



JSW Cement Limited

Ankur Complex
Jambadia, P.O. : Saiyedpur via Salboni
Paschim Medinipur, Pin – 721147
West Bengal
Phone : 8585066001 / 02 / 03
Website : www.jsw.in

Ref. No. JSWCL/Sa/EC /Comp-II/2017-18

Date:-25.04.2018

To

Additional PCCF(c)

Ministry of Environment, Forest and Climate Change

Regional Office (Eastern Zone), A/3

Chandrasekharpur,

Bhubaneswar- 751023, Odisha

Sub: - Submission of Six Monthly Compliance Report against Stipulated Conditions of EC Letter

Ref:- Environmental Clearance Letter issued by SEIAA, West Bengal vide Letter No.- 89/EN/T-II-1/037/2015 dated 14.01.2016 and further amendment vide Letter No. 1771/EN/T-II-1/037/2015 dated 11.08.2016.

Sir,

With reference to above subject, hereby we are submitting the Six Monthly Compliance report for the Period of October 2018-March 2018 against Stipulated Conditions of EC Letter for our Cement Grinding Unit for production of Portland Slag Cement (PSC) and Ground Granulated Blast Furnace Slag (GGBS) of capacity 2.4 MTPA at Vill-Salboni, Dist- Paschim Medinipur, West Bengal.

This is for your kind reference and necessary record keeping purpose.

Thanks and Regards,

For JSW Cement Limited

Raju Ramchandran

VP (MFG), Plant Head

CC to:-

- i. Chief Environmental Officer and Member Secretary, SEIAA, West Bengal.
- ii. The Member Secretary, West Bengal Pollution Control Board.
- iii. Regional Office, West Bengal Pollution Control Board, Haldia.

Regd. Office : JSW Centre
Bandra Kurla Complex
Bandra (East), Mumbai – 400 051
CIN : U26957MH2006PLC160839
Tel : 022 43660000

JSW CEMENT LIMITED

HALF YEARLY COMPLIANCE REPORT OF ENVIRONMENT
CLEARNACE

OCTOBER 2017- MARCH 2018

CEMENT GRINDING UNIT FOR PRODUCTION OF PORTLAND SLAG CEMENT
(PSC) & GRANULATED BLAST FURNACE SLAG (GGBS) OF CAPACITY 2.4 MTPA.

(EC- 89/ENT/T-II-1/037/2015, dated 14.01.2016)

15.04.2018

AT- SALBONI, DIST- WEST MEDINIPUR, WEST BENGAL

Date: 15.04.2018

HALF YEARLY COMPLIANCE REPORT OF ENVIRONMENT CLEARNACE

1. PROJECT CODE: 110-172
2. NAME OF THE PROJECT: Cement Grinding unit for production of Portland Slag Cement (PSC) & Granulated Blast Furnace Slag (GGBS) of capacity 2.4 MTPA by M/s JSW Cement Ltd. at Village Salboni, Dist. Paschim Medinipur, West Bengal
3. CEARANCE LETTER NO. & DATE: 89/ENT/T-II-1/037/2015, dated 14.01.2016
4. PERIOD OF COMPLIANCE REPORT: From October'17 to March '18

Status of the project: Plant is currently in operation with 100% capacity i.e. 2.4 MTPA Cement Production.

Sl. No.	SPECIFIC CONDITIONS	COMPLIANCE
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.	2 Nos. Of Stacks for 2.4 MTPA Cement mill are in operation and the gaseous emissions are maintained within the prescribed limits. Monthly Stack Emission Monitoring by 3 rd party started. Continuous Stack Emission Monitoring System has been installed for both the stacks. Online transmission of Stack Emission data to CPCB server will be started by May 2018.
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 made for control of emission. 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/Nm ³ .	Cement/ slag grinding is done in closed circuit Roller Press mills. High efficiency Bag Houses have been provided for dust emission control. Stacks with 55 M height have been provided. High efficiency cyclone separators have been provided with Roller Press mill. Pulse Jet bag Filters have been installed at material transfer points in Raw Material, Grinding, Packing sections. Stack emission are monitored at intervals prescribed by the WBPCB and maintained <30 mg/Nm ³ . Monthly Stack Emission Result is Attached as Annexure-I .
iii	Regular monitoring of the ambient air quality shall be carried out in and around the plant and records maintained. The	Regular monitoring of the ambient air quality started for six locations in and around the plant by 3 rd party govt. Recognized lab and records are maintained.

	ambient air quality standards as per GSR 826 € dated 16.11.2009 to be maintained.	Ambient Air Quality is well within the prescribed limit as per CPCB NAAQS 2009. Monthly AAQ monitoring result is attached as Annexure-I .
iv.	Provision of back-up power to be made to ensure uninterrupted operation of pollution control devices.	All major pollution control devices are interlocked with the production unit so that in case of failure of Pollution Control Equipment, the production unit will be automatically stopped.
v.	Necessary permissions from various statutory authorities like Chief Controller of Explosive, Factory Inspectorate and others shall be obtained prior to commissioning of the project.	Factory License has been obtained vide letter no. WBF/OL/2018/38/R dated 15.01.2018. NOC obtained from District Magistrate for setup of 1 X 20 KLD and 1 X 100 KLD HSD Storage Tank obtained vide Memo No. 21(3)/LI (Arms) dated 08.01.2018 and Memo No. 22(3)/LI (Arms) dated 08.01.2018 respectively. Obtaining Final License from CCOE is in process. Factory License is Attached as Annexure-II .
vi.	Personal Protective Equipments shall be provided to workers and its regular use shall be ensured and supervised. First Aid Box, all types of fire extinguishers, water sprinkler, sand etc. shall be made readily available in adequate quantity at all the times. Necessary tie up with the nearby fire stations and other emergency services shall be made to ensure that the required aids reach within the shortest time in case of any adverse conditions.	PPEs are provided to the workers and staff engaged in the project. We have also deputed safety officers/ supervisors in all the shifts to supervise safe work practices and use of personal protective equipment on regular basis. First aid boxes, fire tender, sand buckets have been provided at the project site. We also have tied up with nearby hospitals, fire stations, Ambulance Services, Panchayat, Municipal Office etc. for providing emergency services in the shortest possible time in case of an emergency.
vii.	Closed loop pneumatic conveying system for all phases of handling of fly ash and GGBS at the site to be installed and maintained.	Closed loop pneumatic conveying systems have been provided for Fly Ash and GGBS handling. Photographs are attached as Annexure-III .
Viii	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 bag loading areas and other high dust potential areas.	Dust suppression and extraction systems in material storage, loading and unloading and also at the transfer points have been provided for controlling fugitive emissions. Dust collected in bag filters is automatically recycled into the system. CPCB guideline on control of fugitive emission is being implemented.
ix	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.	Permission for Groundwater abstraction from 6 nos. Of bore wells have been obtained from the State Water Investigation Deptt., vide permit No. P1428445003490000001TSE, P1428445003490000002TSE, P1428445003490000003TSE dated 16.10.2015 and P1428446000040000001TSE, P1428445003490000001TSE and

		P1428456001940000001TSE dated 03.11.2017. Water drawal Permission letters are attached as Annexure-IV .
x	Process effluent discharge is not permitted. No liquid effluent shall be generated by adoption of dry grinding process.	The plant is based on dry grinding process technology and as such there no discharge of process effluent.
xi.	Clinker manufacturing is not permitted under this Environment Clearance. Clinker and Fly Ash shall be stored in the closed silos and Gypsum in covered shed.	Clinker shall not be manufactured at this facility. Clinker is stored in closed silo whereas the Fly Ash as and when received/ generated at the proposed CPP shall be stored in closed bin. Gypsum is stored under covered shed.
xii.	Solid waste viz. dust generated shall be properly recycled and reused in the process itself. The slag cement produced by mixing the fly ash generated in addition to the GGBS, as proposed, must meet the requirements of the relevant Indian Standards.	Solid waste is mainly in the form of dust collected in bag filters/ bag houses which are designed to recycle the collected dust back into the process itself so that no dust comes out of the system. The quality requirements of PSC and GGBS as per relevant IS specifications are being maintained.
xiii.	Adequate provisions should be made for harvesting rainwater. The unit may develop storage facilities of capacity 40,000 KL, as proposed, to harvest rainwater. Estimated rainwater harvesting potential of 90,000 KL/annum to be stored and fully utilized to reduce groundwater abstraction. No artificial ground water recharge is permitted.	Rainwater harvesting pit, as proposed, shall be constructed with a potential to store 40000 KL of rainwater. In addition, rainwater will also be harvested from roof top, storm drains etc. The harvested rainwater will be utilized to the maximum extent to conserve fresh water.
xiv.	At least 33% of the area should be kept for green belt development. At least 12500 number of trees to be planted. Indicative list of tree species to be planted in given in Annexure-1. Green belt of 15 M width to be developed all along the plant boundary. 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.	Greenbelt is being developed and as prescribed, 33% of the area will be covered into greenbelt by planting >12500 number of tree species. Since start of construction activities, we have planted approx. 1500 tree saplings. Plantation will be done in monsoon season. Target of 33% plantation will be achieved in 5 years i.e. till year 2021 monsoon. The width of the greenbelt at the plant boundary shall be kept 15 M. No vegetative cover was destroyed/ removed during the establishment and operation phases. Around 8 Acre of Land has been developed as Greenbelt with 4000 nos. Of recommended species. Photographs are attached as Annexure-V .

xv.	Ambient noise levels should not exceed the permissible limit. 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 (nighttime).	<p>Monthly Ambient Noise Monitoring is carried out in and around plant.</p> <p>Ambient noise levels are maintained well within the prescribed limits (75 dBA (daytime) and 70 dBA (nighttime) by maintaining the overall workplace noise level within the permissible limits by adopting various noise control measures such as acoustic hoods, silencers, enclosures etc. on the noise generating equipments.</p> <p>Monthly Ambient Noise Quality results are attached as Annexure-I.</p>
xvi	All internal roads should be pitched. 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>55% of Internal concrete/ paved roads completed and 45% are under construction. Proper lighting and pathway inside the factory premises are being provided. Separate pathways are provided for entry and exit of vehicles. Only PUC certified vehicles shall be allowed inside the plant.</p> <p>Good housekeeping is maintained within the premises.</p> <p>Photographs of completed roads are attached as Annexure-VI.</p>
xvii	At least 100 KW of solar power to be generated and utilized in addition to stand alone solar power street lights.	Construction of Solar Plant of 3.5 MW capacity (3.0 MW Ground Mount + 0.5 MW Roof Top) started. Power generated will be utilized in street lighting, residential power supply and for utility power supply.
xviii	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>Health and safety of workers is being ensured by implementing in line with OHSAS standard. Required PPEs and sanitation facilities are provided to workers at site. Work Zone Monitoring has been done. Occupational Health Surveillance shall be done on regular basis and records shall be maintained as per requirements of the Factories Act.</p> <p>Work Zone monitoring report is attached as Annexure-VII.</p>
xix.	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>Adequate measures are taken to ensure industrial safety. Fire detection and protection devices are installed at appropriate locations. Fire Hydrant, Fire Alarming System are installed. Fire Tender is being purchased and Experienced Fire Fighters are being appointed.</p> <p>Photographs are attached as Annexure-VIII.</p>
xx.	All the recommendations mentioned in the Corporate Responsibility for Environmental Protection (CREP) guidelines for Cement Plants shall be followed and complied.	All the applicable recommendations of CREP guidelines for cement plant are followed and being implemented.

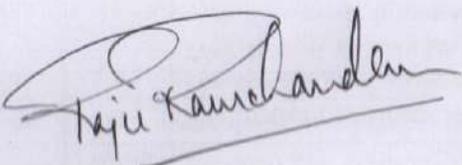
xxi.	The implementation and monitoring of Environment Management Plan should be carried out, as proposed.	Environment Management Plan, as proposed in the EIA report, is being implemented.
xxii	All the issues raised in the public hearing should be complied with.	We are in process to comply with all the issues raised during the public hearing.
xxiii.	At least 2.5% of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues, local need and item-wise details along with time bound action plan shall be prepared and submitted to the SEIAA/ SEAC. Implementation of such programme shall be ensured by constituting a Committee comprising of the proponent, representatives of local Panchayat and District Administration. Action taken report in this regard shall be submitted to the SEIAA/ SEAC.	Rs. 13.75 Crore earmarked for Enterprise Social Commitment (ESC). We have Year wise and item wise budget to be spent in next 10 years is attached as Annexure-IX . We are in the process of forming a committee for implementation of CSR programme. We will submit the details of the committee to SEIAA.
	In addition to the above provision of ESC, the proponent shall prepare a detailed CSR Plan for the next 5 years including annual physical and financial targets for the proposed project, which includes village - wise, sector-wise (Health, Education, Sanitation, Skill Development and Infrastructure etc.) activities in consultation with the local communities and administration. The CSR Plan will include the amount of 2% retain annual profits as provided for in Clause 135 of the Companies Act, 2013 which provides 2% of the average net profits of previous 3 years towards CSR activities for life of the project. A separate budget head shall be created and the annual capital and revenue expenditure on various activities of the Plan shall be submitted as part of the Compliance Report. The details of the CSR Plan shall also be uploaded on the company website and shall also be provided in the Annual Report of the company.	Detailed CSR plan is being prepared and implemented. The CSR plan will be consistent with the provisions of Companies Act, 2013. Separate budget head are created both for capital as well as revenue expenses. The details will be uploaded on company website and shall also be published in our Annual Report.

S. 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.	<p>We have obtained consent to Establish from the WBPCB vide letter NOC No. 139508, Memo No. 133-2M-45/2015 (E), dated 12.02.2016.</p> <p>We have obtained Consent to Operate from the WBPCB vide Letter Consent No. CO106518, Memo No. 46-hl-CO-2/17/0016, Dated 05.07.2017 for 1,00,000 Ton/Month Cement Production(50% of 2.4 MTPA) followed by Consent to Operate from the WBPCB vide Letter Consent No. CO106563, Memo No. 165-hl-CO-2/17/0016, Dated 18.01.2018 for 1,00,000 Ton/Month Cement Production(Balance 50% of 2.4 MTPA)</p> <p>CTO letter for complete 2.4 MTPA Cement productions is attached as Annexure-X.</p>
iii.	The project proponent shall comply with all the environmental protection measures and safeguards recommended. 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.	Noted and we commit to comply with all the environmental safeguards envisaged in the EMP, Environment Clearance and the Consents issued by the board. Socio-economic development activities have been initiated and will be further strengthened in due course.
iv	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.	Noted and agreed.

v.	Provision should be made for the supply of kerosene or cooking gas to the labourers during construction phase. All the labourers 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.	Construction Work completed for 2.4 MTPA Cement plant. Necessary Environmental Sanitation has been provided to workers during operation phase. However, during construction of proposed expansion of Cement Plant along with CPP, kerosene and cooking gas will be supplied to labourers and proper sanitation facilities shall be provided.
vi.	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.	Rs. 26.51 Crores as capital cost and Rs. 1.03 Crores have been allotted towards implementing the Environment Management Plan (EMP). (Pl. refer Annex.XI for details). Implementation schedule is being prepared for all the conditions stipulated in this EC and will be submitted.
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. We have already obtained EC from the SEIAA for project expansion and setting up of 2 x 18 MW CPP vide Letter No. 2015/EN/T-II-1/002/2017 dated 07.09.2017. Followed by Consent to Establish vide letter NOC No. 153376, Memo No. 654-2N-45/2015(E) dated 15.12.2017. EC letter and CTE letter are attached as Annexure-XII .
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 State Level Environment Impact Assessment Authority, West Bengal.	Noted and agreed.
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	Noted and agreed.

	under the provisions of the Environment (Protection) Act, 1986, to ensure implementation of the suggested safeguard measures in a time bound and satisfactory manner.	
x.	A copy of the clearance letter shall be sent by the proponent to the concerned Municipal Corporation and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.	Letters to Municipal Corporation and local NGO have been sent The clearance letter is available on our company's website www.jswcement.in
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. It shall simultaneously be sent to the respective zonal office of the WBPCB. 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.	Noted. Status of EC compliance as well as monitored data will be uploaded on the website and will also be submitted to the WBPCB. Monitoring of critical sectoral parameters of the project shall be done and data displayed near the main gate is in progress.
xii.	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://environmentweb.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 Times of India (English) and Amrit Bazar Patrika (Bangla) dated 22/01/2016. Copies of the advertisements have been forwarded to R.O. Eastern Region, Bhubaneswar alongwith first compliance report.
xiii.	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: 31.12.2015 Date of final approval of the project: 09.08.2016 Date of land development/ project implementation:20.02.2016

iv. 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.
---	-------------------



Raju Ramchandran
VP (MFG), Plant Head
JSW Cement Ltd.
Salboni (W.B.)



POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals
& Chemical Project Engineers, EIA & Disaster Management Study

ANNEXURE-I

FORMAT NO.: PPC/FM/67

ISSUE NO.: 03

ISSUE Dt.: 01.01.2018 (Rev. No.: 01)

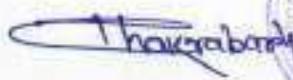
Page 1 of 1

TEST REPORT STACK GAS

CUSTOMER NAME : M/s. JSW Cement Limited,		DATE OF SAMPLING	: 11/01/2018
ADDRESS : Salboni, Paschim Medinipur, West Bengal		TIME OF SAMPLING	: 01:10 P.M.
LOCATION	: Stack #2	REPORT NO.	: G/18/01/01
SAMPLE ID NO.	: GS/18/01/01	REPORT DATE	: 18/01/2018
		TYPE OF SAMPLE	: Stack Gas
A : GENERAL INFORMATION ABOUT STACK		B. ANALYSIS/CHARACTERISTICS OF FUEL	
1	STACK CONNECTED TO : Stack #2	1	EMISSION DUE TO : Grinding process
2	MATERIAL OF CONSTRUCTION : M.S.	2	FUEL USED : --
3	SHAPE OF THE DUCT : Circular	3	FUEL CONSUMPTION : --
4	HEIGHT OF THE STACK :	4	CALORIFIC VALUE (K-Cal/Kg) : --
	a) From Ground Level (M) : 55.0	5	SULPHUR CONTENT (% by wt) : --
	b) From Roof Level : --	6	ASH CONTENT (% by wt) : --
5	DIAMETER OF THE STACK :	7	AIR FLOW : --
	a) Top (M) : 3.5	C : STEAM GENERATION CAPACITY	
	b) Bottom (M) : --	a)	RATED : --
	c) Sampling Point (M) : 3.5	b)	RUNNING : --
6	HEIGHT OF THE SAMPLING PORT :	Load	
	a) From Ground Level (M) : 40.0	a)	RATED : 100 TPH
	b) From Lower Disturbing Zone (M) : --	b)	RUNNING : 100 TPH (OPC Grinding)
7		WHETHER STACK IS PROVIDED WITH PERMANENT PLATFORM /LADDER: Yes	
		POLLUTION CONTROL DEVICE : Bag filter	
D. RESULT OF SAMPLING			
		Unit	Method of Test (Reference)
1	TEMPERATURE OF EMISSION	deg C	IS:11255 (Part 1):1985 (RA2012) & (Part 3):2008
2	BAROMETRIC PRESSURE	mmHg	IS:11255 (Part 1):1985 (RA2012) & (Part 3):2008
3	VELOCITY OF GAS FLOW	M/Sec	IS:11255 (Part 1):1985 (RA2012) & (Part 3):2008
4	QUANTITY OF GAS FLOW	Nm ³ /Hr.	IS:11255 (Part 1):1985 (RA2012) & (Part 3):2008
5	CONCENTRATION OF PARTICULATE MATTER	mg/Nm ³	IS:11255 (Part 1):1985 (RA2012) & (Part 3):2008
6	PARTICULATE MATTER NORMALISED TO 12 % CO ₂	mg/Nm ³	IS:11255 (Part 1):1985 (RA2012) & (Part 3):2008
7	CONCENTRATION OF SULPHUR DIOXIDE	mg/Nm ³	IS:11255 (Part 2):1985 (RA 2014)
8	CONCENTRATION OF NITROGEN DIOXIDE	mg/Nm ³	IS:11255 (Part 7):2005 (RA 2017)
9	CONCENTRATION OF OXYGEN	% v/v	APHA 3 rd Air Analysis Method- 134:2016
10	CONCENTRATION OF CARBON DIOXIDE	% v/v	APHA 3 rd Air Analysis Method- 134:2016
11	CONCENTRATION OF CARBON MONOXIDE	% v/v	APHA 3 rd Air Analysis Method- 134:2016
			Result
			: 89
			: 753
			: 7.73
			: 218381.6
			: 11
			: --
			: --
			: 19.8
			: <0.2
			: <0.2

The results relate only to the parameters tested.

....end of report..




Tanmoy Chakrabarty
Quality Manager

Authorized Signatory

For Pollution And Project Consultants

*Test Certificate shall not be reproduced except in full, without written approval of the laboratory.

LABORATORY FOR ANALYSIS OF AIR, EFFLUENT, SOLIDWASTE, COAL, ORE. ETC.

Office & Laboratory : P-145, Bangur Avenue, Block - A, Kolkata - 700 055

Phone : (033) 2574-3418 / 2984 • Fax : (033) 2574-2984

E-mail : ppconsultants@awsppc.in / awsppc@airtelmail.in • Web : www.awsppcenvirogroup.com



POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals
& Chemical Project Engineers. EIA & Disaster Management Study

FORMAT NO.: PPC/FM/68 ISSUE NO.: 03 ISSUE Dt.: 01.01.2018 (Rev No.:01)

Page 1 of 1

TEST REPORT AMBIENT AIR

Customer Name	: M/s. JSW Cement Limited,	Report No.	: G/18(01)/03			
Address	: Saiboni, Paschim Medinipur, West Bengal	Report Date	: 16/01/2018			
Type of Sample	: Ambient Air	Sample Id No.	: GA/18(01)/03			
Location of Sampling	: Project Office(N)	Date Sampling	: 09/10-01-2018			
Sl. No.	Parameters	Unit	Result	Standard	Time Weighted Average	Standard Ref. Methods
1	Particulate Matter ₁₀ (as PM ₁₀)	µg/m ³	60.6	100	24 Hours	IS:5182 (Part -23) : 2006 RA 2017
2	Particulate Matter _{2.5} (as PM _{2.5})	µg/m ³	32.3	60	24 Hours	In house Method SOP No. SOP/02/02 Issue Date 02.04.15 (Prepared based on CPCB Guidelines)
3	Sulphur dioxides (as SO ₂)	µg/m ³	12.0	80	24 Hours	IS:5182 (Part -2) : 2001 RA 2017
	Nitrogen dioxides (as NO ₂)	µg/m ³	22.0	80	24 Hours	IS:5182 (Part -6) : 2006 RA 2017
4	Carbon monoxide (as CO)	mg/m ³	0.5	4	24 Hours	APHA (Air Analysis) 3 rd Edn. Method 128:2016

The results relate only to the parameters tested

...end of report....

Tanmoy Chakrobarty
Quality Manager

Authorised Signatory

For Pollution And Project Consultants

* Test Certificate shall not be reproduced except in full, without written approval of the laboratory.

LABORATORY FOR ANALYSIS OF AIR, EFFLUENT, SOLIDWASTE, COAL, ORE. ETC.

Office & Laboratory : P-145, Bangur Avenue, Block - A, Kolkata - 700 055

Phone : (033) 2574-3418 / 2984 • Fax : (033) 2574-2984

E-mail : ppconsultants@awsppc.in / awsppc@airtelmail.in • Web : www.awsppcenvirogroup.com



POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals
& Chemical Project Engineers. EIA & Disaster Management Study

FORMAT NO.: PPC/FM/68 ISSUE NO.: 03 ISSUE Dt.: 01.01.2018 (Rev No.:01)

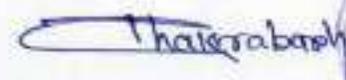
Page 1 of 1

TEST REPORT AMBIENT AIR

Customer Name	: M/s. JSW Cement Limited,	Report No.	: G/18(01)/04			
Address	: Salboni, Paschim Medinipur, West Bengal	Report Date	: 16/01/2018			
Type of Sample	: Ambient Air	Sample Id No.	: GA/18(01)/04			
Location of Sampling	: Near Staff Colony (Inside Ankur Company)(NW)	Date Sampling	: 09/10-01-2018			
Sl. No.	Parameters	Unit	Result	Standard	Time Weighted Average	Standard Ref. Methods
1	Particulate Matter ₁₀ (as PM ₁₀)	µg/m ³	52.8	100	24 Hours	IS:5182 (Part -23) : 2006 RA 2017
2	Particulate Matter _{2.5} (as PM _{2.5})	µg/m ³	30.1	60	24 Hours	In house Method SOP No. SOP/02/02 Issue Date 02.04.15 (Prepared based on CPCB Guidelines)
3	Sulphur dioxide (as SO ₂)	µg/m ³	12.0	80	24 Hours	IS:5182 (Part -2) : 2001 RA 2017
	Nitrogen dioxide (as NO ₂)	µg/m ³	20.0	80	24 Hours	IS:5182 (Part - 6) ; 2006 RA 2017
4	Carbon monoxide (as CO)	mg/m ³	0.5	4	24 Hours	APHA (Air Analysis) 3 rd Edn. Method 128:2016

The results relate only to the parameters tested.

....end of report....




Tanmoy Chakrabarty
Quality Manager

Authorised Signatory

For Pollution And Project Consultants

* Test Certificate shall not be reproduced except in full, without written approval of the laboratory.

LABORATORY FOR ANALYSIS OF AIR, EFFLUENT, SOLIDWASTE, COAL, ORE. ETC.

Office & Laboratory : P-145, Bangur Avenue, Block - A, Kolkata - 700 055

Phone : (033) 2574-3418 / 2984 • Fax : (033) 2574-2984

E-mail : ppconsultants@awsppc.in / awsppc@airtelmail.in • Web : www.awsppcenvirogroup.com



POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals
& Chemical Project Engineers. EIA & Disaster Management Study

FORMAT NO.: PPC/FM/68 ISSUE NO.: 03 ISSUE Dt.: 01.01.2018 (Rev No.:01)

Page 1 of 1

TEST REPORT AMBIENT AIR

Customer Name	: M/s: JSW Cement Limited,	Report No.	: G/18(01)/05			
Address	: Salboni, Paschim Medinipur, West Bengal	Report Date	: 16/01/2018			
Type of Sample	: Ambient Air	Sample Id No.	: GA/18(01)/05			
Location of Sampling	: Labour Colony (E)	Date Sampling	: 10/11-01-2018			
Sl. No.	Parameters	Unit	Result	Standard	Time Weighted Average	Standard Ref. Methods
1	Particulate Matter ₁₀ (as PM ₁₀)	µg/m ³	62.9	100	24 Hours	IS:5182 (Part -23) : 2006 RA 2017
2	Particulate Matter _{2.5} (as PM _{2.5})	µg/m ³	49.6	60	24 Hours	In house Method SOP No. SOP/02/02 Issue Date 02.04.15 (Prepared based on CPCB Guidelines)
3	Sulphur dioxide (as SO ₂)	µg/m ³	14.0	80	24 Hours	IS:5182 (Part -2) : 2001 RA 2017
	Nitrogen dioxide (as NO ₂)	µg/m ³	26.0	80	24 Hours	IS:5182 (Part - 6) : 2006 RA 2017
4	Carbon monoxide (as CO)	mg/m ³	0.48	4	24 Hours	APHA (Air Analysis) 3 rd Edn. Method 128:2016

The results relate only to the parameters tested

...end of report....

Tanmoy Chakrabarty
Quality Manager

Authorised Signatory

For Pollution And Project Consultants



* Test Certificate shall not be reproduced except in full, without written approval of the laboratory.

LABORATORY FOR ANALYSIS OF AIR, EFFLUENT, SOLIDWASTE, COAL, ORE. ETC.

Office & Laboratory : P-145, Bangur Avenue, Block - A, Kolkata - 700 055

Phone : (033) 2574-3418 / 2984 • Fax : (033) 2574-2984

E-mail : ppconsultants@awsppc.in / awsppc@airtelmail.in • Web : www.awsppcenvirogroup.com



POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals
& Chemical Project Engineers. EIA & Disaster Management Study

FORMAT NO.: PPC/FM/68 ISSUE NO.: 03 ISSUE Dt.: 01.01.2018 (Rev No.:01)

Page 1 of 1

TEST REPORT AMBIENT AIR

Customer Name	: M/s. JSW Cement Limited,	Report No.	: G/18(01)/06			
Address	: Salboni, Paschim Medinipur, West Bengal	Report Date	: 16/01/2018			
Type of Sample	: Ambient Air	Sample Id No.	: GA/18(01)/06			
Location of Sampling	: Near Railway siding (S)	Date Sampling	: 10/11-01-2018			
Sl. No.	Parameters	Unit	Result	Standard	Time Weighted Average	Standard Ref. Methods
1	Particulate Matter ₁₀ (as PM ₁₀)	µg/m ³	82.4	100	24 Hours	IS:5182 (Part -23) : 2006 RA 2017
2	Particulate Matter _{2.5} (as PM _{2.5})	µg/m ³	50.8	60	24 Hours	In house Method SOP No. SOP/02/02 Issue Date 02.04.15 (Prepared based on CPCB Guidelines)
3	Sulphur dioxide (as SO ₂)	µg/m ³	15.0	80	24 Hours	IS:5182 (Part -2) : 2001 RA 2017
	Nitrogen dioxide (as NO ₂)	µg/m ³	24.0	80	24 Hours	IS:5182 (Part - 6) : 2006 RA 2017
4	Carbon monoxide (as CO)	mg/m ³	0.71	4	24 Hours	APHA (Air Analysis) 3 rd Edn. Method 128:2016

The results relate only to the parameters tested

....end of report....



Tanmoy Chakrabarty
Quality Manager

Authorised Signatory

For Pollution And Project Consultants



* Test Certificate shall not be reproduced except in full, without written approval of the laboratory.

LABORATORY FOR ANALYSIS OF AIR, EFFLUENT, SOLIDWASTE, COAL, ORE, ETC.

Office & Laboratory : P-145, Bangur Avenue, Block - A, Kolkata - 700 055

Phone : (033) 2574-3418 / 2984 ● Fax : (033) 2574-2984

E-mail : ppconsultants@awsppc.in / awsppc@airtelmail.in ● Web : www.awsppcenvirogroup.com



POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals
& Chemical Project Engineers, EIA & Disaster Management Study

FORMAT NO.: PPC/FM/68 ISSUE NO.: 03 ISSUE Dt.: 01.01.2018 (Rev No.:01)

Page 1 of 1

TEST REPORT AMBIENT AIR

Customer Name	: M/s. JSW Cement Limited,	Report No.	: G/18(01)/07			
Address	: Salboni, Paschim Medinipur, West Bengal	Report Date	: 16/01/2018			
Type of Sample	: Ambient Air	Date Sampling	: GA/18(01)/07			
Location of Sampling	: Near Godapiasal Village (SE)	Sample Id No.	: 11/12-01-2018			
Sl. No.	Parameters	Unit	Result	Standard	Time Weighted Average	Standard Ref. Methods
1	Particulate Matter ₁₀ (as PM ₁₀)	µg/m ³	78.9	100	24 Hours	IS:5182 (Part -23) : 2006 RA 2017
2	Particulate Matter _{2.5} (as PM _{2.5})	µg/m ³	48.3	60	24 Hours	In house Method SOP No. SOP/02/02 issue Date 02.04.15 (Prepared based on CPCB Guidelines)
3	Sulphur dioxide (as SO ₂)	µg/m ³	16.0	80	24 Hours	IS:5182 (Part -2) : 2001 RA 2017
	Nitrogen dioxide (as NO ₂)	µg/m ³	24.0	80	24 Hours	IS:5182 (Part - 6) : 2006 RA 2017
4	Carbon monoxide (as CO)	mg/m ³	0.6	4	24 Hours	APHA (Air Analysis) 3 rd Edn. Method 128:2016

The results relate only to the parameters tested

...end of report....

Tanmoy Chakrabarty
Quality Manager

Authorised Signatory

For Pollution And Project Consultants



* Test Certificate shall not be reproduced except in full, without written approval of the laboratory.

LABORATORY FOR ANALYSIS OF AIR, EFFLUENT, SOLIDWASTE, COAL, ORE, ETC.

Office & Laboratory : P-145, Bangur Avenue, Block - A, Kolkata - 700 055

Phone : (033) 2574-3418 / 2984 • Fax : (033) 2574-2984

E-mail : ppconsultants@awsppc.in / awsppc@airtelmail.in • Web : www.awsppcenvirogroup.com



POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals
& Chemical Project Engineers. EIA & Disaster Management Study

FORMAT NO.: PPC/FM/68 ISSUE NO.: 03 ISSUE Dt.: 01.01.2018 (Rev No.:01)

Page 1 of 1

TEST REPORT AMBIENT AIR

Customer Name	: M/s. JSW Cement Limited,	Report No.	: G/18(01)/08			
Address	: Salboni, Paschim Medinipur, West Bengal	Report Date	: 16/01/2018			
Type of Sample	: Ambient Air	Date Sampling	: GA/18(01)/08			
Location of Sampling	: Near Proposed CPP Area(SSW)	Sample Id No.	: 11/12-01-2018			
Sl. No.	Parameters	Unit	Result	Standard	Time Weighted Average	Standard Ref. Methods
1	Particulate Matter ₁₀ (as PM ₁₀)	µg/m ³	69.3	100	24 Hours	IS:5182 (Part -23) : 2006 RA 2017
2	Particulate Matter _{2.5} (as PM _{2.5})	µg/m ³	42.5	60	24 Hours	In house Method SOP No. SOP/02/02 Issue Date 02.04.15 (Prepared based on CPCB Guidelines)
3	Sulphur dioxide (as SO ₂)	µg/m ³	16.0	80	24 Hours	IS:5182 (Part -2) : 2001 RA 2017
	Nitrogen dioxide (as NO ₂)	µg/m ³	26.0	80	24 Hours	IS:5182 (Part - 6) : 2006 RA 2017
4	Carbon monoxide (as CO)	mg/m ³	0.58	4	24 Hours	APHA (Air Analysis) 3 rd Edn. Method 128:2016

The results relate only to the parameters tested

....end of report....



Tanmoy Chakrabarty
Quality Manager

Authorised Signatory
For Pollution And Project Consultants



* Test Certificate shall not be reproduced except in full, without written approval of the laboratory.

LABORATORY FOR ANALYSIS OF AIR, EFFLUENT, SOLIDWASTE, COAL, ORE, ETC.

Office & Laboratory : P-145, Bangur Avenue, Block - A, Kolkata - 700 055

Phone : (033) 2574-3418 / 2984 • Fax : (033) 2574-2984

E-mail : ppconsultants@awsppc.in / awsppc@airtelmail.in • Web : www.awsppcenvirogroup.com



POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals
& Chemical Project Engineers. EIA & Disaster Management Study

PPC/FM/66

Issue on : 03

Issue Dt. 01.01.2018 (Rev.No. 01)

Page No. 1/1

Report No. : G/18(01)/10-12

Date : 16-01-2018

NOISE LEVEL MONITORING REPORT			
Customer Name	: M/s. ISW Cement Limited,		
Address	: Salboni, Paschim Medinipur, West Bengal		
Sampling Station	Near Project Office	Staff Colony (Inside Ankur Company)	Near Labour Colony
Type of Area	Industrial	Industrial	Industrial
Monitoring Date	09/10-01-2018	09/10-01-2018	10/11-01-2018
Time (In Hrs.)	Hourly Leq dB(A)		
6.00-7.00	54.6	50.7	53.3
7.00-8.00	58.2	52.2	54.4
8.00-9.00	60.5	52.9	53.7
9.00-10.00	57.1	54.0	55.5
10.00-11.00	61.3	54.8	59.1
11.00-12.00	60.4	58.0	59.8
12.00-13.00	62.5	61.9	66.7
13.00-14.00	62.1	62.9	62.4
14.00-15.00	63.2	64.2	63.2
15.00-16.00	64.4	66.3	65.4
16.00-17.00	64.9	60.1	63.8
17.00-18.00	65.1	61.3	62.0
18.00-19.00	66.9	64.0	62.0
19.00-20.00	62.1	61.7	61.0
20.00-21.00	59.3	61.1	62.0
21.00-22.00	59.5	55.6	61.9
22.00-23.00	57.1	53.7	53.0
23.00-0.00	54.6	55.2	53.4
0.00-1.00	54.7	52.2	51.9
1.00-2.00	51.0	51.7	49.2
2.00-3.00	50.4	51.9	46.4
3.00-4.00	51.4	54.8	46.8
4.00-5.00	47.2	45.8	50.2
5.00-6.00	48.3	49.0	50.5
Leq dB(A) Day Time	62.4	61.0	61.9
Leq dB(A) Night Time	53.0	52.6	50.8
The Applicant shall take adequate measures for control of noise levels from its own sources within premises to conform to :-			
Day time Limit (06:00 A.M.-10:00 P.M.)	75 dB(A)	75 dB(A)	75 dB(A)
Night Time Limit (10:00 P.M.-06:00 A.M.)	70 dB(A)	70 dB(A)	70 dB(A)

Tanmoy Chakrabarty

Tanmoy Chakrabarty
Quality Manager



Authorized Signatory

For Pollution And Project Consultants

*Test Certificate shall not be reproduced except in full, without written approval of the laboratory.

LABORATORY FOR ANALYSIS OF AIR, EFFLUENT, SOLIDWASTE, COAL, ORE. ETC.

Office & Laboratory : P-145, Bangur Avenue, Block - A, Kolkata - 700 055

Phone : (033) 2574-3418 / 2984 • Fax : (033) 2574-2984

E-mail : ppconsultants@awsppc.in / awsppc@airtelmail.in • Web : www.awsppcenvirogroup.com



POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals
& Chemical Project Engineers, EIA & Disaster Management Study

PPC/FM/66

Issue on : 03

Issue Dt. 01.01.2017 (Rev.No. 00)

Page No. 1/1

Report No. : G/18(01)/13-15

Date : 16-01-2018

NOISE LEVEL MONITORING REPORT			
Customer Name	: M/s. JSW Cement Limited,		
Address	: Salboni, Paschim Medinipur, West Bengal		
Sampling Station	Railway Siding Area	Near Godaplasal Village	Near Proposed CPP Area
Type of Area	Industrial	Industrial	Industrial
Monitoring Date	10/11-01-2018	11/12-01-2018	11/12-01-2018
Time (in Hrs.)	Hourly Leq dB(A)		
6.00-7.00	47.1	54.8	40.7
7.00-8.00	49.2	56.0	41.2
8.00-9.00	49.9	54.8	42.2
9.00-10.00	52.4	56.5	42.7
10.00-11.00	53.8	61.1	43.5
11.00-12.00	62.5	60.9	48.6
12.00-13.00	65.2	63.1	51.1
13.00-14.00	64.9	62.6	52.3
14.00-15.00	63.3	65.2	54.9
15.00-16.00	56.2	65.0	59.1
16.00-17.00	60.3	59.1	60.2
17.00-18.00	58.1	55.2	61.2
18.00-19.00	56.7	53.9	63.3
19.00-20.00	55.1	54.7	58.7
20.00-21.00	58.0	53.4	53.5
21.00-22.00	54.2	52.1	52.6
22.00-23.00	53.5	54.2	50.0
23.00-0.00	54.9	48.3	48.9
0.00-1.00	49.9	47.4	47.3
1.00-2.00	48.4	51.5	45.8
2.00-3.00	47.0	49.6	46.3
3.00-4.00	47.4	49.3	43.7
4.00-5.00	48.4	49.3	42.3
5.00-6.00	49.0	51.2	45.1
Leq dB(A) Day Time	59.7	60.1	56.5
Leq dB(A) Night Time	50.8	50.6	46.8
The Applicant shall take adequate measures for control of noise levels from its own sources within premises to conform to :-			
Day time Limit (06:00 A.M.-10:00 P.M.)	75 dB(A)	75 dB(A)	75 dB(A)
Night Time Limit (10:00 P.M.-06:00 A.M.)	70 dB(A)	70 dB(A)	70 dB(A)



Sanmoy Chakrabarty
Sanmoy Chakrabarty
Quality Manager
Authorized Signatory

For Pollution And Project Consultants

*Test Certificate shall not be reproduced except in full, without written approval of the laboratory.

LABORATORY FOR ANALYSIS OF AIR, EFFLUENT, SOLIDWASTE, COAL, ORE. ETC.

Office & Laboratory : P-145, Bangur Avenue, Block - A, Kolkata - 700 055

Phone : (033) 2574-3418 / 2984 • Fax : (033) 2574-2984

E-mail : ppconsultants@awsppc.in / awsppc@airtelmail.in • Web : www.awsppcenvirogroup.com



POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals
& Chemical Project Engineers, EIA & Disaster Management Study

Format No. PPC/PM/71

Issue No. 05

Issue Dt. 01.01.2018 (Rev.No.01)

Page: 1 of 1

TEST REPORT

Water Sample

Sl. No.	Parameter test	Unit	Standard against which test are performed	Norms as per IS:10500-2012		Result
				Desirable Limit	Permissible Limit	
1	Temperature (Collection Time)	°C	IS: 3025 (Part-9) 1984 RA 2002	Not specified		14.0
2	Turbidity	NTU	APHA 23rd Edn. 2017. 2130 B	1	5	3.8
3	pH value	-	APHA 23rd Edn. 2017. 4500 H+B	6.5 - 8.5	No Relaxation	7.46
4	Total Suspended Solids (as TSS)	mg/l	APHA 23rd Edn. 2017. 2540 D	Not specified		<2.5
5	Total Dissolved Solids (as TDS)	mg/l	APHA 23rd Edn. 2017. 2540 C	500	2000	219.0
6	Sp. Conductivity at 25°C	µS/cm	APHA 23rd Edn. 2017. 2510 B	Not specified		360.0
7	Calcium Hardness (as CaCO ₃)	mg/l	IS: 3025 (Part-40) 1991 RA 2014	Not specified		85.5
8	Bio-Chemical Oxygen Demand (BOD)	mg/l	IS: 3025 (Part-44) 1993 RA 2014	-	-	<1.0
9	Chemical Oxygen Demand (COD)	mg/l	APHA 23rd Edn. 5220 B-2017	-	-	4.0
10	Oil & Grease	mg/l	APHA 23rd Edn. 5220 B-2017	-	-	<1.0
11	Total Hardness (as CaCO ₃)	mg/l	IS: 3021 (Part-21) RA 2014	200	500	145.6
12	Mercury (as Hg)	mg/l	APARHA 23rd Edn. 2017. 3112B	0.001	No Relaxation	<0.0002
13	Lead (as Pb)	mg/l	APARHA 23rd Edn. 2017. 3111B	0.01	No Relaxation	<0.005
14	Iron (as Fe)	mg/l	APARHA 23rd Edn. 2017. 3111B	0.3	No Relaxation	1.36
15	Copper (as Cu)	mg/l	APARHA 23rd Edn. 2017. 3111B	0.05	1.5	<0.01
16	Total Chromium (as Cr)	mg/l	APARHA 23rd Edn. 2017. 3111B	0.05	No Relaxation	<0.01
17	Zinc (as Zn)	mg/l	APARHA 23rd Edn. 2017. 3111B	5	25	0.10
18	Arsenic (as As)	mg/l	APARHA 23rd Edn. 2017. 3114C	0.01	0.05	<0.01
19	Cadmium (as Cd)	mg/l	APARHA 23rd Edn. 2017. 3111B	0.002	No Relaxation	<0.001
20	Nickel (as Ni)	mg/l	APARHA 23rd Edn. 2017. 3111B	0.02	No Relaxation	<0.005
21	Manganese (as Mn)	mg/l	APARHA 23rd Edn. 2017. 3111B	0.1	0.3	0.05
22	Fluoride (as F)	mg/l	APARHA 23rd Edn. 2017. 4500 F.D	1	1.5	0.40
23	Chloride (as Cl)	mg/l	APARHA 23rd Edn. 2017. 4500 Cl B	250	1000	32.4
24	Sulphate (as SO ₄)	mg/l	IS: 3025 (Part-24) RA 2014	200	400	5.0
25	Sulfite (as SO ₃)	mg/l	IS: 3025 (Part-24) RA 2014	-	-	<0.005
26	Nitrate (as NO ₃)	mg/l	APARHA 23rd Edn. 2017. 4500NO ₃ -D	45	No Relaxation	0.20
27	Nitrite (as NO ₂)	mg/l	APARHA 23rd Edn. 2017. 4500NO ₂ -B	Not specified		<0.01
28	Phenolic Compound (as C ₆ H ₅ OH)	mg/l	APARHA 23rd Edn. 2017. 5530 D	0.001	0.002	<0.001

The results relate only to the parameters tested.

...end of report...

Tanmoy Chakrabarty

Tanmoy Chakrabarty
Quality Manager

Authorized Signatory
For Pollution And Project Consultants

*Test Certificate shall not be reproduced except in full, without written approval of the laboratory.

LABORATORY FOR ANALYSIS OF AIR, EFFLUENT, SOLIDWASTE, COAL, ORE. ETC.

Office & Laboratory : P-145, Bangur Avenue, Block - A, Kolkata - 700 055

Phone : (033) 2574-3418 / 2984 • Fax : (033) 2574-2984

E-mail : ppconsultants@awsppc.in / awsppc@airtelmail.in • Web : www.awsppcenvirogroup.com



POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals
& Chemical Project Engineers. EIA & Disaster Management Study

Format No. PPC/PM/71

Issue No. 03

Issue Dt. 01.01.2017 (Rev. No.00)

Page. 1/1

TEST REPORT

Water Sample

Customer Name	: M/s. JSW Cement Limited.	Report No.	: GW/18/01/64
Address	: Salboni, Paschim Medinipur, West Bengal	Report Date	: 19/01/2018
Type of Sample	: Ground Water	Sample Id No.	: GW/18/01/64
Sampling Location	: Bore Well No. 2 Near CCR Building.	Test Start Date	: 13/01/2018
Sampling Date	: 11/01/2018	Test End Date	: 19/01/2018

Sr. No.	Parameter test	Unit	Standard against which test are performed	Norms as per IS:10500-2012		Result
				Desirable Limit	Permissible Limit	
1	Temperature (Collection Time)	°C	IS: 3025 (Part-9) 1984 RA 2002	Not specified		33.0
2	Turbidity	NTU	APHA 23rd Edn. 2017. 2130 B	1	5	1.0
3	pH value	--	APHA 23rd Edn. 2017. 4500 H+H	6.5 - 8.5	No Relaxation	6.86
4	Total Suspended Solids (as TSS)	mg/l	APHA 23rd Edn 2017. 2540 D	Not specified		<2.5
5	Total Dissolved Solids (as TDS)	mg/l	APHA 23rd Edn. 2017. 2540 C	500	2000	108.0
6	Sp. Conductivity at 25°C	µS/cm	APHA 23rd Edn. 2017. 2530 B	Not specified		180.0
7	Calcium Hardness (as CaCO ₃)	mg/l	IS: 3025 (Part-40) 1991 RA 2014	Not specified		43.1
8	Bio-Chemical Oxygen Demand (BCD)	mg/l	IS: 3025 (Part-44) 1991 RA 2014	--	--	<1.0
9	Chemical Oxygen Demand (COD)	mg/l	APHA 23rd Edn. 5220 B-2017	--	--	3.5
10	Oil & Grease	mg/l	APHA 23rd Edn. 5220 B-2017	--	--	<1.0
11	Total Hardness (as CaCO ₃)	mg/l	IS:3025(Part-21) RA 2014	200	600	75.2
12	Mercury (as Hg)	mg/l	APartha 23rd Edn. 2017. 3112B	0.001	No Relaxation	<0.002
13	Lead (as Pb)	mg/l	APartha 23rd Edn. 2017. 3111B	0.01	No Relaxation	<0.005
14	Iron (as Fe)	mg/l	APartha 23rd Edn. 2017. 3111B	0.3	No Relaxation	0.19
15	Copper (as Cu)	mg/l	APartha 23rd Edn. 2017. 3111B	0.05	1.5	<0.01
16	Total Chromium (as Cr)	mg/l	APartha 23rd Edn. 2017. 3111B	0.05	No Relaxation	<0.01
17	Zinc (as Zn)	mg/l	APartha 23rd Edn. 2017. 3111B	5	15	0.06
18	Arsenic (as As)	mg/l	APartha 23rd Edn. 2017. 3114C	0.01	0.05	<0.01
19	Cadmium (as Cd)	mg/l	APartha 23rd Edn. 2017. 3111B	0.003	No Relaxation	<0.001
20	Nickel (as Ni)	mg/l	APartha 23rd Edn. 2017. 3111B	0.02	No Relaxation	<0.005
21	Manganese (as Mn)	mg/l	APartha 23rd Edn. 2017. 3111B	0.1	0.5	0.08
22	Fluoride (as F)	mg/l	APartha 23rd Edn. 2017. 4500 F.D.	1	1.5	0.35
23	Chloride (as Cl)	mg/l	APartha 23rd Edn. 2017. 4500 Cl B	250	1000	8.4
24	Sulphate (as SO ₄)	mg/l	IS:3025 (Part-24) RA 2014	200	400	2.0
25	Sulfite (as SO ₃)	mg/l	IS: 3025 (Part-24) RA 2014	--	--	<0.005
26	Nitrate (as NO ₃)	mg/l	APartha 23rd Edn. 2017. 4500NO ₃ -D	45	No Relaxation	0.10
27	Nitrite (as NO ₂)	mg/l	APartha 23rd Edn. 2017. 4500NO ₂ -B	Not specified		<0.01
28	Phenolic Compounds(as C ₆ H ₅ OH)	mg/l	APartha 23rd Edn. 2017-5530 D	0.001	0.002	<0.001

The results relate only to the parameters tested.

...end of report...

Tanmoy Chakrabarty

Tanmoy Chakrabarty
Quality Manager

Authorized Signatory

For Pollution And Project Consultants

*Test Certificate shall not be reproduced except in full, without written approval of the laboratory.

LABORATORY FOR ANALYSIS OF AIR, EFFLUENT, SOLIDWASTE, COAL, ORE. ETC.

Office & Laboratory : P-145, Bangur Avenue, Block - A, Kolkata - 700 055

Phone : (033) 2574-3418 / 2984 • Fax : (033) 2574-2984

E-mail : ppconsultants@awsppc.in / awsppc@airtelmail.in • Web : www.awsppcenvirogroup.com



POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals
& Chemical Project Engineers. EIA & Disaster Management Study

Format No. PPC/FM/71

Issue No. 03

Issue Dt. 01.01.2017 (Rev.No.00)

Page 1/1

TEST REPORT

Water Sample

Customer Name	: M/s. JSW Cement Limited,	Report No.	: GW/18/01/03
Address	: Salboni, Paschim Medinipur, West Bengal	Report Date	: 19/01/2018
Type of Sample	: Ground Water	Sample Id No.	: GW/18/01/65
Sampling Location	: Bore Well No. 3 Near Stack Yard	Test Start Date	: 13/01/2018
Sampling Date	: 11/01/2018	Test End Date	: 19/01/2018

Sl. No.	Parameter test	Unit	Standard against which test are performed	Norms as per IS:10500-2012		Result
				Desirable Limit	Permissible Limit	
1	Temperature (Collection Time)	°C	IS: 3025 (Part-9) 1084 RA 2002	Not specified		34.1
2	Turbidity	NTU	APHA 23rd Edn. 2017. 2130 B	1	5	3.0
3	pH value	-	APHA 23rd Edn. 2017. 4500 H+B	6.5-8.5	No Relaxation	6.9
4	Total Suspended Solids (as TSS)	mg/l	APHA 23rd Edn. 2017. 2540 D	Not specified		<2.5
5	Total Dissolved Solids (as TDS)	mg/l	APHA 23rd Edn. 2017. 2540 C	500	1000	126.0
6	Sp. Conductivity at 25°C	µS/cm	APHA 23rd Edn. 2017. 2510 B	Not specified		220.0
7	Calcium Hardness (as CaCO ₃)	mg/l	IS: 3025 (Part-40):1993 RA 2014	Not specified		49.8
8	Bio-Chemical Oxygen Demand (BOD)	mg/l	IS: 3025 (Part-44) 1993 RA 2014	-	-	<1.0
9	Chemical Oxygen Demand (COD)	mg/l	APHA 23rd Edn. 5220 B.2017	-	-	3.1
10	Oil & Grease	mg/l	APHA 23rd Edn. 5220 B.2017	-	-	<1.0
11	Total Hardness (as CaCO ₃)	mg/l	IS:3025(Part-21) RA 2014	200	600	81.8
12	Mercury (as Hg)	mg/l	APARTHA 23rd Edn. 2017. 3112B	0.001	No Relaxation	<0.002
13	Lead (as Pb)	mg/l	APARTHA 23rd Edn. 2017. 3111B	0.01	No Relaxation	<0.01
14	Iron (as Fe)	mg/l	APARTHA 23rd Edn. 2017. 3111B	0.3	No Relaxation	0.81
15	Copper (as Cu)	mg/l	APARTHA 23rd Edn. 2017. 3111B	0.05	1.5	<0.01
16	Total Chromium (as Cr)	mg/l	APARTHA 23rd Edn. 2017. 3111B	0.05	No Relaxation	<0.01
17	Zinc (as Zn)	mg/l	APARTHA 23rd Edn. 2017. 3111B	5	25	0.07
18	Arsenic (as As)	mg/l	APARTHA 23rd Edn. 2017. 3114C	0.01	0.05	<0.01
19	Cadmium (as Cd)	mg/l	APARTHA 23rd Edn. 2017. 3111B	0.003	No Relaxation	<0.002
20	Nickel (as Ni)	mg/l	APARTHA 23rd Edn. 2017. 3111B	0.02	No Relaxation	<0.005
21	Manganese (as Mn)	mg/l	APARTHA 23rd Edn. 2017. 3111B	0.1	0.3	0.05
22	Fluoride (as F)	mg/l	APARTHA 23rd Edn. 2017. 4500 F.D.	1	1.5	0.32
23	Chloride (as Cl)	mg/l	APARTHA 23rd Edn. 2017. 4500 Cl B	250	1000	10.1
24	Sulphate (as SO ₄)	mg/l	IS:3025 (Part-24) RA 2014	200	400	1.8
25	Sulfite (as SO ₃)	mg/l	IS:3025 (Part-24) RA 2014	-	-	<0.005
26	Nitrate (as NO ₃)	mg/l	APARTHA 23rd Edn. 2017. 4500NO ₃ -D	45	No Relaxation	0.08
27	Nitrite (as NO ₂)	mg/l	APARTHA 23rd Edn. 2017. 4500NO ₂ -B	Not specified		<0.01
28	Phenolic Compounds(as C ₆ H ₅ OH)	mg/l	APARTHA 23rd Edn. 2017:5530 D	0.001	0.002	<0.001

The results relate only to the parameters tested.

...end of report.

Tanmoy Chakrabarty

Tanmoy Chakrabarty
Quality Manager

Authorized Signatory
For Pollution And Project Consultants



*Test Certificate shall not be reproduced except in full, without written approval of the laboratory.

LABORATORY FOR ANALYSIS OF AIR, EFFLUENT, SOLIDWASTE, COAL, ORE. ETC.

Office & Laboratory : P-145, Bangur Avenue, Block - A, Kolkata - 700 055

Phone : (033) 2574-3418 / 2984 • Fax : (033) 2574-2984

E-mail : ppconsultants@awsppc.in / awsppc@airtelmail.in • Web : www.awsppcenvirogroup.com



POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals & Chemical Project Engineers, EIA & Disaster Management Study

FORMAT NO.: PPC/FM/67 ISSUE NO.: 03 ISSUE Dt.: 01/01/2017 (Rev. No.: 01 Rev. Dt. 01/01/2018)

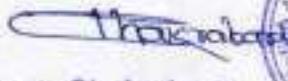
Page 1 of 1

TEST REPORT STACK GAS

CUSTOMER NAME : M/s. JSW Cement Limited,		DATE OF SAMPLING : 17.03.2018	
ADDRESS : Salboni, Paschim Medinipur, West Bengal		TIME OF SAMPLING : 12:30 P.M.	
LOCATION : Stack #2		REPORT NO. : G/18(03)/09	
SAMPLE ID NO. : GS/18(03)/09		REPORT DATE : 29/03/2018	
		TYPE OF SAMPLE : Stack Gas	
A : GENERAL INFORMATION ABOUT STACK		B. ANALYSIS/CHARACTERISTICS OF FUEL	
1 STACK CONNECTED TO : Stack #2		1 EMISSION DUE TO : Grinding process	
2 MATERIAL OF CONSTRUCTION : M.S.		2 FUEL USED : --	
3 SHAPE OF THE DUCT : Circular		3 FUEL CONSUMPTION : --	
4 HEIGHT OF THE STACK :		4 CALORIFIC VALUE (K-Cal/Kg) : --	
a) From Ground Level (M) : 55.0		5 SULPHUR CONTENT (% by wt) : --	
b) From Roof Level : --		6 ASH CONTENT (% by wt) : --	
5 DIAMETER OF THE STACK :		7 AIR FLOW : --	
a) Top (M) : 3.5			
b) Bottom (M) : --		C : STEAM GENERATION CAPACITY	
c) Sampling Point (M) : 3.5		a) RATED : --	
6 HEIGHT OF THE SAMPLING PORT :		b) RUNNING : --	
a) From Ground Level (M) : 40.0		Load	
b) From Lower Disturbing Zone (M) : --		a) RATED : 100 TPH	
		b) RUNNING : 100 TPH (OPC Grinding)	
7 WHETHER STACK IS PROVIDED WITH PERMANENT PLATFORM /LADDER: Yes		POLLUTION CONTROL DEVICE : Bag filter.	
D. RESULT OF SAMPLING	Unit	Method of Test (Reference)	Result
1 TEMPERATURE OF EMISSION	deg C	IS:11255 (Part 1):1985 (RA2012) & (Part 3):2013	: 93
2 BARMETRIC PRESSURE	mmHg	IS:11255 (Part 1):1985 (RA2012) & (Part 3):2013	: 757
3 VELOCITY OF GAS FLOW	M/Sec	IS:11255 (Part 1):1985 (RA2012) & (Part 3):2013	: 7.1
4 QUANTITY OF GAS FLOW	Nm ³ /hr.	IS:11255 (Part 1):1985 (RA2012) & (Part 3):2013	: 19956 [±] 3
5 CONCENTRATION OF PARTICULATE MATTER	mg/Nm ³	IS:11255 (Part 1):1985 (RA2012) & (Part 3):2013	: 14.5
6 PARTICULATE MATTER NORMALISED TO 12 % CO ₂	mg/Nm ³	IS:11255 (Part 1):1985 (RA2012) & (Part 3):2013	: N.A.
7 CONCENTRATION OF SULPHUR DIOXIDE	mg/Nm ³	IS:11255 (Part 2):1985 (RA 2014)	: N.A.
8 CONCENTRATION OF NITROGEN DIOXIDE	mg/Nm ³	IS:11255 (Part 7):2005 (RA 2017)	: N.A.
9 CONCENTRATION OF OXYGEN	% v/v	APHA 3 rd Air Analysis Method- 134	: 20.4
10 CONCENTRATION OF CARBON DIOXIDE	% v/v	APHA 3 rd Air Analysis Method- 134	: <0.2
11 CONCENTRATION OF CARBON MONOXIDE	% v/v	APHA 3 rd Air Analysis Method- 134	: <0.2

The results relate only to the parameters tested.

....end of report..


Tanmoy Chakrabarty
Quality Manager

Authorized Signatory

For Pollution And Project Consultants



* Test Certificate shall not be reproduced except in full, without written approval of the laboratory.

LABORATORY FOR ANALYSIS OF AIR, EFFLUENT, SOLIDWASTE, COAL, ORE. ETC.

Office & Laboratory : P-145, Bangur Avenue, Block - A, Kolkata - 700 055

Phone : (033) 2574-3418 / 2984 • Fax : (033) 2574-2984

E-mail : ppconsultants@awsppc.in / awsppc@airtelmail.in • Web : www.awsppcenvirogroup.com



POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals
& Chemical Project Engineers. EIA & Disaster Management Study

FORMAT NO.: PPC/FM/67 ISSUE NO.: 03 ISSUE Dt.: 01/01/2017 (Rev. No.: 01 Rev. Dt. 01/01/2018)

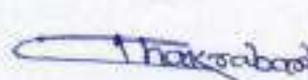
Page 1 of 1

TEST REPORT STACK GAS

CUSTOMER NAME : M/s. JSW Cement Limited,	DATE OF SAMPLING : 17.03.2018		
ADDRESS : Salboni, Paschim Medinipur, West Bengal	TIME OF SAMPLING : 2:40 P.M		
LOCATION : Stack #1	REPORT NO. : G/18/03/08		
SAMPLE ID NO. : GS/18/03/08	REPORT DATE : 29/03/2018		
	TYPE OF SAMPLE : Stack Gas		
A : GENERAL INFORMATION ABOUT STACK			
1 STACK CONNECTED TO : Stack #1	B. ANALYSIS/CHARACTERISTICS OF FUEL		
2 MATERIAL OF CONSTRUCTION : M.S.	1 EMISSION DUE TO : Grinding process		
3 SHAPE OF THE DUCT : Circular	2 FUEL USED : --		
4 HEIGHT OF THE STACK :	3 FUEL CONSUMPTION : --		
a) From Ground Level (M) : 55.0	4 CALDRIFIC VALUE (K-Cal/Kg) : --		
b) From Roof Level : --	5 SULPHUR CONTENT (% by wt) : --		
5 DIAMETER OF THE STACK :	6 ASH CONTENT (% by wt) : --		
a) Top (M) : 3.5	7 AIR FLOW : --		
b) Bottom (M) : --	C - STEAM GENERATION CAPACITY		
c) Sampling Point (M) : 3.5	a) RATED : --		
6 HEIGHT OF THE SAMPLING PORT :	b) RUNNING : --		
a) From Ground Level (M) : 40.0	Load		
b) From Lower Disturbing Zone (M) : --	a) RATED : 100 TPH		
	b) RUNNING : 100 TPH (OPC Grinding)		
7 WHETHER STACK IS PROVIDED WITH PERMANENT PLATFORM /LADDER: Yes	POLLUTION CONTROL DEVICE : Bag filter		
D. RESULT OF SAMPLING			
	Unit	Method of Test (Reference)	Result
1 TEMPERATURE OF EMISSION	deg C	IS:11255 (Part 1):1985 (RA2012) & (Part 3):2013	: 92
2 BAROMETRIC PRESSURE	mmHg	IS:11255 (Part 1):1985 (RA2012) & (Part 3):2013	: 757
3 VELOCITY OF GAS FLOW	M/Sec	IS:11255 (Part 1):1985 (RA2012) & (Part 3):2013	: 6.7
4 QUANTITY OF GAS FLOW	Nm ³ /Hr.	IS:11255 (Part 1):1985 (RA2012) & (Part 3):2013	: 188839.45
5 CONCENTRATION OF PARTICULATE MATTER	mg/Nm ³	IS:11255 (Part 1):1985 (RA2012) & (Part 3):2013	: 12.0
6 PARTICULATE MATTER NORMALISED TO 12 % CO ₂	mg/Nm ³	IS:11255 (Part 1):1985 (RA2012) & (Part 3):2013	: N.A.
7 CONCENTRATION OF SULPHUR DIOXIDE	mg/Nm ³	IS:11255 (Part 2):1985 (RA 2014)	: N.A.
8 CONCENTRATION OF NITROGEN DIOXIDE	mg/Nm ³	IS:11255 (Part 7):2005 (RA 2017)	: N.A.
9 CONCENTRATION OF OXYGEN	% v/v	APHA 3 rd Air Analysis Method- 134	: 20.4
10 CONCENTRATION OF CARBON DIOXIDE	% v/v	APHA 3 rd Air Analysis Method- 134	: <0.2
11 CONCENTRATION OF CARBON MONOXIDE	% v/v	APHA 3 rd Air Analysis Method- 134	: <0.2

The results relate only to the parameters tested.

--- end of report ---


Tanmoy Chakrabarty
 Quality Manager
 Authorized Signatory
 For Pollution And Project Consultants



*Test Certificate shall not be reproduced except in full, without written approval of the laboratory.

LABORATORY FOR ANALYSIS OF AIR, EFFLUENT, SOLIDWASTE, COAL, ORE. ETC.

Office & Laboratory : P-145, Bangur Avenue, Block - A, Kolkata - 700 055

Phone : (033) 2574-3418 / 2984 • Fax : (033) 2574-2984

E-mail : ppconsultants@awsppc.in / awsppc@airtelmail.in • Web : www.awsppcenvirogroup.com



POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals
& Chemical Project Engineers. EIA & Disaster Management Study

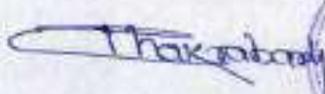
FORMAT NO.: PPC/FM/68 ISSUE NO.: 03 ISSUE Dt.: 01/01/2017 (Rev No.:01 Rev. Dt. 01/01/2018) Page 1 of 1

TEST REPORT AMBIENT AIR

Customer Name	: M/s. JSW Cement Limited,	Report No.	: G/18(03)/02			
Address	: Salboni, Paschim Medinipur, West Bengal	Report Date	: 29/03/2018			
Type of Sample	: Ambient Air	Sample Id No.	: GA/18(03)/02			
Location of Sampling	: Project Office(N)	Date Sampling	: 15/16.03.2018			
Environmental Conditions						
Average Temperature (°C): 34		Average Relative Humidity (%): 75		Barometric Pressure (mm/Hg): 759		
Sl. No.	Parameters	Unit	Result	Standard	Time Weighted Average	Standard Ref. Methods
1	Particulate Matter ₁₀ (as PM ₁₀)	µg/m ³	61.0	100	24 Hours	IS:5182 (Part -23) : 2006 RA 2017
2	Particulate Matter _{2.5} (as PM _{2.5})	µg/m ³	30.2	60	24 Hours	In house Method SOP No. SOP/02/02 Issue Date 02.04.15 (Prepared based on CPCB Guidelines)
3	Sulphur dioxides (as SO ₂)	µg/m ³	8.0	80	24 Hours	IS:5182 (Part -2) : 2001 RA 2017
4	Nitrogen dioxides (as NO ₂)	µg/m ³	24.0	80	24 Hours	IS:5182 (Part - 6) : 2006 RA 2017
5	Carbon monoxide (as CO)	mg/m ³	0.5	4	24 Hours	APHA (Air Analysis) 3 rd Edition Method 128

The results relate only to the parameters tested

...end of report....


Tanmoy Chakrabarty
Quality Manager
Authorised Signatory



For Pollution And Project Consultants

* Test Certificate shall not be reproduced except in full, without written approval of the laboratory.

LABORATORY FOR ANALYSIS OF AIR, EFFLUENT, SOLIDWASTE, COAL, ORE. ETC.

Office & Laboratory : P-145, Bangur Avenue, Block - A, Kolkata - 700 055

Phone : (033) 2574-3418 / 2984 ● Fax : (033) 2574-2984

E-mail : ppconsultants@awsppc.in / awsppc@airtelmail.in ● Web : www.awsppcenvirogroup.com



POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals
& Chemical Project Engineers. EIA & Disaster Management Study

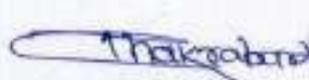
FORMAT NO.: PPC/FM/68 ISSUE NO.: 03 ISSUE Dt.: 01/01/2017 (Rev No.:01 Rev. Dt. 01/01/2018) Page 1 of 1

TEST REPORT AMBIENT AIR

Customer Name	: M/s. JSW Cement Limited,	Report No.	: G/18(03)/03			
Address	: Salboni, Paschim Medinipur, West Bengal	Report Date	: 29/03/2018			
Type of Sample	: Ambient Air	Sample Id No.	: GA/18(03)/03			
Location of Sampling	: Near Staff Colony (Inside Ankur Company)(NW)	Date Sampling	: 15/16.03.2018			
Environmental Conditions						
Average Temperature (°C): 34		Average Relative Humidity (%): 75				
Barometric Pressure (mm/Hg): 759						
Sl. No.	Parameters	Unit	Result	Standard	Time Weighted Average	Standard Ref. Methods
1	Particulate Matter ₁₀ (as PM ₁₀)	µg/m ³	52.0	100	24 Hours	IS:5182 (Part -23) : 2006 RA 2017
2	Particulate Matter _{2.5} (as PM _{2.5})	µg/m ³	30.3	60	24 Hours	In house Method SOP No. SOP/02/02 Issue Date 02.04.15 (Prepared based on CPCB Guidelines)
3	Sulphur dioxide (as SO ₂)	µg/m ³	11.0	80	24 Hours	IS:5182 (Part -2) : 2001 RA 2017
4	Nitrogen dioxide (as NO ₂)	µg/m ³	20.0	80	24 Hours	IS:5182 (Part - 6) : 2006 RA 2017
5	Carbon monoxide (as CO)	mg/m ³	0.5	4	24 Hours	APHA (Air Analysis) 3 rd Edition Method 128

The results relate only to the parameters tested.

...end of report....


Tanmoy Chakrabarty
Quality Manager
Authorised Signatory

For Pollution And Project Consultants



* Test Certificate shall not be reproduced except in full, without written approval of the laboratory.

LABORATORY FOR ANALYSIS OF AIR, EFFLUENT, SOLIDWASTE, COAL, ORE. ETC.

Office & Laboratory : P-145, Bangur Avenue, Block - A, Kolkata - 700 055

Phone : (033) 2574-3418 / 2984 • Fax : (033) 2574-2984

E-mail : ppconsultants@awsppc.in / awsppc@airtelmail.in • Web : www.awsppcenvirogroup.com



POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals
& Chemical Project Engineers. EIA & Disaster Management Study

FORMAT NO.: PPC/FM/68 ISSUE NO.: 03 ISSUE Dt.: 01/01/2017 (Rev No.:01 Rev. Dt. 01/01/2018) Page 1 of 1

TEST REPORT AMBIENT AIR

Customer Name	: M/s. JSW Cement Limited,	Report No.	: G/18(03)/04			
Address	: Salboni, Paschim Medinipur, West Bengal	Report Date	: 29/03/2018			
Type of Sample	: Ambient Air	Sample Id No.	: GA/18(03)/04			
Location of Sampling	: Labour Colony (E)	Date Sampling	: 16/17.03.2018			
Environmental Conditions						
Average Temperature (°C): 35		Average Relative Humidity (%): 75				
Barometric Pressure (mm/Hg): 759						
Sl. No.	Parameters	Unit	Result	Standard	Time Weighted Average	Standard Ref. Methods
1	Particulate Matter ₁₀ (as PM ₁₀)	µg/m ³	58.0	100	24 Hours	IS:5182 (Part -23) : 2006 RA 2017
2	Particulate Matter _{2.5} (as PM _{2.5})	µg/m ³	45.0	60	24 Hours	In house Method SOP No. SOP/02/02 Issue Date 02.04.15 (Prepared based on CPCB Guidelines)
3	Sulphur dioxide (as SO ₂)	µg/m ³	10.0	80	24 Hours	IS:5182 (Part -2) : 2001 RA 2017
4	Nitrogen dioxide (as NO ₂)	µg/m ³	22.0	80	24 Hours	IS:5182 (Part - 6) : 2006 RA 2017
5	Carbon monoxide (as CO)	mg/m ³	0.4	4	24 Hours	APHA (Air Analysis) 3 rd Edition Method 128

The results relate only to the parameters tested.

...end of report....

Tanmoy Chakrabarty
Quality Manager
Authorised Signatory

For Pollution And Project Consultants

* Test Certificate shall not be reproduced except in full, without written approval of the laboratory.

LABORATORY FOR ANALYSIS OF AIR, EFFLUENT, SOLIDWASTE, COAL, ORE, ETC.

Office & Laboratory : P-145, Bangur Avenue, Block - A, Kolkata - 700 055

Phone : (033) 2574-3418 / 2984 • Fax : (033) 2574-2984

E-mail : ppconsultants@awsppc.in / awsppc@airtelmail.in • Web : www.awsppcenvirogroup.com



POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals
& Chemical Project Engineers. EIA & Disaster Management Study

FORMAT NO.: PPC/FM/68 ISSUE NO.: 03 ISSUE Dt.: 01/01/2017 (Rev No.:01 Rev. Dt. 01/01/2018) Page 1 of 1

TEST REPORT AMBIENT AIR

Customer Name	: M/s. ISW Cement Limited,	Report No.	: G/18(03)/05			
Address	: Salboni, Paschim Medinipur, West Bengal	Report Date	: 29/03/2018			
Type of Sample	: Ambient Air	Sample Id No.	: GA/18(03)/05			
Location of Sampling	: Near Railway Siding (5)	Date Sampling	: 16/17.03.2018			
Environmental Conditions						
Average Temperature (°C): 34 Average Relative Humidity (%): 75 Barometric Pressure (mm/Hg): 759						
Sl. No.	Parameters	Unit	Result	Standard	Time Weighted Average	Standard Ref. Methods
1	Particulate Matter ₁₀ (as PM ₁₀)	µg/m ³	78.0	100	24 Hours	IS:5182 (Part -23) : 2006 RA 2017
2	Particulate Matter _{2.5} (as PM _{2.5})	µg/m ³	47.0	60	24 Hours	In house Method SOP No. SOP/02/02 Issue Date 02.04.15 (Prepared based on CPCB Guidelines)
3	Sulphur dioxide (as SO ₂)	µg/m ³	12.0	80	24 Hours	IS:5182 (Part -2) : 2001 RA 2017
4	Nitrogen dioxide (as NO ₂)	µg/m ³	24.0	80	24 Hours	IS:5182 (Part - 6) : 2006 RA 2017
5	Carbon monoxide (as CO)	mg/m ³	0.6	4	24 Hours	APHA (Air Analysis) 3 rd Edition Method 128

The results relate only to the parameters tested

...end of report....

Tanmoy Chakrabarty
Quality Manager
Authorised Signatory

For Pollution And Project Consultants



* Test Certificate shall not be reproduced except in full, without written approval of the laboratory.

LABORATORY FOR ANALYSIS OF AIR, EFFLUENT, SOLIDWASTE, COAL, ORE. ETC.

Office & Laboratory : P-145, Bangur Avenue, Block - A, Kolkata - 700 055

Phone : (033) 2574-3418 / 2984 ● Fax : (033) 2574-2984

E-mail : ppconsultants@awsppc.in / awsppc@airtelmail.in ● Web : www.awsppcenvirogroup.com



POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals
& Chemical Project Engineers. EIA & Disaster Management Study

FORMAT NO.: PPC/FM/68 ISSUE NO.: 03 ISSUE Dt.: 01/01/2017 (Rev No.:01 Rev. Dt. 01/01/2018) Page 1 of 1

TEST REPORT AMBIENT AIR

Customer Name	: M/s. JSW Cement Limited,	Report No.	: G/18(03)/06			
Address	: Saiboni, Paschim Medinipur, West Bengal	Report Date	: 29/03/2018			
Type of Sample	: Ambient Air	Date Sampling	: GA/18(03)/06			
Location of Sampling	: Near Proposed CPP Area(SSW)	Sample Id No.	: 18/19.03.2018			
Environmental Conditions						
Average Temperature (°C): 34 Average Relative Humidity (%): 75 Barometric Pressure (mm/Hg): 759						
Sl. No.	Parameters	Unit	Result	Standard	Time Weighted Average	Standard Ref. Methods
1	Particulate Matter ₁₀ (as PM ₁₀)	µg/m ³	68.0	100	24 Hours	IS:5182 (Part -23) : 2006 RA 2017
2	Particulate Matter _{2.5} (as PM _{2.5})	µg/m ³	42.0	60	24 Hours	In house Method SOP No. SOP/02/02 issue Date 02.04.15 (Prepared based on CPCB Guidelines)
3	Sulphur dioxide (as SO ₂)	µg/m ³	12.0	80	24 Hours	IS:5182 (Part -2) : 2001 RA 2017
4	Nitrogen dioxide (as NO ₂)	µg/m ³	22.0	80	24 Hours	IS:5182 (Part - 6) : 2006 RA 2017
5	Carbon monoxide (as CO)	mg/m ³	0.50	4	24 Hours	APHA (Air Analysis) 3 rd Edition Method 128

The results relate only to the parameters tested

...end of report....

Tanmoy Chakrabarty
Quality Manager
Authorised Signatory

For Pollution And Project Consultants

* Test Certificate shall not be reproduced except in full, without written approval of the laboratory.

LABORATORY FOR ANALYSIS OF AIR, EFFLUENT, SOLIDWASTE, COAL, ORE. ETC.

Office & Laboratory : P-145, Bangur Avenue, Block - A, Kolkata - 700 055

Phone : (033) 2574-3418 / 2984 ● Fax : (033) 2574-2984

E-mail : ppconsultants@awsppc.in / awsppc@airtelmail.in ● Web : www.awsppcenvirogroup.com



POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals
& Chemical Project Engineers. EIA & Disaster Management Study

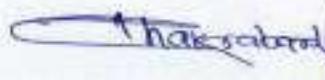
FORMAT NO.: PPC/FM/68 ISSUE NO.: 03 ISSUE Dt.: 01/01/2017 (Rev No.:01 Rev. Dt. 01/01/2018) Page 1 of 1

TEST REPORT AMBIENT AIR

Customer Name	: M/s. JSW Cement Limited,	Report No.	: G/18(03)/07			
Address	: Salboni, Paschim Medinipur, West Bengal	Report Date	: 29/03/2018			
Type of Sample	: Ambient Air	Date Sampling	: GA/18(03)/07			
Location of Sampling	: Near Godapiasal Village (SE)	Sample Id No.	: 17/18.03.2018			
Environmental Conditions						
Average Temperature (°C): 33 Average Relative Humidity (%): 75 Barometric Pressure (mm/Hg): 759						
Sl. No.	Parameters	Unit	Result	Standard	Time Weighted Average	Standard Ref. Methods
1	Particulate Matter ₁₀ (as PM ₁₀)	µg/m ³	78.0	100	24 Hours	IS:5182 (Part-23) : 2006 RA 2017
2	Particulate Matter _{2.5} (as PM _{2.5})	µg/m ³	45.5	60	24 Hours	In house Method SOP No. SOP/02/02 Issue Date 02.04.15 (Prepared based on CPCB Guidelines)
3	Sulphur dioxide (as SO ₂)	µg/m ³	16.0	80	24 Hours	IS:5182 (Part-2) : 2001 RA 2017
4	Nitrogen dioxide (as NO ₂)	µg/m ³	24.0	80	24 Hours	IS:5182 (Part-6) : 2006 RA 2017
5	Carbon monoxide (as CO)	mg/m ³	0.69	4	24 Hours	APHA (Air Analysis) 3 rd Edition Method 128

The results relate only to the parameters tested

...and of report....


Tanmoy Chakrabarty
Quality Manager
Authorised Signatory



For Pollution And Project Consultants

* Test Certificate shall not be reproduced except in full, without written approval of the laboratory.

LABORATORY FOR ANALYSIS OF AIR, EFFLUENT, SOLIDWASTE, COAL, ORE. ETC.

Office & Laboratory : P-145, Bangur Avenue, Block - A, Kolkata - 700 055

Phone : (033) 2574-3418 / 2984 ● Fax : (033) 2574-2984

E-mail : ppconsultants@awsppc.in / awsppc@airtelmail.in ● Web : www.awsppcenvirogroup.com



POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals
& Chemical Project Engineers. EIA & Disaster Management Study

Format No. PPC/PM/71

Issue No. 03

Issue Dt. 01/01/2017 (Rev.No.01 Rev. Dt. 01/01/2018)

Page 1 of 1

TEST REPORT

Water Sample

Customer Name : M/s. ISW Cement Limited,		Address : Salboni, Paschim Medinipur, West Bengal		Report No. : GW/18/03/785	Report Date : 29/03/2018	Sample Id No. : GW/18/03/706	Sampling Date : 16/03/2018	Test Start Date : 22/03/2018	Test End Date : 29/03/2018
Type of Sample : Ground Water		Sampling Location : Bore Well No. 1 Near Packing Plant							
Sl. No.	Parameter test	Unit	Standard against which test are performed	Norms as per IS:10500-2012		Result			
				Desirable Limit	Permissible Limit				
1	Temperature (Collection Time)	°C	IS: 3025 (Part-9) 1984 RA 2002	Not specified		23.0			
2	Turbidity	NTU	APHA 23rd Edn. 2017. 2130 B	1	5	9.0			
3	pH value	-	APHA 23rd Edn. 2017. 4500 H+B	6.5 - 8.5	No Relaxation	7.32			
4	Total Suspended Solids (as TSS)	mg/l	APHA 23rd Edn. 2017. 2540 D	Not specified		2.50			
5	Total Dissolved Solids (as TDS)	mg/l	APHA 23rd Edn. 2017. 2540 C	500	2000	210.0			
6	Sp. Conductivity at 25°C	µS/cm	APHA 23rd Edn. 2017. 2510 B	Not specified		440.0			
7	Calcium Hardness (as CaCO ₃)	mg/l	IS: 3025 (Part-40):1991 RA 2014	Not specified		91.60			
8	Bio-Chemical Oxygen Demand (BOD)	mg/l	IS: 3025 (Part-44) 1993 RA 2014	-	-	<1.0			
9	Chemical Oxygen Demand (COD)	mg/l	APHA 23rd Edn. 2017. 5220 B:2017	-	-	4.20			
10	Oil & Grease	mg/l	APHA 23rd Edn. 2017. 5220 B:2017	-	-	<1.0			
11	Total Hardness (as CaCO ₃)	mg/l	IS:3025 (Part-21) RA 2014	300	600	138.57			
12	Mercury (as Hg)	mg/l	APHA 23rd Edn. 2017. 3112B	0.001	No Relaxation	<0.0002			
13	Lead (as Pb)	mg/l	APHA 23rd Edn. 2017. 3112B	0.01	No Relaxation	<0.005			
14	Iron (as Fe)	mg/l	APHA 23rd Edn. 2017. 3112B	0.3	No Relaxation	2.20			
15	Copper (as Cu)	mg/l	APHA 23rd Edn. 2017. 3112B	0.05	1.5	<0.01			
16	Total Chromium (as Cr)	mg/l	APHA 23rd Edn. 2017. 3112B	0.05	No Relaxation	<0.01			
17	Zinc (as Zn)	mg/l	APHA 23rd Edn. 2017. 3112B	5	15	0.15			
18	Arsenic (as As)	mg/l	APHA 23rd Edn. 2017. 3114C	0.01	0.05	<0.01			
19	Cadmium (as Cd)	mg/l	APHA 23rd Edn. 2017. 3111B	0.003	No Relaxation	<0.001			
20	Nickel (as Ni)	mg/l	APHA 23rd Edn. 2017. 3111B	0.02	No Relaxation	<0.005			
21	Manganese (as Mn)	mg/l	APHA 23rd Edn. 2017. 3111B	0.1	0.3	0.070			
22	Fluoride (as F)	mg/l	APHA 23rd Edn. 2017. 4500 F.D.	1	1.5	0.35			
23	Chloride (as Cl)	mg/l	APHA 23rd Edn. 2017. 4500 Cl B	250	1000	15.68			
24	Sulphate (as SO ₄)	mg/l	IS:3025 (Part-24) RA 2014	200	400	6.0			
25	Sulfite (as SO ₃)	mg/l	IS:3025 (Part-24) RA 2014	-	-	<0.005			
26	Nitrate (as NO ₃)	mg/l	APHA 23rd Edn. 2017. 4500NO ₃ -D	45	No Relaxation	0.25			
27	Nitrite (as NO ₂)	mg/l	APHA 23rd Edn. 2017. 4500NO ₂ -B	Not specified		<0.01			
28	Phenolic Compounds(as C ₆ H ₅ OH)	mg/l	APHA 23rd Edn. 2017-5530 D	0.001	0.002	<0.001			

The results relate only to the parameters tested.

...end of report...

Tanmoy Chakrabarty

Tanmoy Chakrabarty
Quality Manager

Authorized Signatory

For Pollution And Project Consultants



*Test Certificate shall not be reproduced except in full, without written approval of the laboratory.

LABORATORY FOR ANALYSIS OF AIR, EFFLUENT, SOLIDWASTE, COAL, ORE. ETC.

Office & Laboratory : P-145, Bangur Avenue, Block - A, Kolkata - 700 055

Phone : (033) 2574-3418 / 2984 • Fax : (033) 2574-2984

E-mail : ppconsultants@awsppc.in / awsppc@airtelmail.in • Web : www.awsppcenvirogroup.com



POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals
& Chemical Project Engineers. EIA & Disaster Management Study

Format No. PPC/FM/71

Issue No. 03

Issue Dt. 01/01/2017 (Rev.No.01 Rev. Dt. 01/01/2018)

Page: 1 of 1

TEST REPORT

Water Sample

Customer Name	: M/S. ISW Cement Limited,	Report No.	: GW/18(03)/86
Address	: Salboni, Paschim Medinipur, West Bengal	Report Date	: 29/03/2018
Type of Sample	: Ground Water	Sample Id No.	: GW/18(03)/07
Sampling Location	: Bore Well No. 2 Near COR Building	Sampling Date	: 16/03/2018
		Test Start Date	: 22/03/2018
		Test End Date	: 29/03/2018

Sl. No.	Parameter test	Unit	Standard against which test are performed	Norms as per IS:10500-2012		Result
				Desirable Limit	Permissible Limit	
1	Temperature (Collection Time)	°C	IS: 3025 (Part-9) 1984 RA 2002	Not specified		23.0
2	Turbidity	NTU	APHA 23rd Edn. 2017. 2130 B	1	5	<1.0
3	pH value	--	APHA 23rd Edn. 2017. 4500 H+B	6.5-8.5	No Relaxation	7.88
4	Total Suspended Solids (as TSS)	mg/l	APHA 23rd Edn.2017. 2540 D	Not specified		5.0
5	Total Dissolved Solids (as TDS)	mg/l	APHA 23rd Edn. 2017. 2540 C	500	2000	150.0
6	Sp. Conductivity at 25°C	µS/cm	APHA 23rd Edn. 2017. 2510 B	Not specified		300.0
7	Calcium Hardness (as CaCO ₃)	mg/l	IS: 3025 (Part-40):1993 RA 2014	Not specified		76.26
8	Bio-Chemical Oxygen Demand (BOD)	mg/l	IS: 3025 (Part-44) 1993 RA 2014	--	--	<1.0
9	Chemical Oxygen Demand (COD)	mg/l	APHA 23rd Edn. 5220 B:2017	--	--	3.80
10	Oil & Grease	mg/l	APHA 23rd Edn. 5220 B:2017	--	--	<1.0
11	Total Hardness (as CaCO ₃)	mg/l	IS:3025 (Part-21) RA 2014	200	600	102.30
12	Mercury (as Hg)	mg/l	APHA 23rd Edn. 2017. 3112B	0.001	No Relaxation	<0.0002
13	Lead (as Pb)	mg/l	APHA 23rd Edn. 2017. 3111B	0.01	No Relaxation	<0.005
14	Iron (as Fe)	mg/l	APHA 23rd Edn. 2017. 3111B	0.3	No Relaxation	0.21
15	Copper (as Cu)	mg/l	APHA 23rd Edn. 2017. 3111B	0.05	1.5	<0.01
16	Total Chromium (as Cr)	mg/l	APHA 23rd Edn. 2017. 3111B	0.05	No Relaxation	<0.01
17	Zinc (as Zn)	mg/l	APHA 23rd Edn. 2017. 3111B	5	15	0.080
18	Arsenic (as As)	mg/l	APHA 23rd Edn. 2017. 3114C	0.01	0.05	<0.01
19	Cadmium (as Cd)	mg/l	APHA 23rd Edn. 2017. 3111B	0.001	No Relaxation	<0.001
20	Nickel (as Ni)	mg/l	APHA 23rd Edn. 2017. 3111B	0.02	No Relaxation	<0.003
21	Manganese (as Mn)	mg/l	APHA 23rd Edn. 2017. 3111B	0.1	0.3	0.060
22	Fluoride (as F)	mg/l	APHA 23rd Edn. 2017. 4500 F.D.	1	1.5	0.31
23	Chloride (as Cl)	mg/l	APHA 23rd Edn. 2017. 4500 Cl B	250	1000	13.10
24	Sulphate (as SO ₄)	mg/l	IS:3025 (Part-24) RA 2014	200	400	4.0
25	Sulfite (as SO ₃)	mg/l	IS:3025 (Part-24) RA 2014	--	--	<0.005
26	Nitrate (as NO ₃)	mg/l	APHA 23rd Edn. 2017. 4500NO ₃ -D	45	No Relaxation	0.21
27	Nitrite (as NO ₂)	mg/l	APHA 23rd Edn. 2017. 4500NO ₂ -B	Not specified		<0.01
28	Phenolic Compounds (as C ₆ H ₅ OH)	mg/l	APHA 23rd Edn. 2017-5530 D	0.001	0.002	<0.001

The results relate only to the parameters tested.

...end of report...

Tanmoy Chakrabarty
Quality Manager

Authorized Signatory
For Pollution And Project Consultants



*Test Certificate shall not be reproduced except in full, without written approval of the laboratory.

LABORATORY FOR ANALYSIS OF AIR, EFFLUENT, SOLIDWASTE, COAL, ORE, ETC.

Office & Laboratory : P-145, Bangur Avenue, Block - A, Kolkata - 700 055

Phone : (033) 2574-3418 / 2984 • Fax : (033) 2574-2984

E-mail : ppconsultants@awsppc.in / awsppc@airtelmail.in • Web : www.awsppcenvirogroup.com



POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals
& Chemical Project Engineers. EIA & Disaster Management Study

Format No. PPC/FM/71

Issue No. 03

Issue Dt. 01/01/2017 (Rev.No.01 Rev. Dt. 01/01/2018)

Page. 1 of 1

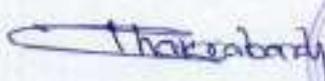
TEST REPORT Water Sample

Customer Name	: M/S. JSW Cement Limited,	Report No.	: GW/18/03/87
Address	: Salboni, Paschim Medinipur, West Bengal	Report Date	: 23/03/2018
Type of Sample	: Ground Water	Sample Id No.	: GW/18/03/08
Sampling Location	: Bore Well No. 3 Near Stack Yard	Sampling Date	: 16/03/2018
		Test Start Date	: 22/03/2018
		Test End Date	: 19/03/2018

Sl. No.	Parameter test	Unit	Standard against which test are performed	Norms as per IS:10500-2012		Result
				Desirable Limit	Permissible Limit	
1	Temperature (Collection Time)	°C	IS: 3025 (Part-8) 1984 RA 2002	Not specified		22.0
2	Turbidity	NTU	APHA 23rd Edn. 2017. 2330 B	1	5	4.0
3	pH value	-	APHA 23rd Edn. 2017. 4500 H+B	6.5 - 8.5	No Relaxation	8.10
4	Total Suspended Solids (as TSS)	mg/l	APHA 23rd Edn. 2017. 2540 D	Not specified		<2.5
5	Total Dissolved Solids (as TDS)	mg/l	APHA 23rd Edn. 2017. 2540 C	500	2000	180.0
6	Sp. Conductivity at 25°C	µS/cm	APHA 23rd Edn. 2017. 2510 B	Not specified		450.0
7	Calcium Hardness (as CaCO ₃)	mg/l	IS: 3025 (Part-40):1993 RA 2014	Not specified		93.47
8	Bio-Chemical Oxygen Demand (BOD)	mg/l	IS: 3025 (Part-44) 1993 RA 2014	-	-	<1.0
9	Chemical Oxygen Demand (COD)	mg/l	APHA 23rd Edn. 5220 B:2017	-	-	4.0
10	Oil & Grease	mg/l	APHA 23rd Edn. 5220 B:2017	-	-	<1.0
11	Total Hardness (as CaCO ₃)	mg/l	IS:3025 (Part-21) RA 2014	200	600	140.43
12	Mercury (as Hg)	mg/l	APHA 23rd Edn. 2017. 3112B	0.001	No Relaxation	<0.0002
13	Lead (as Pb)	mg/l	APHA 23rd Edn. 2017. 3111B	0.01	No Relaxation	<0.005
14	Iron (as Fe)	mg/l	APHA 23rd Edn. 2017. 3111B	0.3	No Relaxation	0.86
15	Copper (as Cu)	mg/l	APHA 23rd Edn. 2017. 3111B	0.05	1.5	<0.01
16	Total Chromium (as Cr)	mg/l	APHA 23rd Edn. 2017. 3111B	0.05	No Relaxation	<0.01
17	Zinc (as Zn)	mg/l	APHA 23rd Edn. 2017. 3111B	5	15	0.095
18	Arsenic (as As)	mg/l	APHA 23rd Edn. 2017. 3114C	0.01	0.05	<0.01
19	Cadmium (as Cd)	mg/l	APHA 23rd Edn. 2017. 3111B	0.003	No Relaxation	<0.001
20	Nickel (as Ni)	mg/l	APHA 23rd Edn. 2017. 3111B	0.02	No Relaxation	<0.005
21	Manganese (as Mn)	mg/l	APHA 23rd Edn. 2017. 3111B	0.1	0.3	0.09
22	Fluoride (as F)	mg/l	APHA 23rd Edn. 2017. 4500 F.D	1	1.5	0.38
23	Chloride (as Cl)	mg/l	APHA 23rd Edn. 2017. 4500 Cl B	250	1000	11.0
24	Sulphate (as SO ₄)	mg/l	IS:3025 (Part-24) RA 2014	200	400	7.0
25	Sulfite (as SO ₃)	mg/l	IS:3025 (Part-24) RA 2014	-	-	<0.005
26	Nitrate (as NO ₃)	mg/l	APHA 23rd Edn. 2017. 4500NO ₃ -D	45	No Relaxation	0.26
27	Nitrite (as NO ₂)	mg/l	APHA 23rd Edn. 2017. 4500NO ₂ -B	Not specified		<0.01
28	Phenolic Compounds(as C ₆ H ₅ OH)	mg/l	APHA 23rd Edn. 2017.5530 D	0.001	0.002	<0.001

The results relate only to the parameters tested.

...and of report...


Tanmoy Chakrabarty
 Quality Manager
 Authorized Signatory
 For Pollution And Project Consultants



*Test Certificate shall not be reproduced except in full, without written approval of the laboratory.

LABORATORY FOR ANALYSIS OF AIR, EFFLUENT, SOLIDWASTE, COAL, ORE. ETC.

Office & Laboratory : P-145, Bangur Avenue, Block - A, Kolkata - 700 055

Phone : (033) 2574-3418 / 2984 ● Fax : (033) 2574-2984

E-mail : ppconsultants@awsppc.in / awsppc@airtelmail.in ● Web : www.awsppcenvirogroup.com



POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals
& Chemical Project Engineers, EIA & Disaster Management Study

PPC/FM/66 Issue on : 03 Issue Dt. 01/01/2017 (Rev.No. 01 Rev.Dt.01/01/2018) Page No. 1/1

Report No. : G/18/03/20-22

Date : : 29/03/2018

NOISE LEVEL MONITORING REPORT			
Customer Name	: M/s. JSW Cement Limited,		
Address	: Salboni, Paschim Medinipur, West Bengal		
Sampling Station	Near Project Office	Near Labour Colony (E)	Railway Siding Area
Type of Area	Industrial	Industrial	Industrial
Monitoring Date	15/16.03.2018	15/16.03.2018	15/16.03.2018
Time (In Hrs.)	Hourly Leq dB(A)		
6.00-7.00	58.8	58.0	54.6
7.00-8.00	53.7	65.4	55.1
8.00-9.00	62.9	68.1	59.7
9.00-10.00	65.3	73.3	67.3
10.00-11.00	66.5	71.4	73.0
11.00-12.00	65.3	64.5	69.8
12.00-13.00	68.9	57.6	64.3
13.00-14.00	60.1	64.4	66.3
14.00-15.00	64.4	68.7	63.3
15.00-16.00	72.5	67.7	68.6
16.00-17.00	68.9	71.5	70.6
17.00-18.00	55.1	70.7	71.6
18.00-19.00	59.0	68.6	71.8
19.00-20.00	55.5	61.0	72.7
20.00-21.00	44.7	59.9	68.0
21.00-22.00	43.3	58.1	56.7
22.00-23.00	41.2	52.2	56.7
23.00-0.00	41.6	49.7	55.1
0.00-1.00	39.6	46.2	50.9
1.00-2.00	42.6	44.0	44.3
2.00-3.00	45.9	43.9	44.5
3.00-4.00	42.9	44.2	46.1
4.00-5.00	43.0	50.4	49.2
5.00-6.00	41.1	51.5	50.8
Leq dB(A) Day Time	65.2	68.0	68.7
Leq dB(A) Night Time	42.6	48.9	51.8
The Applicant shall take adequate measures for control of noise levels from its own sources within			
Day time Limit (06:00 A.M.-10:00 P.M.)	75 dB(A)	75 dB(A)	75 dB(A)
Night Time Limit (10:00 P.M.-06:00 A.M.)	70 dB(A)	70 dB(A)	70 dB(A)

Tanmoy Chakrabarty
Quality Manager

Authorized Signatory

For Pollution And Project Consultants

*Test Certificate shall not be reproduced except in full, without written approval of the laboratory.

LABORATORY FOR ANALYSIS OF AIR, EFFLUENT, SOLIDWASTE, COAL, ORE. ETC.

Office & Laboratory : P-145, Bangur Avenue, Block - A, Kolkata - 700 055

Phone : (033) 2574-3418 / 2984 • Fax : (033) 2574-2984

E-mail : ppconsultants@awsppc.in / awsppc@airtelmail.in • Web : www.awsppcenvirogroup.com



POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals
& Chemical Project Engineers. EIA & Disaster Management Study

PPC/FM/66 Issue on : 03 Issue Dt. 01/01/2017 (Rev.No. 01 Rev.Dt.01/01/2018) Page No. 1/1

Report No. : G/18(03)/23-25

Date : 29/03/2018

NOISE LEVEL MONITORING REPORT			
Customer Name	: M/s. JSW Cement Limited,		
Address	: Salboni, Paschim Medinipur, West Bengal		
Sampling Station	Near Proposed CPP Area	Staff Colony (Inside Ankur Company)	Near Godaplasal Village
Type of Area	Industrial	Industrial	Industrial
Monitoring Date	16/17.03.2018	16/17.03.2018	16/17.03.2018
Time (In Hrs.)	Hourly Leq dB(A)		
6.00-7.00	52.7	44.9	51.6
7.00-8.00	58.4	43.7	52.8
8.00-9.00	61.6	47.0	53.6
9.00-10.00	59.2	45.6	53.7
10.00-11.00	62.5	48.2	54.9
11.00-12.00	63.1	53.5	61.7
12.00-13.00	55.4	55.8	66.0
13.00-14.00	61.3	56.9	65.4
14.00-15.00	55.7	59.6	67.6
15.00-16.00	63.7	64.0	71.1
16.00-17.00	65.2	64.7	72.6
17.00-18.00	65.5	65.6	73.5
18.00-19.00	67.4	66.0	75.7
19.00-20.00	62.0	62.9	70.3
20.00-21.00	58.5	59.6	66.1
21.00-22.00	59.3	57.9	64.6
22.00-23.00	56.9	54.6	62.2
23.00-0.00	51.9	53.5	60.3
0.00-1.00	51.8	50.9	59.9
1.00-2.00	49.7	49.4	61.6
2.00-3.00	49.8	49.0	64.1
3.00-4.00	48.7	48.2	55.4
4.00-5.00	47.2	54.8	54.2
5.00-6.00	48.5	49.6	53.1
Leq dB(A) Day Time	62.3	60.7	68.9
Leq dB(A) Night Time	51.7	52.0	60.3
The Applicant shall take adequate measures for control of noise levels from its own sources within premises to conform to :-			
Day time Limit (06:00 A.M.-10:00 P.M.)	75 dB(A)	75 dB(A)	75 dB(A)
Night Time Limit (10:00 P.M.-06:00 A.M.)	70 dB(A)	70 dB(A)	70 dB(A)

Tanmoy Chakrabarty
Tanmoy Chakrabarty
Quality Manager

Authorized Signatory

For Pollution And Project Consultants



*Test Certificate shall not be reproduced except in full, without written approval of the laboratory.

LABORATORY FOR ANALYSIS OF AIR, EFFLUENT, SOLIDWASTE, COAL, ORE. ETC.

Office & Laboratory : P-145, Bangur Avenue, Block - A, Kolkata - 700 055

Phone : (033) 2574-3418 / 2984 • Fax : (033) 2574-2984

E-mail : ppconsultants@awsppc.in / awsppc@airtelmail.in • Web : www.awsppcenvirogroup.com

GOVERNMENT OF WEST BENGAL
DIRECTORATE OF FACTORIES
NEW SECRETARIAT BUILDINGS (8th floor)
1, KIRON SANKAR ROY ROAD, KOLKATA - 700001
REGISTRATION CERTIFICATE

ANNEXURE-II

No. WBF/OL/2018/38/R

Kolkata, January 15, 201

From: The Chief Inspector of Factories, West Bengal,

To: The Occupier

JSW CEMENT LIMITED

VILL-JAMBEDIA DISTRICT: PASCHIM MEDINIPUR, P.

S.: SALBONI, P. O.: SHALBONI S.O. PIN: 721147

Factories Act, 1948 : West Bengal Factories Rules 1958

Sir,

I have the honour to acknowledge receipt of your letter No. AP2017REG000048 dated the 30/06/2017 together with the application for registration and grant of licence in Common Application Form and to State that the premises known as JSW CEMENT LIMITED situated at VILL-JAMBEDIA DISTRICT: PASCHIM MEDINIPUR, P. S.: SALBONI, P. O.: SHALBONI S.O. PIN: 721147 constitute a "factory" as defined "Under Section 2m(i) / Section 2m(ii) / Section 85" of the said Act. Consequently, the provisions of the following Acts and Rules are applicable to you factory and must be adhered to :-

- 1) The Factories Act, 1948
- 2) The West Bengal Factories Rules, 1958
- 3) The Payment of Wages Act, 1936
- 4) The West Bengal Payment of Wages Rules, 1958
- 5) The Maternity Benefit Act, 1961

The registration number of the factory is 0002/MD(W)/X/2017 Date 05/07/2017

The classification No. of the factory is 23942

The Licence No. of the factory is 021015

*Provided women are employed in the factory

Yours faithfully,

KARTIK CHANDRA Digitally signed by KARTIK CHANDRA MANDAL

for Chief Inspector of Factories, West Bengal

Memo No. M/WBF/OL/2018/38/R/4

Date _____

Copy forwarded for information to the :

- 1) Director, National Sample Survey Organisation, FOD, CGO Complex, Salt Lake, 2nd floor, Kolkata - 700 064
- 2) Regional Director, E.S.I. Corporation, 5/1, Grant Lane, Kolkata - 700012.
- 3) Provident Fund Commissioner, West Bengal, DK Block, Sector-II, Salt Lake, Kolkata-91.
- 4) Dy. C.I.F., Statistics, Extn. Office.

The name of the factory should be entered under the classification 23942

The total number of workers proposed to be employed in the factory is 500, KWHP- 15000

Kolkata,

The,

Memo No. M/WBF/OL/2018/38/R

KARTIK CHANDRA Digitally signed by KARTIK CHANDRA MANDAL

for Chief Inspector of Factories, West Bengal
Dated, The

Copy along with Common Application Form (2nd copy for the year _____ forwarded to the Dy. C.I.F & I.F. _____ for information with reference to his U.O. No. _____

dt. _____

KARTIK CHANDRA Digitally signed by KARTIK CHANDRA MANDAL

for Chief Inspector of Factories, West Bengal

From

The Directorate of Factories
The Designated Officer / Authorised Officer

To

JSW CEMENT LIMITED
18-DX, BAY 11, WERIL HILAND PARK, 1925 CHAK GARIA (Name and address of the Applicant)
KOLKATA 700094

Sub: The West Bengal Right to Public Services Act, 2013 - Acknowledgement of application

Re: Your application No. AP2017REG000048 dated 30/06/2017 11:19 PM
I hereby acknowledge your application cited. Due date of service to be provided is 65 working days

OR

The following defects in the application may be rectified urgently (Specify defects, if any)

(2)

Yours faithfully 

Designated Officer / Authorised Officer
(Office Seal)



FORM 4

ANNEXURE-IV

[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.]

007573

4029

PERMIT NO. P1428445003490000003T6E

1. (a) Name of the applicant (user) : Shri Sri M/s JSW Cement Ltd.
- (b) Son/Daughter of : N.A.
- (c) Address of the applicant : JSW Cement Ltd. Duker Complex;
- (d) Category of farmer (Please tick) : Vill - Jambedia, Saltora
(in case of irrigation well) : Small Farmer/Marginal Farmer/Other
- (e) Serial No. of application Form and date of submission : BP/80149; 81-99 dt 09.09.15
- (f) Specimen signature of the user : [Signature]
2. Location particulars—
- (a) District : West Midnapore
- (b) Block, Mouza, J. L. No., Plot No. : Saltora; Jambedia; 445, 349
- (c) Municipality/Corporation
Ward No./Borough No., Holding No.
3. 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) : 20 m.
- (f) Diameter (for dug well) : - m.
- (g) Type of pump to be used : Submersible
- (h) H. P. of the pump : 7.5 H.P.
- (i) Operational device : Electric Motor
- (j) Rate of withdrawal (m³/hr.) : 30m³/hr for 7hrs/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. MidnaporeDate : 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 Sl. (3)(j) 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 of 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.

Office of the Geologist
Geological Sub-Div. No. - I/A, S.W.D.
OFFICE
SEAL

Member Secretary, D.L.A.
Paschim Medinipur

[Signature]
Signature of the Issuing Authority
and Designation
Geologist

Geological Sub-Div. No. - I/A, S.W.D.

Member Secretary, D.L.A.
Paschim Medinipur

Office of the Geologist
Geological Sub-Div. No. - I/A, S.W.D.

OFFICE
SEAL
Member Secretary, D.L.A.
Paschim Medinipur

FORM 4

[See Rules 9(3) and 10(5)]

(EMBLEM OR HOLOGRAM OF THE CONCERNED AUTHORITY)

PERMIT FOR SINKING OF NEW WELL

[UIS 7(3)(b) / 7(4)(b) / 7(5)(a) of the West Bengal Ground Water Resources (Management, Control and Regulation) Act 2005.]

037574

4028

PERMIT NO. P142844500349000000ITSE

- 1. (a) Name of the applicant (user) : Shri Smt M/S JSW Cement Ltd
- (b) Son/Daughter of : N.A.
- (c) Address of the applicant : JSW Cement Ltd; Ankur Complex, Vaid - Jam
- (d) Category of farmer (Please tick) : Media Salbani
(in case of irrigation well) Small Farmer/Marginal Farmer/Other
- (e) Serial No. of application Form and date of submission : BP/B 0149-21-97; dt 09.09.15
- (f) Specimen signature of the user : 
- 2. Location particulars—
 - (a) District : West Midnapore
 - (b) Block, Mouza, J. L. No., Plot No. : Salbani; Jambedia, 445, 349
 - (c) Municipality/Corporation : -
Ward No./Borough No., Holding No.
- 3. 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) : 20 m.
 - (f) Diameter (for dug well) : - m.
 - (g) Type of pump to be used : Submersible
 - (h) H. P. of the pump : 7.5 H.P.
 - (i) Operational device : Electric Motor
 - (j) Rate of withdrawal (m³/hr.) : 30 m³/hr for 7 hrs/day
 - (k) Maximum allowable running hours per day : 30 m³/hr for 7 hrs/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

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

Chinmayi Roy 16/10/15
Signature of the Issuing Authority
and Designation.
Geologist
Geological Sub-Div. No. - IA, S.W.I.D.

- 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) 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.

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

FORM 4

[See Rules 9(3) and 10(5)]

(EMBLEM OR HOLOGRAM OF THE CONCERNED AUTHORITY)

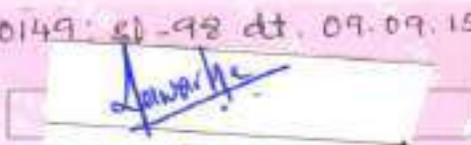
PERMIT FOR SINKING OF NEW WELL

[U/S 7(3)(b) / 7(4)(b) / 7(5)(a) of the West Bengal Ground Water Resources (Management, Control and Regulation) Act 2005.]

037572

4030

PERMIT NO. P1428445003490000002TGE

1. (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 Jambedia; Salboni
- (d) Category of farmer (Please tick) (in case of irrigation well) : Small Farmer/Marginal Farmer/Other
- (e) Serial No. of application Form and date of submission : EP/0 0149: 51-98 dt. 09.09.15
- (f) Specimen signature of the user : 
2. Location particulars—
- (a) District : West Midnapore
- (b) Block, Mouza, J. L. No., Plot No. : Salboni; Jambedia; 445, 349
- (c) Municipality/Corporation Ward No./Borough No., Holding No. : N.A.
3. 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 : F.S.H.P.
- (j) Rate of withdrawal (m³/hr.) : 30m³/hr for 6hrs/day
- (k) Maximum allowable running hours per day : 6hrs/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.

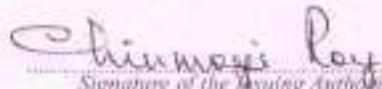
Place : W. Midnapore

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) 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.

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


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

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

4066

FORM 4

[See Rules 9(3) and 10(5)]

(EMBLEM OR HOLOGRAM OF THE CONCERNED AUTHORITY)
PERMIT FOR SINKING OF NEW WELL

035015

[US 7(3)(b) / 7(4)(b) / 7(5)(a) of the West Bengal Ground Water Resources
(Management, Control and Regulation) Act 2005.]

PERMIT NO. P142844600009000001TSE

1. (a) Name of the applicant (user) : Shri/Smt. **JSW CEMENT LIMITED**
 (b) Son/Daughter of : **Salboni, Natunbankali**
 (c) Address of the applicant : **Small Farmer/Marginal Farmer/Other**
 (d) Category of farmer (Please tick) (in case of irrigation well) : **Small Farmer/Marginal Farmer/Other**
 (e) Serial No. of application Form and date of submission : **BP/B 0191, SL-81, Dt-04/08/2017**
 (f) Specimen signature of the user : **[Signature]**
2. Location particulars—
 (a) District : **Paschim Medinipur**
 (b) Block, Mouza, J. L. No., Plot No. : **Salboni, Natunbankali, 446, 4**
 (c) Municipality/Corporation Ward No./Borough No., Holding No.
3. 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**
 (d) Assembly size (for tube well) : **200 mm X 150mm.**
 (e) Approx. strainer length (for tube well) : **m.**
 (f) Diameter (for dug well) : **18 m.**
 (g) Type of pump to be used : **Submersible**
 (h) H. P. of the pump : **7.5 H.P.**
 (i) Operational device : **Electric**
 (j) Rate of withdrawal (m³/hr.) : **30 m³/hr**
 (k) Maximum allowable running hours per day : **7 Hours**

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 : **Midnapore**

Date : **3-11-2017**

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 (3) 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 false at any subsequent stage, this permit is liable for cancellation.
- (4) Any other condition imposed by the concerned Authority.

Office of the Geologist
Geological Sub-Div. No. - IIA S.W.D.
SEAL &
Member Secretary, D.L.A.
Paschim Medinipur

[Signature]
Signature of the Issuing Authority
and Designation.

Geologist
Geological Sub-Div. No. - VI
S.W.D. Medinipur
Member Secretary, D.L.A.
Paschim Medinipur

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

[Signature]
02/11/2017

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.]

035016

4067

PERMIT NO. P1428445003490000001TSE

- (a) Name of the applicant (user) : Shri/Smt. JSW CEMENT LIMITED

(b) Son/Daughter of : *Salboni, Jambedia*

(c) Address of the applicant : *Small Farmer/Marginal Farmer/Other*

(d) Category of farmer (Please tick) (in case of irrigation well) : *BP/B 0191, SL-82, Dt-04/08/2017*

(e) Serial No. of application Form and date of submission : *Taru Chaudhary*

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

(a) District : *Salboni, Jambedia. 445, 349*

(b) Block, Mouza, J. L. No., Plot No. : *-*

(c) Municipality/Corporation 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*

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

(e) Approx. strainer length (for tube well) : *18 m.*

(f) Diameter (for dug well) : *18" Dia.*

(g) Type of pump to be used : *Submersible*

(h) H. P. of the pump : *7.5 H.P.*

(i) Operational device : *Electric*

(j) Rate of withdrawal (m³/hr.) : *30 m³/hr*

(k) Maximum allowable running hours per day : *7 Hours*

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 : *Midnapore*

Date : *3-11-17*

Conditions :

- In case of any change of ownership of the proposed well, fresh registration shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this permit.
- In case, any of the particulars / information furnished by the applicant in his application for issuance of this permit is found to be false or incorrect at any subsequent stage, this permit is liable for cancellation.
- Any other condition imposed by the concerned Authority.

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

Chinmayi Roy
Signature of the Issuing Authority
and Designation, 3/11/17
Geologist
Geological Sub-Div. No. - IA
S.W.D., Medinipur
&
Member Secretary, D.L.A.
Paschim Medinipur

Sinha
03/11/2017

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

P.P.O. for Conditionality

4068

FORM 4

[See Rules 9(3) and 10(5)]

(EMBLEM OR HOLDGRAM 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.]

005017

PERMIT NO. P1428456001940000001TSE

1. (a) Name of the applicant (user) : Shri/Smt. JSW CEMENT LIMITED
 (b) Son/Daughter of : Salloni, Kulphini
 (c) Address of the applicant :
 (d) Category of farmer (Please tick) : Small Farmer/Marginal Farmer/Other
 (in case of irrigation well)
 (e) Serial No. of application Form and date of submission : BP/B 0191, SL-83, Dt-04/08/2017
 (f) Specimen signature of the user : Sujit Chandra
2. Location particulars—
 (a) District : Paschim Medinipur
 (b) Block, Mouza, J. L. No., Plot No. : Salloni, Kulphini, 456, 194
 (c) Municipality/Corporation :
 Ward No./Borough No., Holding No. : —
3. Particulars of the proposed well and pumping device—
 (a) Type of the well : T.W.
 (b) Approx. depth of the well (m) : 150 m
 (c) Purpose of the well : Industrial
 (d) Assembly size (for tube well) : 200 mm X 150 mm.
 (e) Approx. strainer length (for tube well) : 18 m.
 (f) Diameter (for dug well) : m.
 (g) Type of pump to be used : Submersible
 (h) H. P. of the pump : 7.5 H.P.
 (i) Operational device : Electric
 (j) Rate of withdrawal (m³/hr.) : 30 m³/hr.
 (k) Maximum allowable running hours per day : 7 Hours



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 : Midnapore

Date : 3/11/17

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

Chinmayi Roy
Signature of the Issuing Authority
and Designation
3/11/17

Geologist
Geological Sub-Div. No. - I/A,
S.W.I.D., Medinipur
Member Secretary, D.L.A.

Conditions :

- In case of any change of ownership of the proposed well, fresh registration has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the proposed well as indicated at Sl. (2) of this permit is to be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this permit.
- 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.
- Any other condition imposed by the concerned Authority.

Sujit Chandra
03/11/17

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

P.P.O for Conditional

ANNEXURE-V



Greenbelt development



Greenbelt development

ANNEXURE-VI



Concreted Roads



Internal Concreted Roads

DATE OF INSPECTION : 14th & 15th November 2017

OBSERVATION

Results as mention in Form – 30 which are annexed herewith reveal the undernoted.

- ✓ Concentration of Carbon Monoxide & Carbon Dioxide in the factory premises have been found within permissible limit.
- ✓ Noise level in the factory premises have been found within permissible limit in general and of few place crossed the limit.
- ✓ Illumination in general is adequate, advised to be increased.

SAFECON INDIA

**AN ISO 9001 : 2015 & OHSAS 18001 : 2007 CERTIFIED COMPANY
MEMBER OF NATIONAL SAFETY COUNCIL
COMPETENT AUTHORITY**

Approved by Chief Inspector of Factories, Govt. of West Bengal under Factories Act
Under Section 28, 29 & 31 of Factories Act

Approved by Chief Controller of Explosives, Govt. of India under Petroleum Act
Under Rule 126, 130 of Petroleum Act

Safety Audit, HIRA/HAZOP STUDY, Work Zone Monitoring, Stability Test & Certification,
Safety Training, Instrument Calibration, NDT and DP Test
Repairing, Servicing Of EOT/HOT Cranes,
Chain Pulley Block, Electric Hoist etc.

Works & Office : 28, D. N. Mukherjee Road, Chattri, Serampore - 712 204

Tele Fax : (033) 2622-2062, M- 9903263180

E-mail – safeconind@gmail.com/sou0707@rediffmail.com



Fire Alarming System



Smoke Detecting System



Fire Hydrant System

Category 7				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Contribution to PM Relief Funds		7.1	Contribution to Relief Funds										
Category 8				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Supporting Technology Incubators		8.1	Supporting Technology Incubators										
Category 9				0.00	10.00	40.00	40.00	40.00	40.00	40.00	50.00	50.00	50.00
Rural Development Projects		9.1	Rural Roads and Drainages			40.00	40.00	40.00					
		9.2	Infrastructure facilities in Rural area		10.00				40.00	40.00	50.00	50.00	50.00
Category 10				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Swachha Bharat Abhiyan		10.1	Sanitation - Construction, Maintenance & upgradation of										
		10.2	Waste Management										
		10.3	Awareness Campaign										
Category 11				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Slum Development		11.1	Slum Development										
Overhead				0.90	1.90	2.00	2.00	2.00	2.00	2.00	2.00	2.50	2.50
Project Management Cost		12.1	Project Management Cost	0.90	1.90	2.00	2.00	2.00	2.00	2.00	2.00	2.50	2.50
Total				63.00	89.00	130.00	141.00	148.00	153.00	165.00	175.00	155.50	155.50

WEST BENGAL POLLUTION CONTROL BOARD

'Paribesh Bhawan',
Bldg. No. - 10A, Block - LA, Sector-III,
Salt Lake City, Kolkata - 700 098

Consent Letter Number : CD 106518

Memo Number : 46-HI-CO-2/17/2016



Date : 05/07/2017

Consent to Operate

under

Section 25 & 26 of the Water (Prevention and Control of Pollution) Act, 1974 and
Section 21 of the Air (Prevention and Control of Pollution) Act, 1981

The West Bengal Pollution Control Board (hereinafter referred to as State Board) under the provisions of Section 25 & 26 of the Water (Prevention and Control of Pollution) Act, 1974, as amended and Section 21 of the Air (Prevention and Control of Pollution) Act, 1981, as amended, and Rules and Orders made thereunder, hereby grants its consent to :

M/s. JSW CEMENT LIMITED

(Address of Regd. office/Head/Office/City Office)

(hereinafter referred to as Applicant) for its unit located at Vill: Salboni, P.O: Sayedpur via Salboni,

Dist: Medinipur (W), PIN: 721147

(Detailed address of the manufacturing unit)

for a period from Date of issue to 28/02/2022

to operate the industrial unit and to discharge liquid effluent and to emit gaseous effluent from the premises/land of the industrial unit, in accordance with the conditions as mentioned in the Annexure to this consent letter provided on any day at any instance the quantity and quality of liquid discharge and gaseous emission shall not exceed the permissible limit as specified in the Table I & II of this consent letter and in the Environmental (Protection) Act, 1986.

Breach of the conditions and / or failure to comply with the directions as set out in the Annexure shall render the applicant liable for prosecution under the provisions of the Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981.

The State Board reserve the right to revoke, withdraw or make any reasonable variation / change / alter the conditions of this consent letter giving one month's notice to the applicant.



For and on behalf of the State Board

(Member Secretary / Chief Engr. / Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.)

Senior Environmental Engineer
W.B. Pollution Control Board

ANNEXURE

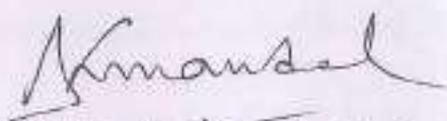
Consent to M/s. J S W CEMENT LIMITED
 for its unit at Vll: Salsuni, P.O: Sayedpur, via Salsuni,
 Dist: Medinipur (W), PIN: 721147

Conditions :

01. This Consent is valid for the manufacture of :-

Sl. No.	Name of major products and by-products	Quantity manufactured per month
01	Ground Granulated Blast Furnace	100 000 TON
02	Slag & Portland Slag Cement	
03		
04		
05		
06		
07		
08		
09		
10		
11		
12		

02. The *Applicant* shall remain responsible for quantity and quality of liquid effluent and air emissions.
03. Daily discharge of industrial liquid effluent shall not exceed KL.
04. Daily discharge of domestic liquid effluent shall not exceed 8 KL.
05. Daily discharge of mixed (industrial & domestic) liquid effluent shall not exceed KL.
06. The *Applicant* shall discharge liquid effluent to Sakpita (place of discharge) through 01 nos. outlets/outfalls.
07. To bring into any altered or new outlet/outfall or to change the place of discharge, the *Applicant* shall have to inform the Board and obtain prior permission of the Board in this effect.
08. The *Applicant* shall provide comprehensive facility for treatment of industrial liquid waste and domestic liquid waste (sewage, sullage and liquid effluent generated from canteen), and operate and maintain the same continuously so that the quality of final effluent conforms to the *Standard* as given in Table-I in page 03.


 (Member-Secretary/Chief Engr./Sr. Env. Engr./Inv. Engr./Asst. Env. Engr.)

Senior Environmental Engineer
 W.B. Pollution Control Board/Continued.....

Consent to M/s. J S W CEMENT LIMITED
 for its unit at W.II: Salboni, P.O: Sayedpur, via salboni,
Dists Medinipur (W), PIN: 721147

11. The Applicant shall install suitable device for measuring the volume of water consumed for different purposes as mentioned above giving correct result to the satisfaction of the State Board.
12. All the stacks connected to various sources of emissions must be designated by numbers such as S-1, S-2, S-3, etc., and this must be painted/displayed to facilitate identification.
13. The Applicant shall install comprehensive control system consisting of pollution control equipment as is warranted with reference to generation of air emissions and operate and maintain the same continuously so as to achieve the level of pollutants of the Standard as given in Table-II below :

Table - II

Stack No.	Stack height from G.L. (in mts.)	Stack attached to (sources and control system, if any):	Volume Nm ³ /hr.	Velocity of gas emission m/sec	Concentrations of parameters not to exceed				Frequency of emission sampling
					SPM (mg/Nm ³)	CO (% v/v)			
S-1	50	Grinding Unit - 1 (Ball mill press - 2 nos)	---	---	30				Half Yearly
S-2		& HAG - 1 No. Coal fired - 4 TPH)							
S-3	50	Coal Mill (20 TPH)	---	---	30				Half Yearly
S-4	40	Packing Unit (2 Nos)	---	---	30				Half Yearly
S-5									
S-6									
S-7									
S-8									
S-9									
S-10									

Amansel

consent to M/s. J S W CEMENT LIMITED
 for its unit at Vill: Salboni, P.O: Sayedpur, via salboni
Dist: Medinipur (W), PIN: 721147

11. The Applicant shall provide ports in the stack(s) and other necessary permanent facilities such as ladder, platform, etc. for monitoring/sampling the air emissions and the same shall be made available for inspection and use by the State Board's staff as well as State Board's authorised agencies.
15. The Applicant shall observe the following fuel consumption pattern :-

Sl. No.	Type of fuel	Quantity consumed per day month	Fuel burning operation where the fuel is used
01	Coal	1334 Tons	H A G
02			
03			
04			
05			

16. The Applicant shall maintain the generation and treatment / disposal of non-hazardous solid waste as specified below :

Type of waste	Quantity	Treatment	Disposal
Coal Ash	7 MT/day		To be used in cement
Dust	50 T/day		to be recycled
Metal Waste	50 kg/day		to be sold

17. The Applicant shall take adequate measures for control of noise levels from its own sources within the premises within the limit given below —

Time	Limit in dB(A) L ₉₀
Day Time (06 a.m. to 6 p.m.)	75
Night Time (6 p.m. to 06 a.m.)	70

18. The Applicant shall at all times maintain good house-keeping, proper working order, and operate efficiently for control of pollution from all sources so as not to cause nuisance to surrounding area/inhabitants and to achieve compliance with the terms and conditions of the consent.
19. The Applicant shall bring about at least 33% of the available open land under the green coverage/plantation.
20. The Applicant shall provide for an alternate electric power source sufficient to operate all pollution control facilities installed by the Applicant to maintain compliance with the terms and conditions of the consent. In absence of such an alternate electric power source, the Applicant shall stop, reduce or otherwise control production to abide by the terms and conditions of the Consent regarding pollution level.
21. The Applicant shall install a separate energy meter showing the consumption of energy for operation of pollution control devices.
22. The Applicant shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the factory premises.
23. The Applicant shall provide drainage system for conveying industrial and domestic liquid waste. Storm-water drain shall be kept separate from the drainage system meant for industrial and domestic liquid waste.

(Member Secretary/Chief Engr./Sr. Env. Engr./Env. Engr./Asst. Env. Engr.)

Secretary/Chief Engr./Sr. Env. Engr./Env. Engr./Asst. Env. Engr.

Continued....

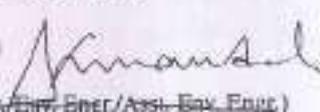
Consent to M/s. J S W CEMENT LIMITED
for its unit at Willa Selboni, P.O: Seyedpur, via selboni
Dist: Medinipur (W), PIN: 721147

24. The Applicant shall maintain a separate register showing consumption of chemicals used in pollution control systems.
25. The Applicant shall get the samples of hazardous wastes/leachates analysed at least once in from the laboratory recognised of the West Bengal Pollution Control Board and ensure that they conform to the limits stipulated. Test reports shall be sent to the Board.
26. The Applicant shall provide adequate and safe facility for collection of air, waste water and solid waste samples by the State Board's staff as well as State Board's authorised agencies.
27. The Applicant shall submit to the State Board by the 30th September of every year the Environmental Statement Report for the financial year ending 31st March of the current year in the prescribed form (Form - V) as required under the provisions of rule 14 of the Environment (Protection) [Second Amendment] Rules, 1992.
28. The Applicant shall allow the Officers of the State Board to enter into the applicant's premises at any reasonable time to inspect the pollution control systems as well as monitoring and measuring devices in connection with prevention & control of pollution.
29. The Applicant shall maintain an Inspection Book in the factory premises which shall be made available to Officers & employees of the State Board for inspection, review and to write down any direction or observation as is deemed necessary during the inspection from time to time.
30. The Applicant shall furnish to the State Board all information in respect of quality, quantity, rate of discharge, place of discharge of liquid effluent and air emissions.
31. The Applicant shall maintain adequate number of qualified and trained personnel among his staff for proper maintenance and operation of the effluent treatment and/or emission control devices and for overall environment management of the industry.
32. The Applicant shall have to make registration for the use of groundwater if any, with Central Ground Water Authority.
33. The Applicant shall intimate to the State Board immediately of any occurrence or apprehension of occurrence of discharge of any poisonous, noxious or pollutants in excess of quality as well as quantity as mentioned earlier to any receiving water body/receiving system or to atmosphere owing to accident or other unforeseen incident/event including natural disaster. The Applicant shall (i) take all steps adequate to prevent such accident discharge/release of poisonous, noxious or pollutants and to limit their consequences to persons and the environment. (ii) provide to the persons working on the site with the information, training and equipment including antidotes necessary to ensure their safety and mitigate the accidental release of poisonous, noxious or pollutants to the environment.
34. The Applicant shall make an application to the State Board in the prescribed form for renewal of the consent at least 60 (sixty) days before the date of expiry of this Consent.
35. The Applicant shall not make any alteration/modification/expansion in the existing manufacturing process and equipment as well as the pollution control system without prior approval of the Board.
36. The Applicant shall comply with the conditions as laid down in the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 and Hazardous Wastes (Management & Handling) Rules, 1989.

Additional Conditions (1) The unit should comply with the Environmental clearance (No. 89/EN/T-II-1/037/2015 dated 14/01/16)

(2) The unit should comply with the Consent to Establish (Memo no. 133-24-45/2015 (E) dated 12/02/16)

(Member Secretary/Chief Engr./Sr. Engr./Engr./Asst. Engr.)


Senior Environmental Engineer
W.B. Pollution Control Board

WEST BENGAL POLLUTION CONTROL BOARD

'Paribesh Bhawan',
Bldg. No. - 10A, Block - 1A, Sector-III,
Salt Lake City, Kolkata - 700 098



Consent Letter Number : CO106563

Memo Number : 165-hl-co-1/17/2016

Date : 18/01/2018

Consent to Operate

under

Section 25 & 26 of the Water (Prevention and Control of Pollution) Act, 1974 and
Section 21 of the Air (Prevention and Control of Pollution) Act, 1981

The West Bengal Pollution Control Board (hereinafter referred to as State Board) under the provisions of Section 25 & 26 of the Water (Prevention and Control of Pollution) Act, 1974, as amended and Section 21 of the Air (Prevention and Control of Pollution) Act, 1981, as amended, and Rules and Orders made thereunder, hereby grants its consent to :

M/s. J S W CEMENT LIMITED

(Address of Regd. office/Head/Office/City Office)

(hereinafter referred to as Applicant) for its unit located at Vill: Selbani, P.O: Nayadpur, via Selbani,

Dist: Medinipur (W), PIN: 721147

(Detailed address of the manufacturing unit)

for a period from Date of issue to 20/02/2022

to operate the industrial unit and to discharge liquid effluent and to emit gaseous effluent from the premises/land of the industrial unit, in accordance with the conditions as mentioned in the Annexure to this consent letter provided on any day at any instance the quantity and quality of liquid discharge and gaseous emission shall not exceed the permissible limit as specified in the Table I & II of this consent letter and in the Environmental (Protection) Act, 1986

Breach of the conditions and / or failure to comply with the directions as set out in the Annexure shall render the applicant liable for prosecution under the provisions of the Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981.

The State Board reserve the right to revoke, withdraw or make any reasonable variation / change / alter the conditions of this consent letter giving one month's notice to the applicant.



For and on behalf of the State Board

[Signature]
(Member Secretary/Chief Engr./Sr. Env. Engr./Env. Engr./Asst. Env. Engr.)

Chief Environmental Engineer
West Bengal Pollution Control Board

ANNEXURE

Consent to M/s. J S W CEMENT LIMITED
 for its unit at Vill: Sribeni, P.O: Sayadpur, via Sribeni,
 Dist: Medinipur (w), PIN: 721147

Conditions :

01. This Consent is valid for the manufacture of :-

Sl. No.	Name of major products and by-products	Quantity manufactured per month
01	Ground Granulated Blast	
02	Furnace slag & Portland Slag	
03	ceмент	100000 Ton
04		
05		
06		
07		
08		
09		
10		
11		
12		

02. The Applicant shall remain responsible for quantity and quality of liquid effluent and air emissions.
03. Daily discharge of industrial liquid effluent shall not exceed KL.
04. Daily discharge of domestic liquid effluent shall not exceed Same as existing KL.
05. Daily discharge of mixed (industrial & domestic) liquid effluent shall not exceed KL.
06. The Applicant shall discharge liquid effluent to (place of discharge)
 through 01 nos. outlets/outfalls.
07. To bring into any altered or new outlet/outfall or to change the place of discharge, the Applicant shall have to inform the Board and obtain prior permission of the Board in this effect.
08. The Applicant shall provide comprehensive facility for treatment of industrial liquid waste and domestic liquid waste (sewage, sullage and liquid effluent generated from canteen), and operate and maintain the same continuously so that the quality of final effluent conforms to the Standard as given in Table-I in page 03.

[Signature]
 (Member Secretary/Chief Engr./Sr. Env. Engr./Env. Engr./Asst. Env. Engr.)

Chief Executive Engineer,
 W.B. Pollution Control Board

Continued.....

Consent to M/s. J S W CEMENT LIMITED
 for its unit at Vill: Salbari, P.O: Sayadpur via Salbari,
 Dist: Medinipur (W), PIN: 721147

Table - I

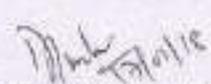
Outlet No.	Nature of effluent	Parameters	Standard	Frequency of effluent sampling
01	Domestic	pH	Between : 5.5 to 9.0	Yearly
		Total Suspended Solids	Not to exceed : 100 mg/l.	
		Biochemical Oxygen Demand (3day at 27°C)	Not to exceed : 30 mg/l.	
		Chemical Oxygen Demand	Not to exceed : 250 mg/l.	
		Oil & Grease	Not to exceed : 10 mg/l.	
WEST BENGAL				

09. The Applicant falls in the Category of the Water (Prevention and Control of Pollution) Cess Act, 1977 and Rules made thereunder and the Applicant shall comply with the provisions of the said Act and Rules made thereunder.

10. Daily water consumption for the following purposes should not exceed :-

- Industrial cooling, spraying in mine pits and boiler feed water → 240 (additional) KL
 (Water used for gardening should be included in this category of use)
- Domestic purpose → KL
- Processing whereby water gets polluted and the pollutants are easily biodegradable → KL
- Processing whereby water gets polluted and the pollutants are not easily biodegradable → KL

The Applicant shall regularly submit to the Board the Returns of Water Consumption in the prescribed form and pay the Cess as specified under Section 3 of the said Act.


 (Member Secretary/Chief Engr./Sr. Env. Engr./Env. Engr./Asst. Env. Engr.)

Director, Environmental Control Board
 West Bengal Pollution Control Board

Continued....

Consent to M/s. J S W CEMENT LIMITED

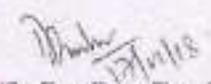
for its unit at Vill: Salhani, P.O: Sayadpur via Salhani,

..... Dist: Medinipur (w), PIN: 721147

11. The Applicant shall install suitable device for measuring the volume of water consumed for different purposes as mentioned above giving correct result to the satisfaction of the State Board.
12. All the stacks connected to various sources of emissions must be designated by numbers such as S-1, S-2, S-3, etc., and this must be painted/displayed to facilitate identification.
13. The Applicant shall install comprehensive control system consisting of pollution control equipment as is warranted with reference to generation of air emissions and operate and maintain the same continuously so as to achieve the level of pollutants of the Standard as given in Table-II below :

Table - II

Stack No.	Stack height from G.L. (in mts.)	Stack attached to (sources and control system, if any):	Volume Nm ³ /hr.	Velocity of gas emission m/sec	Concentrations of parameters not to exceed				Frequency of emission sampling
					SPM (mg/Nm ³)	CO (% v/v)			
S-1	50	Grinding Unit --- 02			30				
S-2		(Roller press 2 Nos & H A G --- 01 Conl. fired --- 4 TPH)							Half-yearly
S-3		Packing unit --- 1 no			30				
S-4									
S-5									
S-6									
S-7									
S-8									
S-9									
S-10									


 (Member Secretary/Chief Engr./Sr. Env. Engr./Asst. Engr./Asst. Env. Engr.)

Consent to M/s. J S W CEMENT LIMITED
 for its unit at Mill: Solboni, P.O: Sanyalpur, via Solboni,
Dist: Medinipur (W)? PIN: 721147

11. The Applicant shall provide ports in the stack(s) and other necessary permanent facilities such as ladder, platform, etc. for monitoring/sampling the air emissions and the same shall be made available for inspection and use by the State Board's staff as well as State Board's authorised agencies.
15. The Applicant shall observe the following fuel consumption pattern :-

Sl. No.	Type of fuel	Quantity consumed per day	Fuel burning operation where the fuel is used
01	Coal	1333 Tons	H A G
02			
03			
04			
05			

16. The Applicant shall maintain the generation and treatment / disposal of non-hazardous solid waste as specified below :

Type of waste	Quantity	Treatment	Disposal
Coal Ash	6 MT/day		to be used in cement mfg process
Dust	50 Ton/day		to be recycled
Metal wood Etc	20 kg/day		to be sold

17. The Applicant shall take adequate measures for control of noise levels from its own sources within the premises within the limit given below :

Time	Limit in dB(A) L ₉₀
Day Time (06 a.m. to 09 p.m.)	75
Night Time (09 p.m. to 06 a.m.)	70

18. The Applicant shall at all times maintain good house-keeping, proper working order, and operate efficiently for control of pollution from all sources so as not to cause nuisance to surrounding areas/inhabitants and to achieve compliance with the terms and conditions of the consent.
19. The Applicant shall bring about at least 33% of the available open land under the green coverage/plantation.
20. The Applicant shall provide for an alternate electric power source sufficient to operate all pollution control facilities installed by the Applicant to maintain compliance with the terms and conditions of the consent. In absence of such an alternate electric power source, the Applicant shall stop, reduce or otherwise control production to abide by the terms and conditions of the Consent regarding pollution level.
21. The Applicant shall install a separate energy meter showing the consumption of energy for operation of pollution control devices.
22. The Applicant shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the factory premises.
23. The Applicant shall provide drainage system for conveying industrial and domestic liquid waste. Storm-water drain shall be kept separate from the drainage system meant for industrial and domestic liquid waste.

(Member Secretary/Chief Engr./St. Env. Engr./Asst. Engr./Asst. Env. Engr.)

Continued.....

Consent to: M/s. J S W CEMENT LIMITED
 for its unit at Vill: Selbani, P.O: Sayadpur via Selbani,
Dist: Medinipur (W), PIN: 721107

24. The Applicant shall maintain a separate register showing consumption of chemicals used in pollution control systems.
25. The Applicant shall get the samples of hazardous wastes/leachates analysed at least once in..... from the laboratory recognised of the West Bengal Pollution Control Board and ensure that they conform to the limits stipulated. Test reports shall be sent to the Board.
26. The Applicant shall provide adequate and safe facility for collection of air, waste water and solid waste samples by the State Board's staff as well as State Board's authorised agencies.
27. The Applicant shall submit to the State Board by the 30th September of every year the Environmental Statement Report for the financial year ending 31st March of the current year in the prescribed form (Form - V) as required under the provisions of rule 14 of the Environment (Protection) [Second Amendment] Rules, 1992.
28. The Applicant shall allow the Officers of the State Board to enter into the applicant's premises at any reasonable time to inspect the pollution control systems as well as monitoring and measuring devices in connection with prevention & control of pollution.
29. The Applicant shall maintain an Inspection Book in the factory premises which shall be made available to Officers & employees of the State Board for inspection, review and to write down any direction or observation as is deemed necessary during the inspection from time to time.
30. The Applicant shall furnish to the State Board all information in respect of quality, quantity, rate of discharge, place of discharge of liquid effluent and air emissions.
31. The Applicant shall maintain adequate number of qualified and trained personnel among his staff for proper maintenance and operation of the effluent treatment and / or emission control devices and for overall environment management of the industry.
32. The Applicant shall have to make registration for the use of groundwater if any, with Central Ground Water Authority.
33. The Applicant shall intimate to the State Board immediately of any occurrence or apprehension of occurrence of discharge of any poisonous, noxious or pollutants in excess of quality as well as quality as mentioned earlier to any receiving water body/receiving system or to atmosphere owing to accident or other unforeseen incident/event including natural disaster. The Applicant shall (i) take all steps adequate to prevent such accident discharge/release of poisonous, noxious or pollutants and to limit their consequences to persons and the environment. (ii) provide to the persons working on the site with the information, training and equipment including antidotes necessary to ensure their safety and mitigate the accidental release of poisonous, noxious or pollutants to the environment.
34. The Applicant shall make an application to the State Board in the prescribed form for renewal of the consent at least 60 (sixty) days before the date of expiry of this Consent.
35. The Applicant shall not make any alternation/modification/expansion in the existing manufacturing process and equipment as well as the pollution control system without prior approval of the Board.
36. The Applicant shall comply with the conditions as laid down in the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 and Hazardous Wastes (Management & Handling) Rules, 1989.

Additional Conditions

The unit should comply with the conditions of C F O
 issued vide memo no. 46-hl-cw-0/17/0016
 dated 25/07/17

(Member Secretary/Chief Engr./Sr. Env. Engr./Env. Engr./Asst. Env. Engr.)

COST OF ENVIRONMENTAL PROTECTION MEASURES

ITEMWISE BREAKUP OF CAPITAL INVESTMENT & ESTIMATES FOR ENVIRONMENT MANAGEMENT PLAN

Details of allocation made for environmental management for Cement Plant		
S. No.	Particulars	Capital Investment (Rs.Lakhs)
1	Process Bag Houses & de-dusting bag filters	1160
2	Covering of Belt Conveyors & providing covered shed for Gypsum and Coal	272.5
3	Internal/ approach Roads	1145
4	Green Belt development	4.4
5	Rain Water Harvesting	22
6	Water Sprinklers with pumps, etc.,	3
7	Noise pollution control	10
8	Occupational Health Centre	9
9	Sewage Treatment Plant (STP) in plant premises	25
	Total	2650.9

RECURRING COST & ESTIMATES

Details of allocation made for Annual cost of monitoring and implementation of control measures for Cement Plant		
S. No.	Particulars	Recurring Cost per annum (Rs. in lakhs)
1	Maintenance & Operation of pollution control equipment	42
2	Maintenance & Operation of STP	1
3	Environmental monitoring	8
4	Occupational Health & Safety	12
5	Greenbelt development	5
6	Socio economic development	25
7	Misc.	10
TOTAL		103

STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

Pranisampad Bhavan, Block 'LB'-2, 5th Floor, Sector – III,
Salt Lake, Kolkata – 700 106
Telefax No. 033 2335 5246

Website : www.environmentwb.gov.in

No. 2015 / EN/ T-II-1/002/2017

Date : 07 / 09 /2017

To
M/s. JSW Cement Ltd.
JSW Centre, MMRDA Ground
Bandra Kurla Complex, Bandra (East)
Mumbai – 400 051

Subject : Environmental Clearance for the proposed expansion of Cement Grinding Unit from 2.4 to 3.6 MTPA and 2x18 MW CPP at Vill – Salboni, Dist – Paschim Medinipur, West Bengal by M/s. JSW Cement Limited

Sir,

This has a reference to your application submitted on 08/03/2017 and subsequent communications for Environmental Clearance for the proposed expansion of Cement Grinding Unit from 2.4 to 3.6 MTPA and 2x18 MW CPP at Vill – Salboni, Dist – Paschim Medinipur, West Bengal.

The proposal has been examined and processed in accordance with EIA Notification, 2006. It is noted that the proposed proposal is for expansion of Cement Grinding Unit from 2.4 to 3.6 MTPA and 2x18 MW CPP at existing unit premises at Vill – Salboni, Dist – Paschim Medinipur, West Bengal. It is noted that clinker will not be manufactured at the site. The manufacturing process will involve only grinding of Cement Clinker with Fly ash/Slag and Gypsum.

It is noted that the salient features of the project, for which Environmental clearance has been considered are as follows :

- Location of the Site – Salboni, Dist – Paschim Medinipur, West Bengal
- Latitude & Longitude – 22°34'32.97"N & 87°18'38.70"E
- Land Area – Proposed expansion will be installed within existing land area of 133.2 acres.
- Greenbelt – 44.0 acres.
- Raw Materials – Clinker, Fly Ash, Slag, Gypsum, Coal and Pet Coke.
- Production Capacity – Existing Capacity – 2.4 MTPA & Proposed capacity after expansion – 3.6 MTPA (OPC, PPC, PSC & GGBS) & 2X18 MW CPP
- Details of existing and proposed emission sources with Air Pollution Control Devices:

Sl. No.	Process Equipment/ Machinery	Existing (2.4 MTPA Cement)		Proposed (3.6 MTPA cement & 2x18 MW CPP)	
		Capacity	APCD	Capacity	APCD
1	Grinding Unit (Roller Press)	4 x 90 TPH	Bag Filter	2 x 90 TPH	Bag Filter
2	Cement & GGBS Storage	3 x 5000 T	Bag Filter	3 x 3000 T & 2 x 1000 T	Bag Filter
3	Blending Unit	450 TPH	Bag Filter	300 TPH	Bag Filter
4	Clinker Storage Silo	1 x 25000 T	Bag Filter	1 x 20000 T	Bag Filter
5	Slag Stacker	2000 TPH	Bag Filter	-	-
6	Packer	3 x 240 TPH	Bag Filter	-	-
7	Hot Air Generator	2 x 4 MCal/Hr	Bag Filter	1 x 1.75 MCal/Hr	Bag Filter

[Signature]

8	Coal Mill for HAG	1 x 20 TPH	Bag Filter	-	-
9	Wagon Tippler	2000 TPH	Bag Filter	-	-
10	Fly Ash Storage Silo (for Cement Plant)	-	-	1 x 1000	Bag Filter
11	Fly Ash Storage Silo (for CPP)	-	-	1 x 500 T	Bag Filter
12	Boiler	-	-	2 X 90 TPH	ESP and Flue Gas De-Sulphurization (FGD)
13	Coal Crusher (for CPP)	-	-	1 x 60 TPH	Bag Filter
14	Coal Coke Stockpile (for CPP)	-	-	2 x 10000 T	Water Sprinkler
15	Coal Stacker (for CPP)	-	-	200 TPH	Bag Filter

- viii. Total Water Requirement – 600 KLD (Bore Wells)
- ix. Solid waste – All dust generated will be recycled and reused in the process. Fly ash generated from CPP to be utilized in manufacturing of PPC.
- x. Wastewater – No process effluent will be generated. Waste water generated from CPP to be treated in suitable ETP and reused within project premises; no process effluent to be discharged outside the project premises and Zero Discharge Principle to be strictly followed. Domestic sewage will be treated in septic tank and soak pit.
- xi. Rainwater Harvesting – Rain water storage tank of dimension 100mX100mX4m to be constructed and harvested rainwater to be utilized in-house to minimize withdrawal of groundwater.
- xii. Total Power requirement – 27 MW, WBSEDCL.

State Level Environment Impact Assessment Authority (SEIAA), examined the proposal and also perused recommendations of the State Level Expert Appraisal Committee (SEAC). After due consideration of the project proposal, and after considering the recommendations of the State Level Expert Appraisal Committee (SEAC), the State Level Environment Impact Assessment Authority accords Environmental Clearance to the project as per provisions of the EIA notification no. S.O. 1533 (E) dt. 14th September, 2006 of Ministry of Environment & Forests, GOI, subject to strict compliance of terms and conditions as mentioned below.

A. SPECIFIC CONDITIONS:

- i. The gaseous emissions from various process 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.
- 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 50m 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 Fan should be provided for Raw Material Handling Section, Ball Mill, Silo and Packing Section. Stack emissions 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 30m from G.L. should be provided. The stack emission should not exceed 30 mg/Nm³.
- iii. 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, PM_{2.5}, 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.
- iv. The unit shall install Continuous Automatic Ambient Air Quality Monitoring Station (CAAAQMS) for the project.
 - v. 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.
 - vi. 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.
 - vii. 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 areas shall be collected in bag filters and recycled back to the process. Water sprinkling arrangement shall be made in the raw material stock yards and other high dust potential areas.
 - viii. 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.
 - ix. Process effluent discharge is not permitted. No liquid effluent shall be generated by adoption of dry grinding process.
 - x. Clinker manufacturing / heating is not permitted under this environmental clearance. Clinker and fly ash shall be stored in the closed silos and gypsum and slag in covered shed.
 - xi. All the bag filter dust, raw meal 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 / reprocessors only. Hazardous waste generated to be disposed of as per provisions of Hazardous Wastes (Management and Transboundary Movement) Rules, 2016.
 - xii. 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.
 - xiii. Green belt shall be developed within the plant premises. At least 33% of the area should be kept for green belt development. At least 12500 (as stated in previous environmental clearance vide no. 89/EN/T-II-1/037/2015 dated 14.01.2016) 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.
 - xiv. 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 (nighttime).
 - xv. Asphaltting/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.
 - xvi. 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.
 - xvii. 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 per the Factories Act.

- xviii. Adequate measures to be adopted to ensure industrial safety. Proper fire detection & protection systems to be provided to control fire and explosion hazards.
- xix. All the recommendations mentioned in the Corporate Responsibility for Environmental Protection (CREP) guidelines for Cement Plants shall be followed and complied.
- xx. The implementation and monitoring of Environmental Management Plan should be carried out, as proposed.
- xxi. At least 2.5% of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs 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.

B. GENERAL CONDITIONS:

- i. The environmental clearance accorded shall be valid for a period of 7 years for the proposed expansion project.
- ii. Prior Consent-to-Establish (NOC) for the proposed expansion project must be obtained from WBPCB before commencement of construction. All other statutory clearances should be obtained by project proponent from the competent authorities.
- iii. 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 programs, educational programs, drinking water supply, sanitation program for local school and health care etc.
- iv. 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 entity.
- v. Provision should be made for the supply of kerosene or cooking gas to the labourers during construction phase. All the labourers 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.
- vi. 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.
- 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.
- 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 proponents 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 all the documents should also be forwarded to the State Level Environment Impact Assessment Authority, West Bengal.
- 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 Environmental (Protection) Act. 1986, to ensure effective implementation of the suggested safeguard measures in a time-bound and satisfactory manner.
- x. The Project Proponent should inform the public that the project has been accorded environmental 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.

- xi. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. The criteria pollutant levels namely; PM10, PM2.5, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- 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.
- 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 and Other Wastes (Management and Transboundary Movement) Rules, 2016, the Public Liability Insurance Act, 1991, the Environment Impact Assessment Notification 2006 and their amendments.
- xiv. The contact details of the proponent and the name of the consultant are given below –

Name of the Contact person with Designation	Mr. Anil Kumar Pillai, Director & CEO
Address	M/s. JSW Cement Limited JSW Centre, MMRDA Ground Bandra Kurla Complex, Bandra (East) Mumbai – 400 051
Email	ceo.cement@jsw.in
Telephone Number, Fax Number	Phone no. +91 224286 1000, +91 224286 3000
Name of the Consultant	M/s. Development Consultants Pvt. Ltd.



(Sandipan Mukherjee, IFS)
Chief Environment Officer &
Member Secretary, SEIAA

No. 2015 /EN/T-II-1/002/2017/1(4)

Date : 07 / 09 /2017

Copy forwarded to :-

1. Secretary, SEAC & M.S. WBPCB
2. Officer-in-Charge, Regional Office (Eastern Zone), Ministry of Environment & Forests, Government of India, A-3, Chandrashekharapur, Bhubaneswar – 751 023, Orissa.
3. Chief Inspector of Factories, Factories Directorate, 1, K.S. Roy Road, Kolkata – 700 001.
4. Guard file / Record file.

Sd/-
Chief Environment Officer &
Member Secretary, SEIAA

LIST OF TREES PROPOSED FOR PLANTATION

(as mentioned in Environmental Clearance vide no.89/EN/T-II-1/037/2015 dated 14.01.2016)

Sl. No.	BOTANICAL NAME	COMMON NAME	QUANTITY
1.	<i>Anthocephalus cadamba</i>	Kadam	500
2.	<i>Peltophorum pterocarpum</i>	Radhachura	500
3.	<i>Polyalthia longifolia</i>	Debdaru	2000
4.	<i>Madhuca longifolia</i>	Mahua	750
5.	<i>Schleichera olosa</i>	Kusum	350
6.	<i>Alstonia scholaris</i>	Chhatim	2000
7.	<i>Mimusops elengi</i>	Bakul	2000
8.	<i>Terminalia arjuna</i>	Arjun	500
9.	<i>Delonix regia</i>	Gulmohor	250
10.	<i>Bombax ceiba</i>	Simul	500
11.	<i>Acacia auriculiformis</i>	Akashmoni	1000
12.	<i>Ficus benghalensis</i>	Banyan	25
13.	<i>Dalbergia sissoo</i>	Sisoo	1000
14.	<i>Ficus benjamina</i>	Fig Tree	250
15.	<i>Tectona grandis</i>	Teak	250
16.	<i>Ficus religiosa</i>	Ashathwa	125
17.	<i>Cassia fistula</i>	Amaltas	500
		Total	12500



WEST BENGAL POLLUTION CONTROL BOARD

Paribesh Bhawan
10A, Block-LA, Sector-III
Bidhannagar, Kolkata-700 098

Memo No. 654-2N-45/2015(E)Dated 15.12.2017

From :
Member Secretary,
West Bengal Pollution Control Board



To : M/s. JSW Cement Limited
Vill - Salboni, PO-Sajedpur, PS-Salboni,
Dist-Paschim Medinipur.

Sub : Consent to Establish (NOC) from Environmental Point of View

Ref : 1) Your letter No. JSWCL/CTE-II-11/2017-18 Dated 09.11.2017

ii) Environmental Clearance issued by SEIAA vide no. 2015/EN/T-II-1/002/2017 dated 07.09.2017.

Dear Sirs,

In response to the application for Consent to Establish (NOC) for proposed Unit of M/s JSW Cement Limited

for manufacturing/storage/installation the proposed expansion of Cement Grinding Unit from 2.4 to 3.6 MTPA* and 2x18 MW CPP
at Vill-Salboni, Dist-Paschim Medinipur, West Bengal.

this is to inform you that this Board hereby grants the Consent to Establish (NOC) from the environmental point of the above subject to the following conditions and special conditions annexed.

*(OPC, PPC, PSCA & CGBS)

1. The quality of sewage and trade effluent to be discharged from your factory shall satisfy the permissible limits as prescribed in IS : 2490 (Pt. I) of 1974, and/or its subsequent amendment and Environment (Protection) Rules 1986.
2. Suitable measures to treat your effluent shall be adopted by you in order to reduce the pollutional load so that the quality of the effluent satisfies the standards mentioned above.
3. You shall have to apply to this Board for its consent to operate and discharge of sewage and trade effluent according to the provisions of the water (Prevention & Control of Pollution) Act, 1974. No sewage or trade effluent shall be discharged by you without prior consent of this Board.
4. All emission from your factory shall conform to the standards as laid down by this Board.
5. No emission shall be permitted without prior approval of this Board and you shall apply to this Board for its consent to operate and atmospheric emission as per provision of the Air (Prevention & Control Pollution) act, 1981.
- E No industrial plant, furnace, flues, chimneys, control equipment, etc. shall be constructed/reconstructed/erected/re-erected without prior approval of this Board.

Amanda 15.12.2017

7. You shall comply with
- Water (Prevention and Control of Pollution) Cess Act, 1977, if applicable.
 - Water (Prevention and Control of Pollution) Cess Act, 1978, if applicable.
 - Environment (Protection) Act, 1986
 - Environment (Protection) Rules, 1986
 - Hazardous Wastes (Management and Handling) Rules, 1989 and Amended Rules, 2000
 - Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 and Amended Rules, 2000
 - Manufacture, Use, Import and Storage and Hazardous Micro-Organisms, Genetically Engineered Organisms or Cell Rules, 1989
 - The Public Liability Insurance Act, 1991 and Amended Act, 1992
 - The Public Liability Insurance Rules, 1991 and Amended Rules 1993
 - Biomedical Wastes (Management & Handling) Rules, 1998 and Amended Rules 2000 if applicable.
 - Recycled Plastics Manufacture and Usage Rules 1999, if applicable and
 - Ozone Depleting Substances (Regulation & Control) Rules, 2000, if applicable
8. You will have to abide by any other stipulations as may be prescribed by any authority/local bodies/Government Departments etc.

SPECIAL CONDITION :

Gross capital investment for the project is -Rs.322 crores.

Please refer to Annexure.

Any violation of the aforesaid conditions shall entail cancellation of this Consent to Establish (NOC)

[Signature]
Yours faithfully,
Sr. Env. Engineer (EIM Cell)

654-2M-45/2015(E) dtd. 15.12.2017.

Member Secretary,
West Bengal Pollution Control Board.

Memo No. _____

Dated _____

Copy forwarded for information to :

- Chief Inspector of Factories, Government of West Bengal, N. S. Building, Kolkata-700 001
- Director of Industries/Director of Cottage & Small Scale Industries, Government of West Bengal, N. S. Building, Kolkata-700 001
- Guard file, West Bengal Pollution Control Board.
- Environmental Engineer, VIII/Alipur R.O./Howrah R.O./Hooghly R.O./B.R.O./D.R.O./Haldia R.O./S.R.O./Malda R.O./Asansol Sub-R.O./WBPC Board

Himalaya Bhawan
Delhi Road, Dankuni
Dist. Hooghly

Vill. Panpur
Kalyani Expressway
P.O. Narayanpur
Dist. 24 Pgs. (N)

Sahid Khudiram Sarani
City Centre, Durgapur-16
Dist. Burdwan

Bhabani Bhawan
2nd Floor, Alipur
Kolkata-700 027

Paribesh Bhawan
10A, LA-Block, Sector-III
Salt Lake City,
Kolkata-700 098

Block-05 at 40
Flats-Complex
Adjacent to Priyambada
Housing Estate
P.O. Khanjanchak,
P.S. Durgachak
Haldia-721602
Dist. - Purba Medinipur

Panbahan Nagar
Matigara, Siliguri
Dist-Darjoling

10, Camac Street
2nd Floor
Kolkata-700 017

Satya Chowdhury
Indoor Stadium
Balurchar Bandh Road
Malda-732101

Asansol Sub-Regional Office
Ghanty Mansion (2nd Floor)
60, G. T. Road
Asansol-713 301

Sr. Env. Engineer (EIM Cell)