

**ENVIRONMENT CLEARANCE COMPLIANCE STATUS
REPORT OF CEMENT PLANT & POWER PLANT
PERIOD: OCTOBER -2023 TO MARCH-2024.**



**JSW Cement Limited, Salboni
(Village- Salboni, P.O. Saiyedpur, Dist- Paschim Medinipur)
West Bengal -721147.**

Compliance Report

Name of Project	:	Environmental Clearance for the cement grinding unit 3.6MTPA and 2x18 MW CPP at Village- Salboni, Dist. –Paschim Medinipur, West Bengal by M/s. JSW Cement Limited.
Clearance letter No.	:	2015/EN/T-II-I/002/2017
Period of Compliance Report	:	October -2023 to March-2024

Compliance report of conditions stipulated in the Environment clearance

ENVIRONMENT CLEARANCE NO: 2015/EN/T-II-I/002/2017 Dated:07.09.2017

Present Status of the project: Expansion of Cement Plant from 2.4 to 3.6 MTPA and 1*18 MW CPP have completed. The manufacture process involves only grinding of cement clinker with fly ash/slag and gypsum. Clinker is being procured from integrated units.

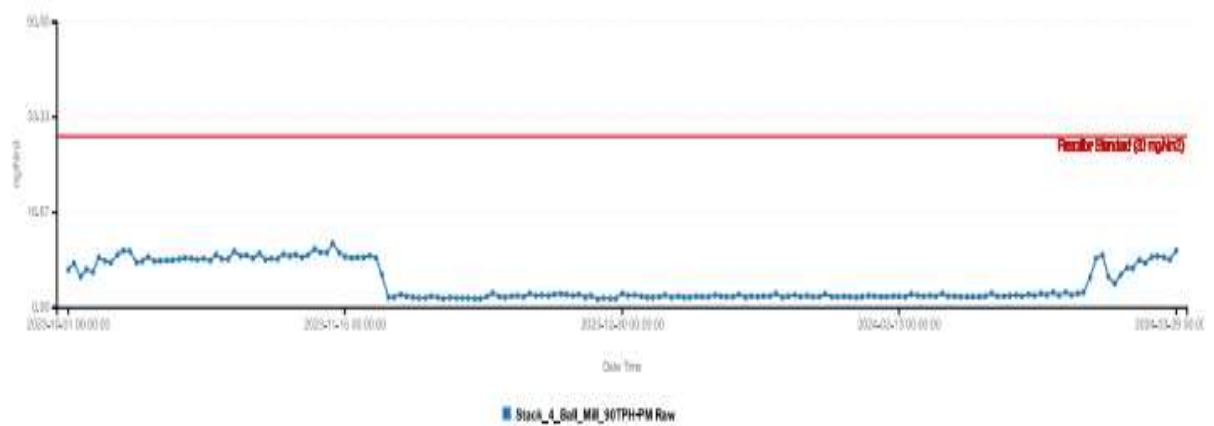
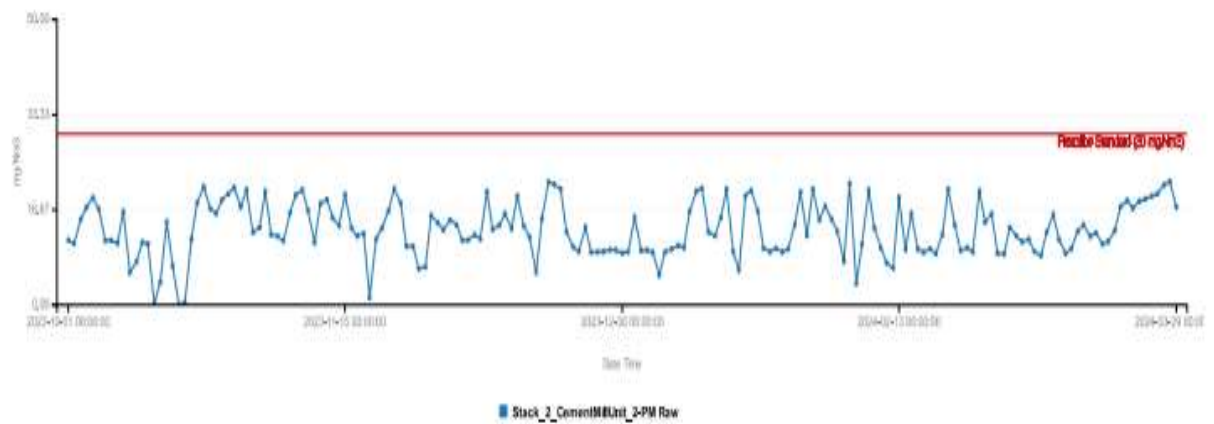
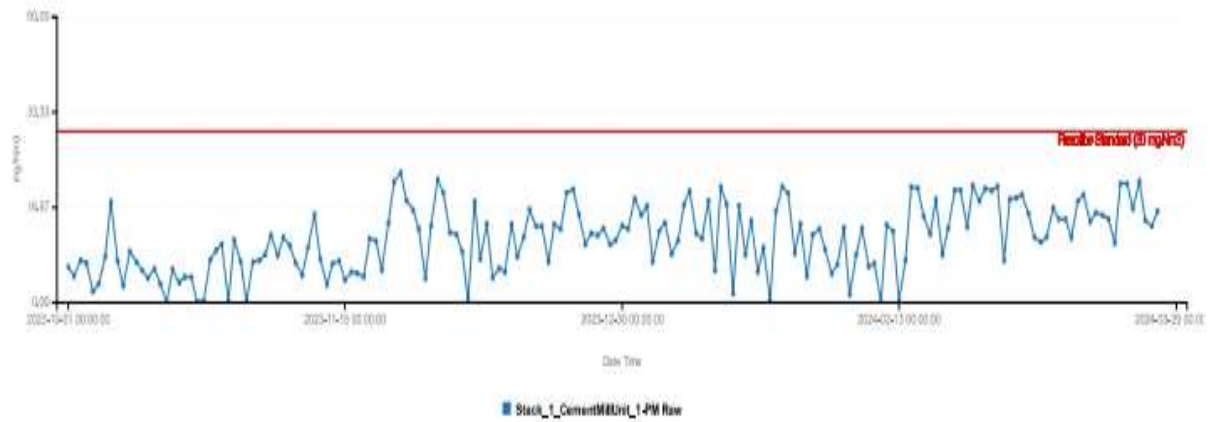
A. Specific Conditions

Sl. No.	CONDITIONS	COMPLIANCE STATUS
i.	The gaseous emissions from various units should conform to the load/ mass based standards prescribed by the Ministry of Environment & Forests and the State Pollution Control Board from time to time. At no time the emission level should go beyond the prescribed standards.	<p>Complied</p> <p>Emissions from all the stacks are within the given permissible limits.</p> <p>The gaseous emission from all the units conform to the load/mass based standards prescribed by the MoEF & CC.</p> <p>Continuous emission monitoring system (CEMS) is installed in Cement Mill-I, II & CPP.</p> <p>The above mentioned units were attached with CEMS system and continuously data of emission level transferred to the CPCB server. (Photograph No.-1, is Showing the CEMS graphs).</p> <p>Appropriate mitigation measures were taken to keep the emission level within the prescribed standard.</p>

Custom Report

SiteName: M/s JSW Cement Limited- Salboni

Created by: JSWK, Created On: 31/05/2024



JSW Cement Limited

VILLAGE: SALBONI, P.O- SAYEDPUR, P.S- SALBONI, DIST.-PASCHIM MEDINIPUR,
PIN-721147., SALBONI, PASCHIM MEDINIPUR. WEST BENGAL - 721147

Station Report

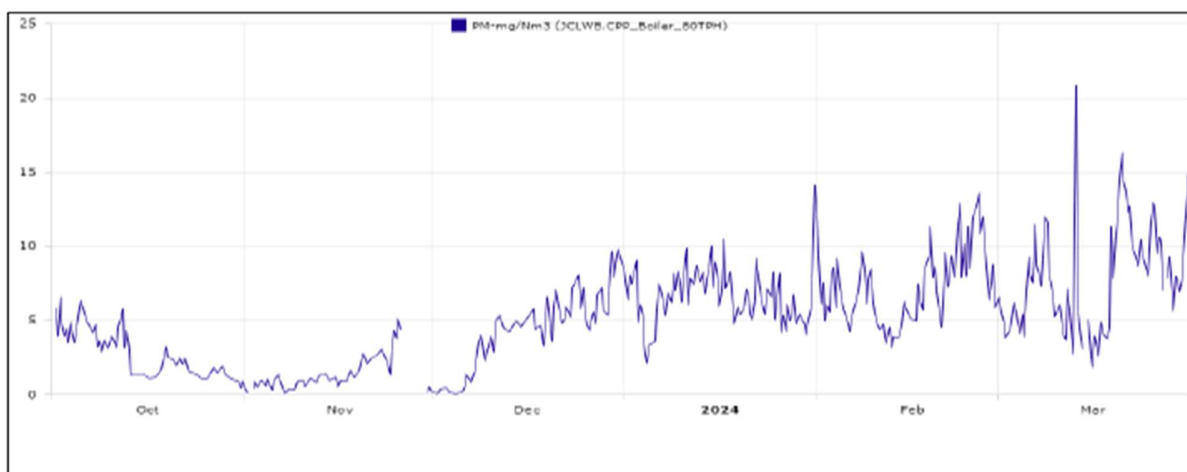
Station: CPP_Boiler_80TPH

From : 01-10-2023 00:00:00

To : 31-03-2024 23:55:00

Interval : 8 Hours

Function : Average



(Photograph-1, Graphs of online continuous emission monitoring systems for the stipulated period)

ii

Cement grinding shall be carried out in closed cement mill. Provision of dust extraction and pollution control systems along with minimum stack height of 50 M from G.L. should be provided for control of emission from slag mill and hot gas generator. Highly Efficient Cyclone Separators, Pulse Jet Bag Filters & ID fans should be provided for Raw Material Handling Section, Ball Mill, Silo, Packing Section. Stack emission shall be monitored at regular intervals and records maintained. The stack emission should not exceed 30 mg/Nm³. For CPP boiler ESP of adequate design and capacity and along with minimum stack height of 30 m from G.L. should be provided. The stack emission should not exceed 30 mg/nm³.

Cement/ slag grinding is being done in closed circuit Roller Press mills.

Each grinding unit have connected with pollution control devices and all the PCD connected with the stack which have the height more than 50 meter from G.L.

Pulse Jet Bag Filters were installed at material transfer points in Raw Material handling section, Ball Mill, Silo, Packing sections.

Stack monitoring is being done regularly by NABL accredited laboratory and records of the results being maintained.

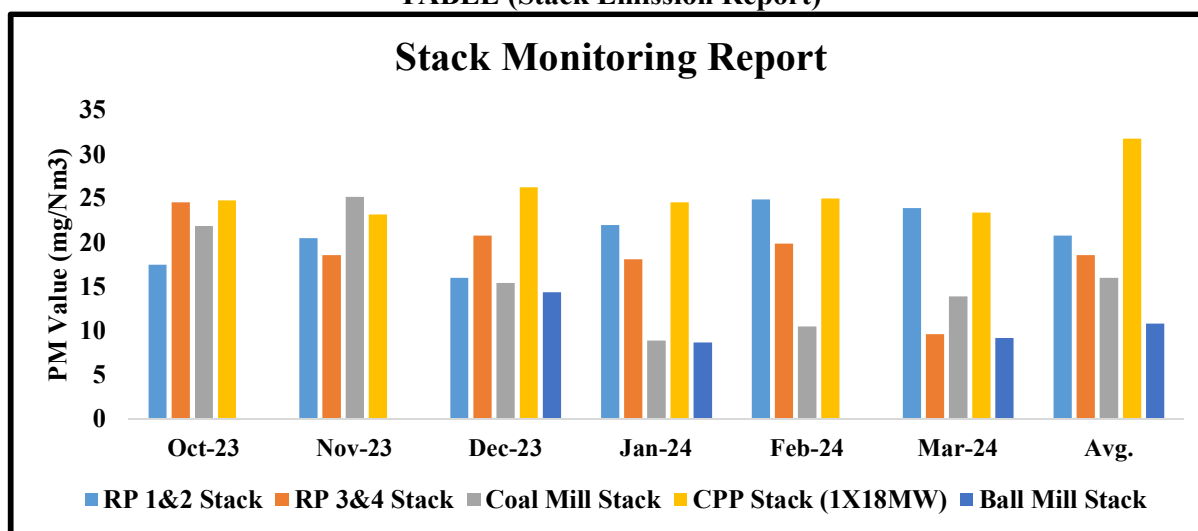
Bag House attached with the grinding unit and high efficiency ESP was installed in CPP having adequate stack Height. **(Photographs No. 2 & 3).**

Stack emission is within prescribed limit; results are attached as **(Table-1 & Graph-1).**

Stack Emission Monitoring Report (Oct -2023 to March-2024)

Stack	Parameters	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	March-24	Avg.
RP 1&2 Stack	Particulate Matter – mg/Nm ³	17.5	20.5	16.0	22.0	24.9	23.9	20.8
RP 3&4 Stack	Particulate Matter – mg/Nm ³	24.6	18.6	20.8	18.1	19.9	9.6	18.6
Coal Mill Stack	Particulate Matter – mg/Nm ³	21.9	25.2	15.4	8.9	10.5	13.9	16.0
CPP Stack (1X18MW)	Particulate Matter – mg/Nm ³	24.8	23.2	26.3	24.6	25.0	23.4	31.8
Ball Mill Stack	Particulate Matter – mg/Nm ³	<5.0	Not Running	14.4	8.7	Not Running	9.2	10.8

TABLE (Stack Emission Report)



GRAPH (Stack Emission Report)



BAG HOUSE ATTACHED TO GRINDING UNIT : (Photograph-2)



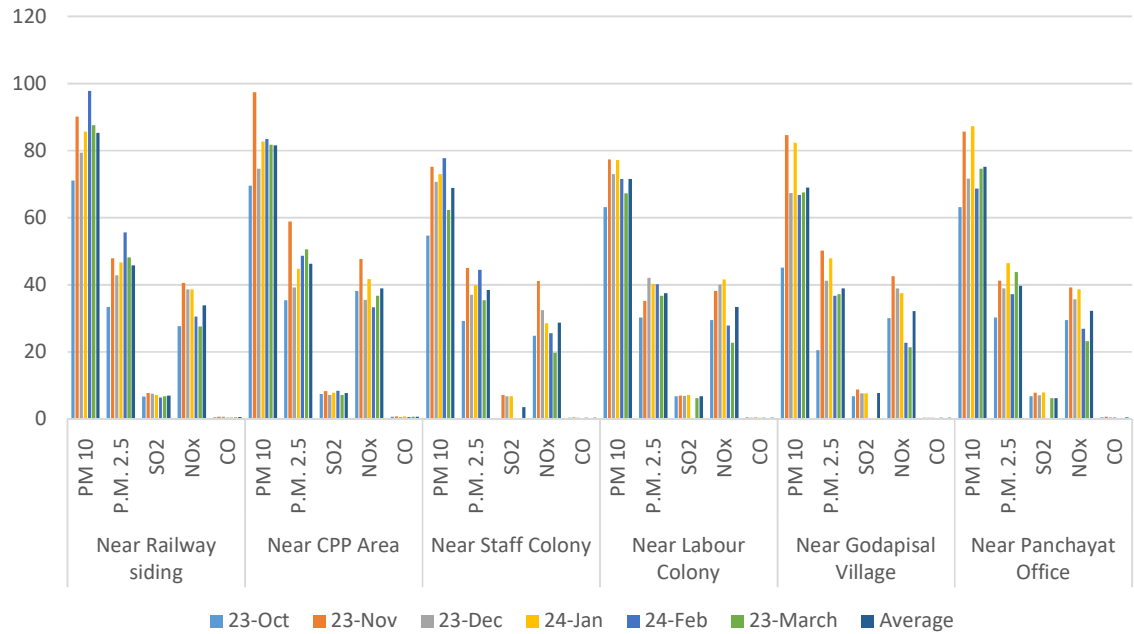
ESP ATTACHED TO CPP (Photograph-3)

iii	<p>Regular monitoring of the ambient air quality shall be carried out in and around the plant and records shall be maintained. All care to be taken to maintain the ambient air quality standards as per GSR 826 (E) dated 16.11. 2009. At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of PM10, PM2.5, SO2 and NO2 are anticipated in consultation with the SPCB. Data on ambient air quality and stack Emission shall be regularly submitted to the SEIAA and the SPCB once in six months.</p>	<p>Regular monitoring of the ambient air quality is being carried out every month in six locations in and around the plant by NABL accredited laboratory and records are being maintained. Ambient air quality results are within prescribed limit; results are attached as (Table-2 & Graph-2)</p> <p>Good housekeeping and water sprinkling done on the regular basis to comply the notification GSR 826(E) published on dated November 16, 2009.</p> <p>We have established six number of air quality monitoring station in and outside the plant in consultation with SPCB.</p> <p>We have also installed one continuous ambient air quality monitoring station in consultation with SPCB.</p> <p>Monitoring reports of stack and ambient air quality are being submitted to SEIAA and SPCB every month.</p>
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Ambient Air Quality Monitoring Report (Oct -2023 to March-2024)								
Location	Parameters	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	March-24	Average
Near Railway siding	PM 10 in $\mu\text{g}/\text{m}^3$	71.1	90.1	79.4	85.7	97.8	87.5	85.3
	P.M. 2.5 in $\mu\text{g}/\text{m}^3$	33.4	47.9	42.9	46.6	55.6	48.2	45.8
	SO2 in $\mu\text{g}/\text{m}^3$	6.6	7.7	7.5	7.2	6.4	6.8	7.0
	NOx in $\mu\text{g}/\text{m}^3$	27.6	40.5	38.7	38.7	30.5	27.5	33.9
	CO in mg/m^3	0.48	0.58	0.59	0.48	0.37	0.48	0.50
Near CPP Area	PM 10 in $\mu\text{g}/\text{m}^3$	69.5	97.4	74.6	82.7	83.5	81.8	81.6
	P.M. 2.5 in $\mu\text{g}/\text{m}^3$	35.4	58.8	39.2	44.8	48.7	50.6	46.3
	SO2 in $\mu\text{g}/\text{m}^3$	7.4	8.3	7.2	7.8	8.4	7.2	7.7
	NOx in $\mu\text{g}/\text{m}^3$	38.1	47.7	35.5	41.7	33.3	36.8	38.9
	CO in mg/m^3	0.59	0.83	0.53	0.67	0.54	0.63	0.63
Near Staff Colony	PM 10 in $\mu\text{g}/\text{m}^3$	54.6	75.2	70.7	73.0	77.8	62.3	68.93
	P.M. 2.5 in $\mu\text{g}/\text{m}^3$	29.2	45.0	37.0	39.9	44.5	35.4	38.50
	SO2 in $\mu\text{g}/\text{m}^3$	<6.0	7.2	6.8	6.8	BDL(DL:6.0)	BDL(DL:6.0)	3.47
	NOx in $\mu\text{g}/\text{m}^3$	24.8	41.1	32.5	28.5	25.6	19.7	28.70

		CO in mg/m3	0.35	0.45	0.37	0.27	0.38	0.21	0.34
	Near Labor Colony	PM 10 in µg/m3	63.10	77.4	73.0	77.2	71.6	67.3	71.6
		P.M. 2.5 in µg/m3	30.2	35.2	42.10	40.3	40.2	36.8	37.47
		SO2 in µg/m3	6.7	7.0	6.9	7.2	BDL(DL:6.0)	6.2	6.80
		NOx in µg/m3	29.5	38.2	40.10	41.6	27.9	22.7	33.33
		CO in mg/m3	0.42	0.38	0.41	0.35	0.32	0.24	0.35
	Near Godapisal Village	PM 10 in µg/m3	45.1	84.7	67.4	82.3	66.8	67.5	68.97
		P.M. 2.5 in µg/m3	20.5	50.2	41.2	47.9	36.7	37.2	38.95
		SO2 in µg/m3	6.8	8.8	7.6	7.6	BDL(DL:6.0)	BDL(DL:6.0)	7.7
		NOx in µg/m3	30.0	42.5	38.9	37.5	22.7	21.3	32.15
		CO in mg/m3	0.37	0.35	0.39	0.29	0.34	0.24	0.33
	Near Panchayat Office	PM 10 in µg/m3	63.1	85.7	71.7	87.3	68.7	74.6	75.18
		P.M. 2.5 in µg/m3	30.2	41.3	38.9	46.5	37.2	43.8	39.65
		SO2 in µg/m3	6.7	7.8	7.1	7.9	BDL(DL:6.0)	6.2	7.14
		NOx in µg/m3	29.5	39.2	35.7	38.7	26.9	23.2	32.20
		CO in mg/m3	0.42	0.58	0.44	0.57	0.28	0.26	0.43
TABLE-2									

AMBIENT AIR QUALITY REPORT (Oct-23 to March'2024)



GRAPH-2





IV

The unit shall install CAAQMS for the project.

The unit has installed one CAAQMS.
(Photograph no : 04)



**AMBIENT AIR QUALITY MONITORING STATION
(Photograph- 04)**

V	<p>Finished cement should be collected in silo and packaging should be done through pneumatically controlled system. Suction system should be installed at packaging section to minimize fugitive emission.</p>	<p>The unit has constructed dedicated Silo for collecting intermediate & finished products (Photograph no.-05 attached below) and packaging is done through pneumatically controlled system. Suction system have installed at packing plant to minimize fugitive emission (Photograph no-06).</p>
	 <p>GPS Map Camera Jamdedya, West Bengal, India H8G6+G4W, Jamdedya, West Bengal 721129, India Lat 22.576624° Long 87.310853° 28/05/24 12:03 PM GMT +05:30</p> <p>Photograph-05</p>	 <p>GPS Paschim Medinipur, West Bengal, India Unnamed Road, West Bengal 721129, India Lat 22.577025° Long 87.312429° 20/11/23 12:34 PM GMT +05:30</p> <p>Photograph-06</p>
VI	<p>All vibrating screens, storage bins will be adequately covered. Covered storage yards shall be provided for raw materials. Closed unloading of raw materials and closed conveyor belt for transportation with bag filter at transfer points should be provided. Suction head should be provided at all transfer points.</p>	<p>The unit has covered all the vibrating screens and storage bins (Photographs No. 7 & 8).</p> <p>All the raw materials store under the covered shed. (Photographs no.-9 & 10).</p> <p>The unit has automated closed wagon tippler for unloading the raw materials, suction hood also provided at unloading point to control the fugitive emission. (Photograph no. -11 &12).</p> <p>Closed conveyor belt is used to transport the material from yard to grinding unit. (Photographs no. -13).</p> <p>Bag filter with suction hoods provided at all the transfer points.(Photographs no.-14).</p>
	 <p>GPS Map Camera Jamdedya, West Bengal, India H8G6+G4W, Jamdedya, West Bengal 721129, India Lat 22.576996° Long 87.311132° 28/05/24 04:48 PM GMT +05:30</p> <p>Photograph-7 VIBRATING SCREENS</p>	 <p>GPS Map Camera Jamdedya, West Bengal, India H8G6+G4W, Jamdedya, West Bengal 721129, India Lat 22.575436° Long 87.311151° 28/05/24 04:47 PM GMT +05:30</p> <p>Photograph-8 STORAGE BINS</p>



(Photograph-9) COAL SHED



(Photograph-10) GYPSUM SHED



(Photograph-11& 12) WAGON TIPPLER



(Photograph-13) Enclosed Belt conveying System



(Photograph-14) Covered material transfer points with suction hoods

VII	<p>Adequate dust suppression and extraction system should be provided in material storage areas, material unloading and transfer points for controlling fugitive emission. Fugitive dust emissions from ball mill and storage area shall be collected in bag filters and recycled back to the process. Water sprinkling arrangement shall be made in the raw material stock yard and other high dust potential areas.</p>	<p>Adequate dust suppression and extraction systems have been provided in the material storage yard, loading and unloading and also at the transfer points to controlling the fugitive emissions (Photographs no.-15). Dust collected in bag filters of ball mill automatically recycled back to the process. Water sprinkling arrangement were made in the raw material stock yard to control fugitive dust emissions.</p>
	 <p style="text-align: center;">(Photograph-15) Covered RM storage & extraction facilities</p>	
VIII	<p>Water required for proposed expansion shall be met from ground water supply as proposed. Groundwater shall be abstracted as per permission of the competent authority as per The West Bengal Ground Water Resources (Management, Control and Regulation) Act, 2005.</p>	<p>Water requirement is met from ground water extraction. We have taken the permission for ground water withdrawal from State Water Investigation Department. NOC for GW withdrawal are as follows: vide permit No. P1428445003490000001TSE, P1428445003490000002TSE, P1428445003490000003TSE dated 16.10.2015 and P1428446000040000001TSE, P1428445003490000001TSE, P1428456001940000001TSE, dated 03.11.2017 respectively.</p> <p style="text-align: center;">(Photographs no-16)</p>

FORM 4
[See Rules 9(3) and 10(5)]
(EMBLEM OR HOLOGRAM OF THE CONCERNED AUTHORITY)
PERMIT FOR SINKING OF NEW WELL
[U/S 7(3)(b) / 7(4)(b) / 7(5)(a) of the West Bengal Ground Water Resources
(Management, Control and Regulation) Act 2005.]

007572

(4030)

PERMIT NO. P1428445003490000002TSE

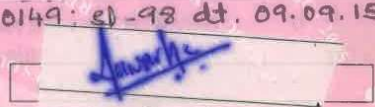
- (a) Name of the applicant (user) : Shri/Smt. M/s TSW Cement Ltd.

(b) Son/Daughter of : N.A.

(c) Address of the applicant : TSW Cement Ltd; Ankur Complex; Vill

(d) Category of farmer (Please tick) : Tarnedia, Salloni
Small Farmer/Marginal Farmer/Other

(e) Serial No. of application Form and date of submission : BP/0 0149: 01-98 dt. 09.09.15

(f) Specimen signature of the user : 
- Location particulars—

(a) District : West Midnapore

(b) Block, Mouza, J. L. No., Plot No. : Salloni; Tarnedia; 445, 349

(c) Municipality/Corporation : N.A.

Ward No./Borough No., Holding No.
- Particulars of the proposed well and pumping device—

(a) Type of the well : T.W.

(b) Approx. depth of the well (m) : 150m

(c) Purpose of the well : Industrial (Cement Factory)

(d) Assembly size (for tube well) : 200 mm X 150 mm.

(e) Approx. strainer length (for tube well) : 30 m.

(f) Diameter (for dug well) : - m.

(g) Type of pump to be used : Submersible

(h) H. P. of the pump : Electric Motor

(i) Operational device : 7.5 H.P.

(j) Rate of withdrawal (m³/hr.) : 30m³/hr for 6hrs/day

(k) Maximum allowable running hours per day

This permit authorizes the owner applicant (user) to sink a well in the location specified at Sl. (2) for extraction of ground water at a rate not exceeding that as shown at Sl. (3)(j) and for running hours / day as shown at Sl. (3) (k), and is valid subject to the observance of the conditions stated overleaf.

Place : W. Midnapore

Date : 16.10.2015

Conditions :

- (1) In case of any change of ownership of the proposed well, fresh registration has to be obtained.
- (2) No change of location, design, rate of withdrawal and pumping device in respect of the proposed well as indicated at Sl. (2) and of this permit shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this permit.
- (3) In case, any of the particulars / information furnished by the applicant in his application for issuance of this permit is found to be incorrect during verification at any subsequent stage, this permit is liable for cancellation.
- (4) Any other condition imposed by the concerned Authority.


SPL/000/09-10/1,00,000 P.T.O.

Office of the Geologist
Geological Sub-Div. No. I/A, S.W.I.D.,
OFFICE
Member Secretary, D.L.A.
Paschim Medinipur

Chinnori Roy
Signature of the Issuing Authority
and Designation.
Geologist
Geological Sub-Div. No. -I/A, S.W.I.D.
&
Member Secretary, D.L.A.
Paschim Medinipur

Office of the Geologist
Geological Sub-Div. No. -I/A, S.W.I.D.,
OFFICE
Member Secretary, D.L.A.
Paschim Medinipur

(Photograph-16) One of the NOC copy obtained from SWID for GW withdrawal

IX	<p>Process effluent discharge is not permitted. No liquid effluent shall be generated by adoption of dry grinding process.</p>	<p>The Cement Grinding is based on dry grinding process technology and as such there are no discharge of process effluent. Two STPs of 60 & 100 KLD have been installed for treatment of domestic waste water, the treated water used for greenbelt/plantation and dust suppression purpose. (Photograph No. 17 & 18).</p> <p>CPP- Waste water from CPP is neutralized in a neutralization pit and then treated water is used for dust suppression.</p>
	<div data-bbox="305 787 1437 1927">  <p>GPS Map Camera</p> <p>Ashna Shuli, West Bengal, India H8G4+VFJ, Ashna Shuli, West Bengal 721129, India Lat 22.576881° Long 87.306842° 28/05/24 11:49 AM GMT +05:30</p> <p>(Photograph-17) STP – II : 60 KLD</p> </div>	



Photograph-18 STP – II : 100 KLD

X

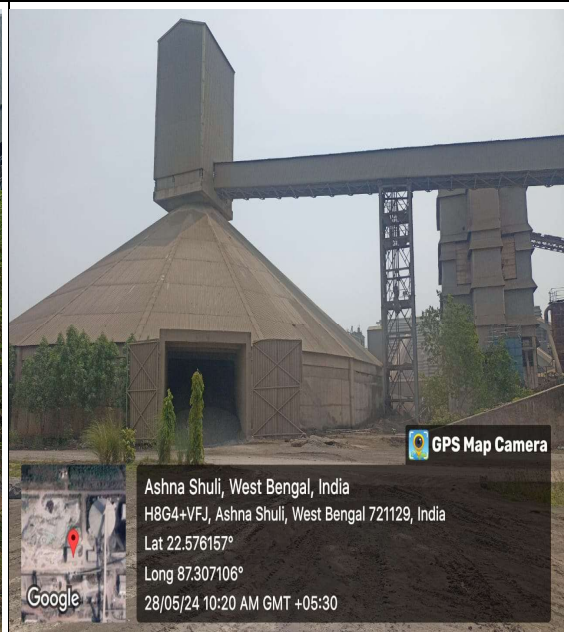
Clinker manufacturing/heating is not permitted under this Environment Clearance. Clinker and Fly Ash shall be stored in the closed silos and Gypsum and slag in covered shed.

Clinker is not manufactured in our plant. Fly ash and Clinker is stored in closed silo **(Photograph No. 19 & 20)**.

Gypsum is stored under covered shed **(Photograph No.-21)**



(Photograph-19)



(Photograph- 20)



(Photograph No. 21) GYPSUM SHED

XI

All the bag filter dust, raw material dust, coal dust, clinker dust and cement dust from pollution control devices should be recycled and reused in the process used for cement manufacturing. Spent oil and batteries should be sold to authorized recyclers/re-processors only. Hazardous waste generated to be disposed of as per provisions of Hazardous Wastes (Management and Transboundary Movement) Rules, 2016.

The dust collected in air pollution control devices/bag filters and raw material dust is being reused in the cement manufacturing process.

Fly Ash generated from ESP is used in the cement manufacturing process.

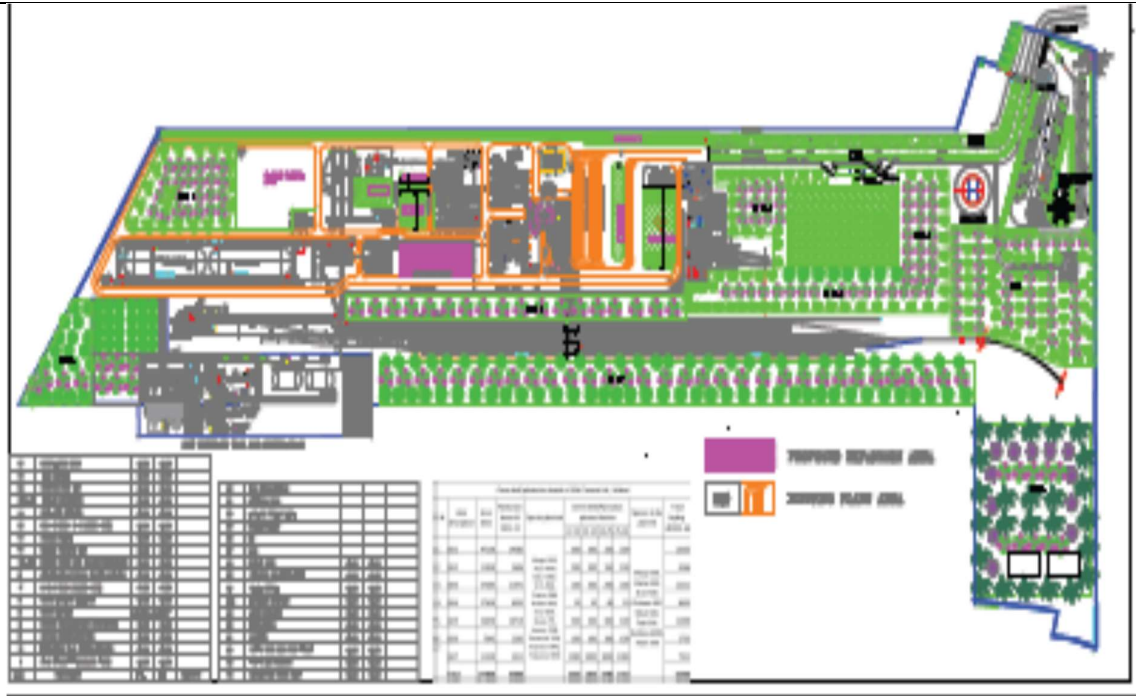
The hazardous waste generated from site is stored under the covered shed and same sold to Authorized recycler/co-processor.

(Photograph No.-22 : HW storage area)

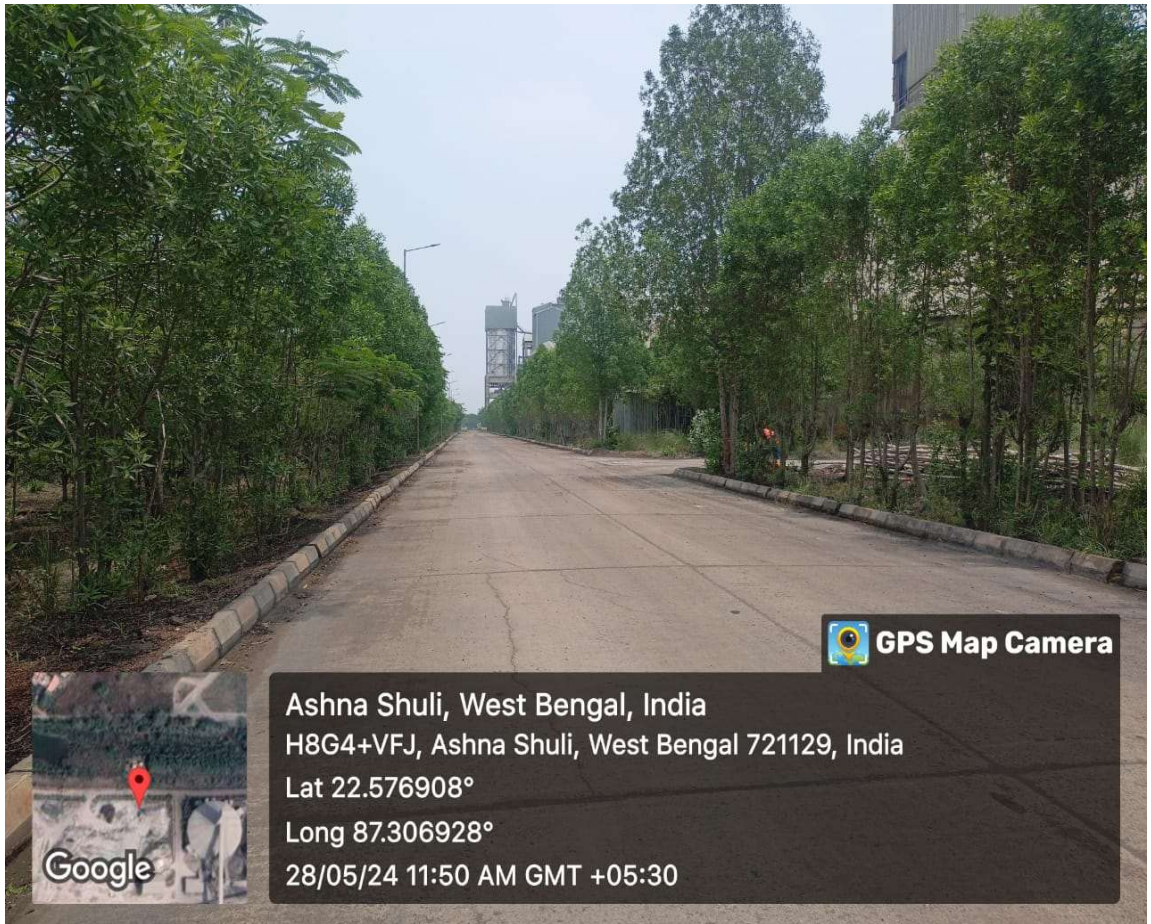


(Photograph-22) Covered HW storage

XII	<p>Adequate provisions should be made for harvesting rainwater. The harvested water should be used for plantation, firefighting, washing and cleaning etc. Recharging of Groundwater is not permitted.</p>	<p>Rainwater harvesting pit is under construction it will be constructed till the end of this FY.</p> <p>The harvested rainwater will be utilized for plantation, firefighting, washing and cleaning purpose only.</p> <p>The ground water is not recharged within the plant premises.</p>
XIII	<p>Greenbelt shall be developed within the plant premises. At least 33% of the area should be kept for greenbelt development. At least 12500 (as stated in previous environmental clearance vide no. 89/EN/T-II-I/037/2015 dated 14.1.2016) to be planted and maintained in the greenbelt area of 44 acres. There should not be any removal/destruction of vegetative cover both at the establishment as well as the operational stage, without the sanction of appropriate authority.</p>	<p>Greenbelt is being developed and as prescribed, more than 33% of the area has been covered with greenbelt/plantation.</p> <p>No vegetative cover was destroyed/ removed during the establishment and operation phases.</p> <p>44 Acres of Land has been developed as Greenbelt/plantation of recommended species (Photographs attached below). As per terms given for plantation in Environment Clearance vide no.89/EN/T-II-I/037/2015 dated 14.01.2016 we have planted 57435 plants against target given of 12500 (Table no. 3 & Photographs No. 23 & 24).</p>



Photograph -23



Photograph-24

PLANTATION DETAILS				
Sl. No.	BOTANICAL NAME	COMMON NAME	QUANTITY PROPOSED	PLANTED
1	Anthocephalus cadamba	Kadam	500	5521
2	Peltophorum pterocarpum	Radhachura	2000	11167
3	Polyalthia longifolia	Debdaru	750	147
4	Madhuca longifolia	Mahua	350	0
5	Schleichera olosa	Kusum	2000	0
6	Alstonia scholaris	Chhatim	2000	3405
7	Mimusops elengi	Bakul	500	2452
8	Terminalia arjuna	Arjun	250	4370
9	Delonix regia	Gulmohor	500	11220
10	Bombax ceiba	Simul	1000	0
11	Acacia auriculiformis	Akashmoni	25	7650
12	Ficus benghalensis	Banyan	1000	0
13	Dalbergia sissoo	Sisoo	250	4802
14	Ficus benamina	Fig Tree	250	0
15	Tectona grandis	Teak	125	4955
16	Ficus religiosa	Ashathwa	500	0
17	Cassia fistula	Amaltas	500	0
18	Mangifera indica	Mango		257
19	guavaa			70
20	Palm tree foxtail			100
21	arica palm			50
22	Black seris			420
23	Jhau			55
24	Royal plam			150
25	karabi tree			100
26	kul			40
27	Jackfruit trees			40
28	Jamrul fruit tree			74
29	Bell tree			70
30	Coconut plant			10
31	Conocarpus tree			192
32	Bougainvillea			100
33	Calliandra			18
		Total	12500	57435

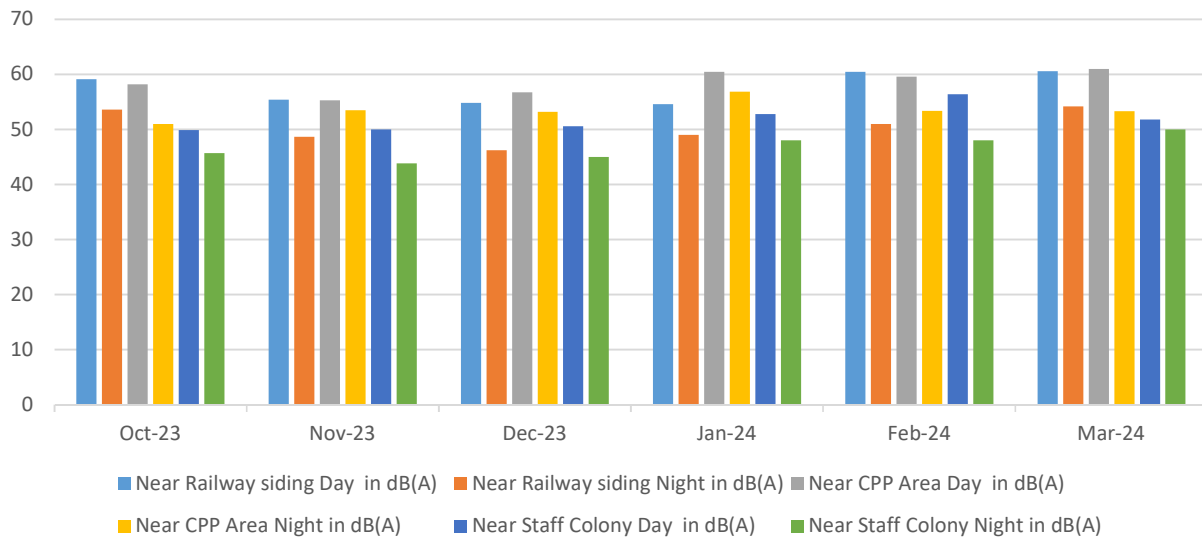
Table-3

XIV	<p>The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (night time).</p>	<p>The overall noise levels in and around the plant area is maintained within the prescribed limit by adopting various noise control measures such as acoustic hoods, silencers, enclosures etc. on the noise generating equipment.</p> <p>The ambient noise levels conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (night-time).</p> <p>Noise monitoring is being done by the NABL Accredited laboratory on regular basis.</p> <p>(Comparative Table-4 and Graph-3 of noise level at different location is attached below).</p>
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Table-4

Location→	Near Railway siding		Near CPP Area		Near Staff Colony	
Months↓	Day in dB(A)	Night in dB(A)	Day in dB(A)	Night in dB(A)	Day in dB(A)	Night in dB(A)
Oct-23	59.1	53.6	58.2	51.0	49.9	45.7
Nov -23	55.4	48.7	55.3	53.5	50.0	43.8
Dec -23	54.8	46.2	56.7	53.2	50.6	45.0
Jan -24	54.6	49.0	60.5	56.9	52.8	48.0
Feb -24	60.5	51.0	59.6	53.4	56.4	48.0
March -24	60.6	54.2	61.0	53.3	51.8	50.0
Location→	Near Labour Colony		Near Godapisal Village		Near Panchayat Office	
Months↓	Day in dB(A)	Night in dB(A)	Day in dB(A)	Night in dB(A)	Day in dB(A)	Night in dB(A)
Oct -23	53.4	56.6	52.3	46.2	51.4	45.0
Nov-23	49.7	43.2	53.5	50.0	53.3	48.0
Dec -23	53.2	48.3	51.8	44.6	52.9	48.3
Jan -24	53.7	49.0	52.9	46.9	53.2	48.0
Feb -24	59.0	47.3	53.8	47.0	57.5	47.8
March -24	53.3	50.4	51.9	50.5	52.3	47.4

Noise Monitoring Report



Graph - 4

XV

Asphalting/concreting of roads and water spray all around the stockyard and loading/unloading areas in the cement plant shall be carried out to control fugitive emissions. Regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of PM₁₀ and PM_{2.5} such as haul road, loading and unloading points, transfer points and other vulnerable areas. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.

All the roads inside the plant made of bituminous/ concrete.

Mechanized road sweeping machine and water spray on the roads is carried out on regular basis by the movable water tanker to control the fugitive emission. **(Photographs- 25 & 26).**

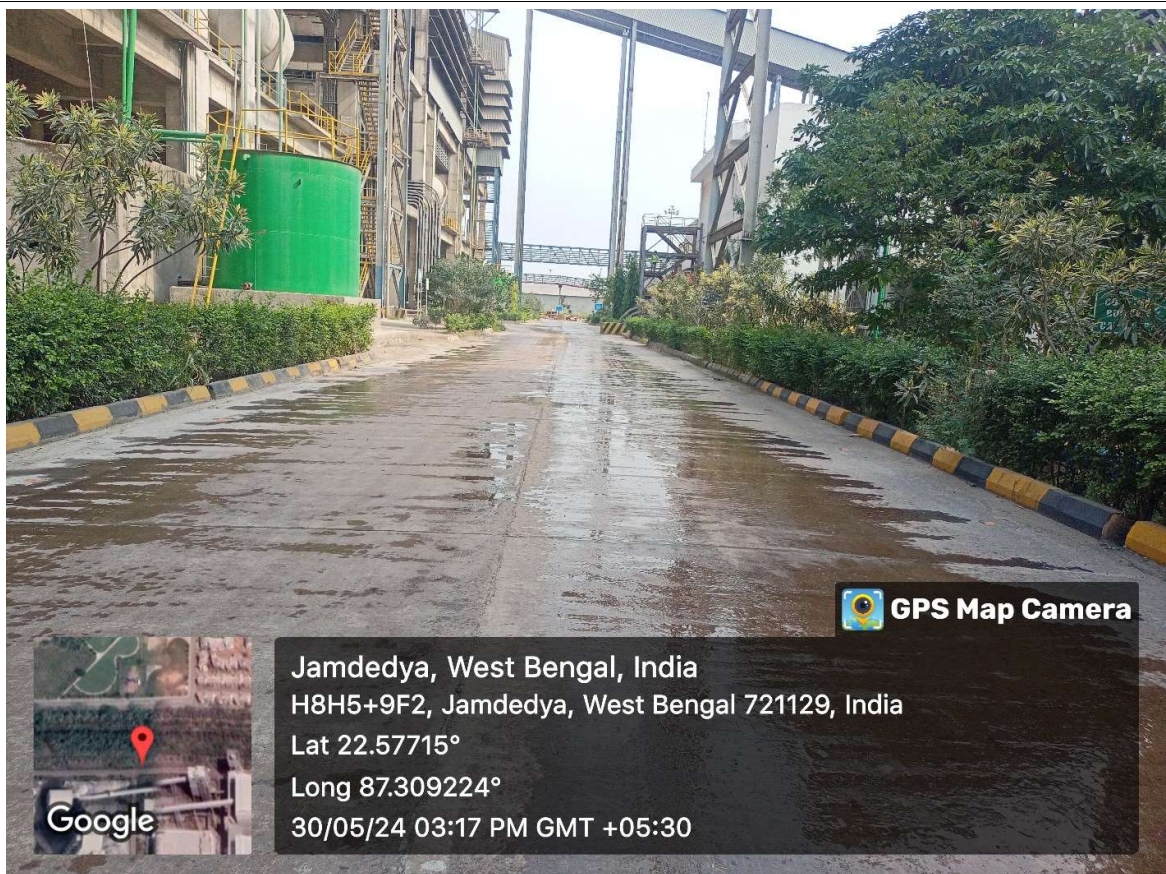
Good housekeeping is maintained within the premises.

Regular water sprinkling is done in critical areas prone to air pollution to maintain the ambient air quality parameters within the norms prescribed by CPCB.

Ambient Air quality monitoring is done on regularly basis by an NABL Accredited laboratory.



Photograph-25

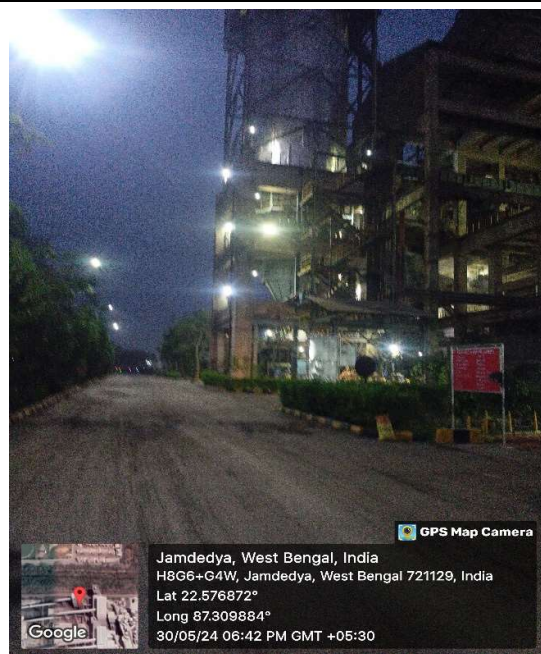


Photograph-26

XVI	<p>Proper lighting and proper pathway inside the factory premises should be constructed to ensure safe vehicular movement. Provision of separate pathway for entry and exit of vehicles should be considered. Vehicles should conform to Pollution under Control (PUC) norms. Proper housekeeping shall be maintained within the premises.</p>	<p>Proper lighting and proper pathway inside the factory premises are being provided (Photographs-27 & 28). Separate pathways provided for entry and exit of vehicles. Only those vehicles allowed inside the plant which have the valid PUC Certificate. Good housekeeping is maintained within the premises</p>
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Photograph-27







Photograph-28

XVII	<p>Health and safety of workers should be ensured. Workers should be provided with adequate personnel protective equipment and sanitation facilities. Occupational Health Surveillance of the workers shall be done on a regular basis and records maintained as the Factories Act.</p>	<p>Health and safety of workers is ensured. Required PPEs and sanitation facilities provided to the workers at site. All necessary safety trainings are also provided to the workers. (Photograph no.-29 & 30). Occupational Health Surveillance done on regular basis and records being maintain as per requirements of the Factories Act. In last financial year 100 percent JSW staffs have done periodic health checkup whereas associates workers have done 100% periodic health checkup (Table-5).</p>
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Sl. No.	Type of Employee	Percentage of staff/ Associates undergone periodic health check-up.
1	JSW Staffs	100%
2	Associate Employees	100%

Table-5

	 <p style="text-align: center;">Photograph-29</p>	 <p style="text-align: center;">Photograph-30</p>
XVIII	<p>Adequate measures to be adopted to ensure industrial safety. Proper fire detection and protection systems to be provided to control fire and explosion hazards.</p>	<p>Adequate measures are being taken to ensure industrial safety.</p> <p>Fire detection and protection devices are installed in different locations to control fire and explosion hazards (Photographs no.- 31 & 32)</p> <p>A fire fighting vehicle is also available 24*7 within the premises.</p>
	 <p style="text-align: center;">Photograph-31</p>	 <p style="text-align: center;">Photograph-32</p>
XIX	<p>All the recommendations mentioned in the Corporate Responsibility for Environmental Protection (CREP) guidelines for Cement Plants shall be followed and complied.</p>	<p>All the applicable recommendations of CREP guidelines for cement plant is being followed and complied.</p>
XX	<p>The implementation and monitoring of Environment Management Plan should be carried out, as proposed.</p>	<p>Environment Management Plan, has been implemented as proposed in the EIA report, and the monitoring of EMP is carried out at regular interval.</p>

XXI	At least 2.5% of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on local need and action plan with financial and physical break-up shall be prepared and submitted. Implementation of such program shall be ensured accordingly in a time bound manner.	An amount of Rs. 10.00 Crore earmarked for Enterprise Social Commitment (ESC) based on local needs. The amount expenditure on yearly basis. The amount spent towards the Enterprise Social Commitment (ESC) in the reporting period is given in the Table-6 .
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	Expenditure Towards Enterprise Social Commitment (ESC) from October'2023 to March'2024.			Expenditure (In Lakhs)
	Category	Sl. No.	Activity	
	Category 1			50.23
	Improving Living Conditions	1.1	Promoting Health Care	37.82
		1.2	Safe Drinking water	0.00
		1.3	Agri Business	12.41
	Category 2			22.66
	Promoting Social Development	2.1	Formal educational institution infrastructure & Development	22.66
		2.2	Vocational educational institution infrastructure & Development	0.00
	Category 3			31.86
	Addressing Social Inequalities	3.1	Livelihoods	31.86
	Category 4			0.00
	Addressing Environmental Issues	4.1	Tree Plantation	
		4.2	Promoting use of Renewable energy	
	Category 5			8.38
	Rural Development Projects	5.1	Rural Roads and Drainages	
		5.2	Infrastructure facilities in Rural area	8.38
	Overhead			1.12
	Project Management Cost	6.1	Project Management Cost	1.12
	Total Expenditure (In Lakhs)			114.25
	Table-6			
Sl. No.	GENERAL CONDITIONS:		COMPLIANCE	
i.	The environment clearance accorded shall be valid for a period of 7 years for the proposed project.		Noted and agreed.	
ii.	Prior Consent-to-Establish (NOC) for the proposed project must be obtained from WBPCB before commencement of construction. All other statutory clearances should be obtained by the project proponent from the competent authorities.		The unit has obtained consent to Establish from the WBPCB vide letter NOC No. 153376, Memo No. 654-2N-45/2015 (E), dated 15.12.2017. All other statutory clearances have also been obtained from the concern departments.	

iii.	<p>The project proponent shall comply with all the environmental protection measures and safeguards recommended in the EIA/EMP. Further, the unit must undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply, sanitation programme for local school and health care etc.</p>	<p>The unit is complying to all the environmental safeguards recommended in the EIA, EMP.</p> <p>Socio-economic development activities like community development programs, educational programs, drinking water supply, sanitation programs for local school and health care have been under taken in the surrounding villages.</p> <p>The plantation done in the nearby schools and sapling also distributed to the students under environment awareness program. (Photograph No-33 ,34,35, 36, 37 & 38)</p>
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Photograph-33



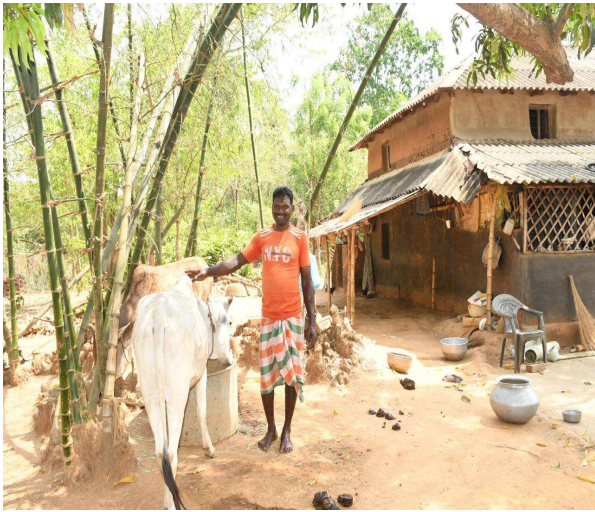

Photograph-34



Photograph-35



Photograph-36

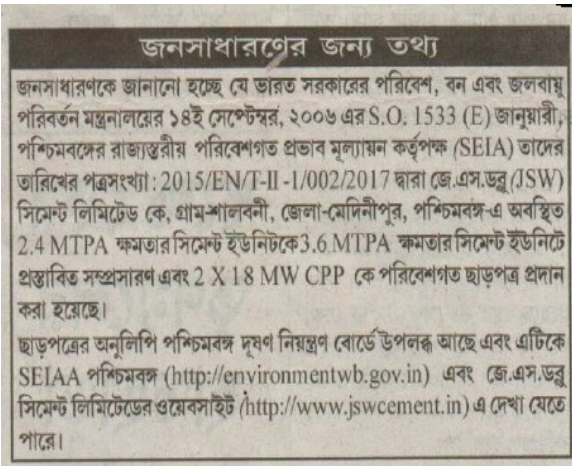
	 <p style="text-align: center;">Photograph-37</p>	 <p style="text-align: center;">Photograph-38</p>
iv	<p>All the conditions, liabilities and legal provisions contained in the EC shall be equally applicable to the successor management of the project in the event of the project proponent transferring the ownership, maintenance of management of the project to any other party.</p>	<p>Noted and agreed.</p>
v.	<p>Provision should be made for the supply of kerosene or cooking gas to the laborers during construction phase. All the laborers to be engaged for construction works should be screened for health and adequately treated before issue of work permits. Environmental sanitation should be ensured for the workers.</p>	<p>Complied. Good housekeeping and sanitation is maintained for the workers.</p>
vi.	<p>The project proponent should make financial provision in the total budget of the project for implementation of the environmental safeguards. The project authorities will provide requisite funds both recurring and non-recurring to implement the conditions stipulated by the SEIAA, West Bengal along with the implementation schedule for all the conditions stipulated herein. The funds so provided should not be diverted for any other purpose.</p>	<p>The unit has accrued Rs. 70.99 Crores towards implementing the Environment Management Plan (EMP), (Details attached in Table-7).</p> <p>Environmental safeguards have been implementation schedule for all the conditions stipulated in this EC is submitted to SEIAA, West Bengal.</p> <p>The fund allocated for EMP will not be diverted for any other purpose.</p>

COST OF ENVIRONMENTAL PROTECTION MEASURES
ITEMWISE BREAKUP OF CAPITAL INVESTMENT & ESTIMATES FOR
ENVIRONMENT MANAGEMENT PLAN

Details of allocation made for environmental management for 1 X 1.2 Cement Plant and 2X 18 MW CPP		
S. No.	Particulars	Capital Investment (Rs. Lakhs)
1	Process Bag Houses(RP Unit)	200
2	Flue Gas Desulphurization Unit	4000
3	ESP for boilers	300
4	De-dusting Bag Filters	240
5	Fly Ash Handling System	900
6	Process Bag House (Coal Mill)	40
7	Process Bag House (Wagon Tippler)	60
8	Covering of Belt Conveyors	756
9	Covered Shed for Gypsum (1500 MT)	94.5
10	Covered Shed for Coal (1500 MT)	94.5
11	Internal Roads	208.65
12	Green Belt development	100
13	Rain Water Harvesting	30
14	Water Sprinklers with pumps, etc.,	15
15	Noise pollution control	50
16	Occupational Health Centre	50
	Total	7098.65

Table-7

vii.	No further expansion or modifications in the plant should be carried out without prior approval of the state level Environment Impact Assessment Authority, West Bengal. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by the SEIAA, West Bengal.	Noted and Agreed.
viii.	The West Bengal Pollution Control Board, who would be monitoring the implementation of environmental safeguards, should be given full cooperation, facilities and documents/ data by the project proponent during their inspection. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to the WBPCB regularly. A complete set of documents should also be forwarded to the	Full co-operation, facilities and documents/data has given to the officials of the SPCB during their inspection. Six monthly compliance reports with monitored data & the status of the implementation of the stipulated environmental safeguards shall be submitted to State Environment Impact Assessment Authority, Ministry of Environment and Forests, its Regional Office, Central Pollution Control Board &

	State Level Environment Impact Assessment Authority, West Bengal.	State Pollution Control Board and also posted on the website of the Company. Copies of six monthly compliance report, monitored data and statistical interpretation of the monitored data will be submitted to SEIAA.
ix.	The State Level Environment Impact Assessment Authority, West Bengal reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environment (Protection) Act, 1986, to ensure implementation of the suggested safeguard measures in a time bound and satisfactory manner.	Noted and agreed.
x.	The project proponent should inform public that the project has been accorded environment clearance by the SEIAA, West Bengal and copies of the clearance letter are available with the State Pollution Control Board/ Committee and may also be seen at Website of the SEIAA, West Bengal (http://environmentwb.gov.in). This should be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned.	The information was advertised through publication in The Telegraph Calcutta (English) and Anand Bazar Patrika (Bangla) dated 15 th September 2017 (Photograph no-39).
	<div style="display: flex; justify-content: space-around; align-items: center;">  <div style="border: 1px solid black; padding: 5px; width: 300px;"> <p style="text-align: center;">PUBLIC INFORMATION</p> <p>This is to inform the Public that M/s JSW Cement Ltd. has been accorded Environment Clearance by the State Level Environment Impact Assessment Authority (SEIAA) vide letter No. 2015 /EN/T-II-1/ 002/ 2017, dated 07-09-2017 in accordance with S.O. 1533 (E) dt. 14 September, 2006 of the Ministry of Environment, Forest and Climate Change, GOI, for their proposed expansion of Cement Grinding Unit from 2.4 MTPA to 3.6 MTPA and 2 x 18 MW CPP at village Salboni, Distt. PaschimMedinipur, West Bengal. Copies of the Clearance letter are available with the West Bengal Pollution Control Board and may also be seen at the Website of the SEIAA, West Bengal (http://www.environmentwb.gov.in) and also at the website of M/s JSW Cement Limited (http://www.jswcement.in).</p> </div> </div> <p style="text-align: center;">Photograph-39</p>	
xi.	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. The criteria pollutant levels namely: SPM, RSPM, SO ₂ , NO _x (ambient levels as well as stack emissions) or critical sectoral parameters indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	EC compliance status and monitored data is being uploaded on the website and also been submitted to the WBPCB on the periodically basis. (https://www.jswcement.in/sustainability). The ambient and stack monitoring is being done on the regular basis and the result also displayed on the digital display board situated at main gate of plant. (Photograph No.-40)



(Photograph-40)

xii.	The project authorities should inform the State Pollution Control Board as well as the SEIAA, West Bengal, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work/ project implementation.	Date of financial closure of the project: NA Date of final approval of the project: 15.12.2017. Date of land development/ project implementation: January 2018
xiii.	The above stipulations would be enforced along with those under the Water (Prevention and Control of Pollution) Act, 1974, the Air ((Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2009, the Public Liability Insurance Act, 1991, The Environment Impact Assessment Notification 2006 and their amendments.	Noted and agreed.

For : JSW Cement Limited, Salboni

Sajeesh G.

Vice President & Unit Head