.98	14.65	13.09	63.31	27.07	14.24	12.69
Aug-20		60.39	25.78	15.63	12.95	62.75	27.87	15.22	12.54
Sep-20		59.69	25.85	15.63	12.87	62.05	27.94	15.22	12.46
Oct-20		60.23	25.85	15.63	12.88	62.59	27.94	15.22	12.47
Nov-20		59.69	26.06	15.61	12.87	62.68	27.08	15.27	12.34
Dec-20		59.92	26.85	16.36	12.72	62.29	28.94	15.95	12.31
Jan-21		59.67	27.55	16.89	12.60	62.03	29.64	16.48	12.20
Feb-21		59.82	27.56	17.25	12.57	62.18	29.65	16.84	12.16
Mar-21		59.92	27.71	17.04	12.61	62.28	29.80	16.63	12.21
Min		59.67	16.34	13.03	12.57	62.03	18.43	12.62	12.16
Max		61.58	27.71	17.25	14.09	63.94	29.80	16.84	13.68
Average		60.28	25.38	15.62	12.94	62.71	27.37	15.22	12.53