

Ref: CCIL/USO/EHS/2022-23/01

Dated: 11/11/2022

To,

The Director,
Ministry of Environment Forest & Climate Change
Govt. of India, Integrated Regional Office,
Guwahati, Assam.

Subject: Submission of Six-Monthly Compliance Report of the condition of environment clearance of M/S Calcom Cement India Limited located at Umrongso Assam-788931.

Dear Sir,

With reference to the stipulations of Environment Clearance, please find enclosed herewith the Six-Monthly Compliance report for the period of 1st April 2022 to 30th September 2022 for Calcom Cement India Limited, Umrongso. The compliance report will be uploaded to our company website www.dalmiabharat.com within 15 days.

Kindly acknowledge the receipt of the same.

Thanking you,

For Calcom Cement India Limited.


(Authorized Signatory)

- CC to:
- 1) The Regional Executive Engineer,
Regional Office, Silchar, Pollution Control Board, Assam.
 - 2) The Zonal Officer
Central Pollution Control Board,
Shillong, Meghalaya-793 014.
 - 3) SEIAA Guwahati

Calcom Cement India Limited

Subsidiary of Dalmia Cement (Bharat) Limited

16 Kilo, Jamuna Nagar, Umrongso, District-Dima Hasao (N.C. Hills) - 788931 (Assam) India

W www.dalmiacement.com CIN : U26942AS2004PLC007538

Registered Office : 3rd & 4th Floor, Anil Plaza II , ABC G.S. Road, Guwahati-781005 (Assam) India

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A **Dalmia Bharat Group** Company, www.dalmiabharat.com

Calcom Cement India Ltd.

Environmental Clearance - Compliance Report

Ref: *Environment Clearance No. J-11011/307/2006-IA.II(I), dated 5th May 2022*

EC to Cement (Clinker) Plant 1.52 MTPA at Jamunanagar, Umrangshu, Dist. Dima Hasao, Assam by M/S Calcom Cement India Ltd.

Sn.	Conditions	Compliance Status
A	<u>Specific Conditions</u>	
(1)	Particulate matter emissions from all the stacks shall be less than 30 mg/Nm ³ .	Complied.
(2)	975 KLD water shall be sourced from the Longlai River flowing 6 km from the site. Groundwater withdrawal is not permitted.	Complied.
(3)	Green belt shall be developed in 9.63 ha area all along the entire periphery of the area with a density of 2500 trees per ha by 31 st December 2023 as committed. Additionally, 20,000 trees shall be planted outside the project site shall be brought under avenue plantation as committed by the proponent	Green belt developed in 7.33 ha area. Additional 5000 trees were planted outside the project site.
(4)	Thermal Energy consumption for the kiln shall be less than 720 Kcal/ton for clinker as committed by the proponent.	Complied.
(5)	DeSOx system shall be provided dry type. NOx level shall be maintained below 600 mg/Nm ³ by using the best available technology	Complied.
(6)	All stockyards shall be having impervious flooring and shall be equipped with a water spray system for dust suppression. Stockyards shall also have garland drains to trap the run-off material.	Complied.
(7)	Slip roads shall be provided at the gates and along crossings on main roads.	Complied.
(8)	All internal and connecting road to the Highway shall be black topped/ concreted with suitable load in term of Million Standard Axle (MSA) as per IRC guidelines.	Complied.
(9)	Performance monitoring of pollution control equipment shall be taken up yearly and compliance status in this regard shall be reported to the concerned Regional Office of the MoEF&CC.	Performance monitoring Shall be done in the month of Dec 2022 and a report shall be submitted.
(10)	Dioxin and furans shall be monitored twice a year during the co-processing of hazardous waste and a report shall be submitted to the Regional Office of	Complied. Report attached. Annexure-I

	the MoEF&CC.	
(11)	Project proponent shall develop separate drainage system for storm water and industrial waste water and effectively prevent the pollution of natural waterbody.	Sedimentation pit was constructed and ensure compliance.
(12)	Project proponent shall comply with the all the observations as mentioned in the IRO report dated 28/03/2022 by 31/12/2022 except for green belt development by 31/12/2023.	Noted and complied. Detailed report attached. Attached as an Annexure-II
B	General Conditions	
(1)	Statutory compliance The Environment Clearance (EC) granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/ construe to approvals/ consent/ permissions etc., required to be obtained or standards/conditions to be followed under any other Acts/Rules/Subordinate legislations, etc., as may be applicable to the project.	Noted & Complied
(2)	Air quality monitoring and preservation The project proponent shall install 24x7 Continuous Emission Monitoring System (CEMS) at process stacks to monitor stack emission as well as 4 Nos. Continuous Ambient Air Quality Station (CAAQS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act 1986 or NABL accredited laboratories	Complied.
(3)	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognized under Environment (Protection) Act, 1986.	Complied and attached as Annexure-III
(4)	The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags	Complied.
(5)	The project proponent shall ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust	Complied

	generation; Use closed bulkers for carrying fly ash;	
(6)	The project proponent shall provide wind shelter fence and chemical spraying on the raw material stock piles;	Complied
(7)	The ventilation system shall be designed for adequate air changes as per the prevailing norms for all tunnels, motor houses, and cement bagging plants.	Complied
(8)	Water quality monitoring and preservation The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 612 (E) dated 25th August, 2014 (Cement) and subsequent amendment dated 9thMay, 2016 (Cement) and 10th May, 2016 (in case of Co-processing Cement)as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.	The dry process is being maintained and zero waste discharge is being maintained.
(9)	The project proponent shall regularly monitor ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.	Surface water is being used. Ground water is not available.
(10)	Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards	Complied.
(11)	The project proponent shall make efforts to minimize water consumption in the cement plant complex by segregation of used water, practicing cascade use and by recycling treated water.	Complied and agrees to comply
(12)	Noise monitoring and prevention Noise quality shall be monitored as per the prescribed Noise Pollution (Regulation and Control) Rules, 2000 and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.	Complied. Report attached as Annexure-IV

(13)	Energy Conservation measures Waste heat recovery system shall be provided for kiln and cooler.	Complied.
(14)	The project proponent makes efforts to achieve power consumption less than 65 units/ton for Portland Pozzolona Cement (PPC) and 85 units/ton for Ordinary Portland Cement (OPC) production and thermal energy consumption of 670 Kcal/Kg of clinker	Only the Clinkerisation unit is installed and 46 units/ Ton is being maintained
(15)	Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.	Complied.
(16)	Provide the project proponent for LED lights in their offices and residential areas.	Complied and agrees to comply.
(17)	Waste management Used refractories shall be recycled as far as possible.	Noted
(18)	Green Belt The project proponent shall prepare GHG emissions inventory for the plant and shall submit the program for reduction of the same including carbon sequestration by trees in the plant premises.	Noted and WHRS plant is installed
(19)	Public hearing and Human health issues Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented	Noted and complied.
20	The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms.	Noted and Complied
21	Occupational health surveillance of the workers shall be done on a regular basis and records maintained.	Complied
22	Environment Management The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020.	Noted and complied

23	The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.	Noted and complied. Attached as an Annexure-V
24	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.	Complied and attached as Annexure-VI
C	Miscellaneous	
1.	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.	Complied and attached as an Annexure VII
2.	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.	Complied and attached as annexure-VIII
3.	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis	Complied and attached as an Annexure-IX
4.	The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display	Complied The criteria pollutant levels namely: PM (stack), PM10, PM2.5, SO2, NOx (ambient levels as well as stack emissions) are

	the same at a convenient location for disclosure to the public and put on the website of the company	monitored continuously online and displayed at main gate of the company in the public domain.
5.	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal	Noted and Complied
6.	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.	Complied and attached.
7	The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.	Complied and the Operation started. CTE and CTO attached as an Annexure-X
8.	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.	Public Hearing commitments ensured. Attached as an Annexure as XI
9.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).	Noted and complied
10.	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.	Noted
11.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Noted
12.	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions	Noted
13.	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing	Noted

	the requisite data / information/monitoring reports	
14.	Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	Noted

Report No.: ENV/CCIL/DMH/22-23/N01

Order No.: 4556000805/236

Date : 06/07/2022

Date : 28/04/2022

Report Issued To : **CALCOM CEMENT INDIA LIMITED**
 (Unit of Dalmia Cement (Bharat) Ltd.)

Village: Jamunagar-16 Kilo, Umrangso, Dist.- Dima Hasao; Assam- 788931

STACK EMISSION TEST RESULTS

01	Stack Emission Test Ref. No.	CAL/SE/2022/06-01		
02	Date of Sampling	22.06.2022		
03	Material of Construction	M. S.		
04	Stack Attached To	R.A.B.H (25.5111, 92.76494)		
05	Flue Gas Temperature (°C)	55		
06	Exit Velocity of Gas (m/sec)	3.8		
07	Flow Rate (Nm ³ /hr)	151		
08	Type of Fuel Used	8.3		
09	Analysis Results of Flue Gas			
Sl. No.	Parameter(s)	Result(s)	Unit(s)	Limit(s)
i.	Particulate Matter	12	mg/Nm ³	30
ii.	Sulphur Dioxide (as SO ₂)	392	mg/Nm ³	1000
iii.	Oxides of Nitrogen (as NO _x)	196	mg/Nm ³	800
iv.	Oxygen (as O ₂)	13.7	% V/V	--
v.	Hydrogen Chloride (as HCl)	2.4	mg/Nm ³	10
vi.	Hydrogen Fluoride (as HF)	BDL [MDL: 1.0]	mg/Nm ³	1
vii.	Mercury (as Hg)	BDL [MDL: 0.001]	mg/Nm ³	0.03
viii.	Hg and its compounds	BDL [MDL: 0.001]	mg/Nm ³	0.05
ix.	Cd + Tl and their compounds	0.003	mg/Nm ³	0.05
x.	Sb+As+Pb+Co+Cr+Cu+Mn+Ni+V+ and their compounds	0.041	mg/Nm ³	0.5
xi.	Total Organic Carbon (as TOC)	7.46	mg/Nm ³	10
xii.	Total Dioxins and Furans	BDL [MDL: 0.01]	ngTEQ/Nm ³	0.1

BDL: Below Detectable Limit, MDL: Minimum Detectable Limit



Checked By: Mr. Pankaj Baroi, **ENVIROCON**

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Sn.	Observations	Compliance Status
A		
(1)	Coal dumping has been done without cover shade where spontaneous firing was also observed, neither fixed type of water sprinklers have been provided, nor undertaken any measures to control of fugitive dust and smog & based on height of foothills the constructed toe wall, catch drains, siltation ponds and sedimentation pits are insufficient	Partial Complied and work is in progress for covered shed However, all control measures were taken. Additional fixed-type sprinklers installed for the same along with Dry Fog System for coal dump hopper area. Additional Settling pond Constructed. Attached photos 1 2 &3.
(2)	Roads connecting the raw material yards to the plant has not been repaired. (Specific Condition No. v.)	Complied.
(3)	Approach road to coal stockyard has neither been black topped nor properly paved/ concreted creating dust pollution in the project site. (Specific Conditions No. vi.)	Complied
(4)	A settling pond has not been constructed before discharge of water from all drainage system into the outside plant premises. (Specific Condition No. ix and Specific Condition no. xii.)	Complied.
(5)	Cemented bandh made to block the natural flow to accumulate water has resulted in drying of remaining part of the natural nallah in winter season (Specific condition no. x.)	During the coming Winter season, we will undertake a study by organisation to review the impact of water withdrawal during the winter season.
(6)	Green belt development is not satisfactory and high value index air pollution tolerant native species have not been planted (Specific Condition No. xvii.)	The plantation is in Progress.
(7)	The transfer of EC for Cement plant from else while owner of M/s. Calcom Cement Ltd. to present owner M/s. Dalmia Bharat Cement Limited is yet to be approved by the Ministry and no application has been submitted. (General Condition No. i.)	Complied. Already complied during seeking extension of validity of EC.



Photos 1



Photos 2



Photos 3

Report No.: ENV/CCIL/DMH/22-23/FE-11/01

Date : 11/11/2022

Order No.:

Date :

Report Issued To : **CALCOM CEMENT INDIA LIMITED**

(Unit of Dalmia Cement (Bharat) Ltd.)

Village: Jamunagar-16 Kilo, Umrangso, Dist- Dima Hasao; Assam- 788931

FUGITIVE EMISSION TEST RESULTS

Sl. No.	Locations	Date Of Sampling	Suspended Particulate Matter ($\mu\text{g}/\text{m}^3$)	Limits ($\mu\text{g}/\text{m}^3$)
1	Near Raw Mill	07.11.2022	314	2000

Analysis Protocol: IS 5182



Checked By: Mr. Pankaj Baroi, **ENVIROCON**

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Report No.: ENV/VLC/DMH/21-22/AA-02
 Date : 23/02/2022

 Order No.: 4556000733/236
 Date :

 Report Issued To: **VCL LIMITED**

 [Unit of Dalma Cement (Bharat) Ltd.]
 Vill.: Jamunagar-16 Kilo, Umrangso, Dist.: Dima Hasao, Assam - 788931

AMBIENT AIR QUALITY TEST RESULTS

LOCATIONS ↓	Date of Sampling	PM 2.5 (µg/m ³)	PM 10 (µg/m ³)	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	NH ₃ (µg/m ³)	CO (mg/m ³)	O ₃ (µg/m ³)	B(a)P (ng/m ³)	C ₆ H ₆ (µg/m ³)	NI (ng/m ³)	As (ng/m ³)	Pb (µg/m ³)
LIMITS →	..	60 (24 hrs. Average)	100 (24 hrs. Average)	80 (24 hrs. Average)	80 (24 hrs. Average)	400 (24 hrs. Average)	4.0 (1 hr. Average)	180 (1 hr. Average)	1.0 (Annual Average)	5.0 (Annual Average)	20 (Annual Average)	6.0 (Annual Average)	1.3 (24 hrs. Average)
Near Magazine (N 25°30'45.33948" E 92°47'3.98879")	11.02.2022	32.4	61.7	6.2	7.6	<5.0	<0.01	<1.0	<0.1	<0.01	<0.01	<0.01	<0.01
Near Weighbridge (N 25°30'53.80808" E 92°47'7.06909")	11.02.2022	50.6	87.2	10.6	15.2	<5.0	<0.01	<1.0	<0.1	<0.01	<0.01	<0.01	<0.01
Mine View Point (N 25°31'0.377736" E 92°47'21.12594")	12.02.2022	18.2	38.4	<5.0	<6.0	<5.0	<0.01	<1.0	<0.1	<0.01	<0.01	<0.01	<0.01

Analysis Protocol: IS 5182



Checked By: Pankaj Baroi, ENVIROCON

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Report No.: ENV/CCL/DMH/21-22/AA-02
 Date : 23/02/2022

 Order No.: 4556000733/236
 Date :

 Report Issued To: **CALCOM CEMENT INDIA LIMITED**
 [Unit of Dalmia Cement (Bharat) Ltd]
 Vill.: Jamunagar-16 Kilo, Umrangso, Dist.: Dima Hasao, Assam- 788931

AMBIENT AIR QUALITY TEST RESULTS

LOCATIONS ↓	Date of Sampling	PM 2.5 (µg/m ³) (24 hrs. Average)	PM 10 (µg/m ³) (24 hrs. Average)	SO ₂ (µg/m ³) (24 hrs. Average)	NO ₂ (µg/m ³) (24 hrs. Average)	NH ₃ (µg/m ³) (24 hrs. Average)	CO (mg/m ³) (1 hr. Average)	O ₃ (µg/m ³) (1 hr. Average)	B(a)P (ng/m ³) (Annual Average)	CaH ₄ (µg/m ³) (Annual Average)	NI (ng/m ³) (Annual Average)	As (ng/m ³) (Annual Average)	Pb (µg/m ³) (24 hrs. Average)
CCR Building (N 25°30'43.2954" E 92°45'49.51224")	12.02.2022	24.6	46.1	<5.0	<6.0	<5.0	<0.01	<1.0	<0.1	<0.01	<0.01	<0.01	<0.01
Near Dispensary (N 25°30'42.59628" E 92°45'48.17156")	10.02.2022	19.2	40.2	<5.0	<6.0	<5.0	<0.01	<1.0	<0.1	<0.01	<0.01	<0.01	<0.01
Near Shiv Temple (N 25°30'38.74781" E 92°45'49.28767")	10.02.2022	16.2	36.4	<5.0	<6.0	<5.0	<0.01	<1.0	<0.1	<0.01	<0.01	<0.01	<0.01

Analysis Protocol: IS 5182



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Report No.: ENV/CCIL/DMH/21-22/N-02
Date : 23/02/2022

Order No.: 4556000733/236
Date :

Report Issued To : **CALCOM CEMENT INDIA LIMITED**
(Unit of Dalmia Cement (Bharat) Ltd.)
Village: Jamunagar-16 Kilo, Umrangso, Dist- Dima Hasao; Assam- 788931

AMBIENT NOISE LEVEL MEASUREMENT RESULTS

Area Code/Category: A/Industrial Area

Sl. No.	Location(s)	Date Of Measurement	Day Time		Night Time	
			L _{eq} (dB-A)	Limit (dB-A)	L _{eq} (dB-A)	Limit (dB-A)
1	Near Magazine	11.02.2022	52	75	38	70
2	Near Weighbridge	11.02.2022	56	75	50	70
3	View Point Mine	12.02.2022	41	75	32	70
4	CCR Building	12.02.2022	61	75	42	70
5	Near Shiv Temple	10.02.2022	48	75	32	70
6	Near Dispensary	10.02.2022	45	75	32	70
7	Crusher	11.02.2022	79*	75	75*	70
8	Cooler Section	11.02.2022	80*	75	78*	70
9	Near RABH	12.02.2022	72	75	58	70
10	Near Coal Mill	11.02.2022	79*	75	77*	70
11	Compressor Room	10.02.2022	72	75	68	70
12	Raw Mill	10.02.2022	78*	75	75*	70
13	Kiln Area	10.02.2022	79*	75	76*	70
14	Landing Silo	10.02.2022	81*	75	78*	70
15	Near Pre Heater	10.02.2022	79*	75	77*	70

*Remarks: PPE (Personal Protective Equipment) recommended.

Checked By: Mr. Pankaj Baroi, ENVIROCON



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Report No.: ENV/CCIL/DMH/21-22/SE-04
Date : 23/02/2022

Order No.: 4556000733/236
Date :

Report Issued To : **CALCOM CEMENT INDIA LIMITED**
(Unit of Dalmia Cement (Bharat) Ltd.)
Village: Jamunagar-16 Kilo, Umrangso, Dist.- Dima Hasao; Assam- 788931

STACK EMISSION TEST RESULTS

01	Stack Emission Test Ref. No.	CAL/SE/2022/02-01		
02	Date of Sampling	13.02.2022		
03	Material of Construction	M. S.		
04	Stack Attached To (with GPS co-ordinate)	R.A.B.H (25.5111, 92.76494)		
05	Stack Height From Ground Level (Meter)	55		
05	Stack Diameter (Meter)	3.8		
06	Flue Gas Temperature (°C)	146		
07	Exit Velocity of Gas (m/sec)	9.4		
08	Flow Rate (Nm ³ /hr)	272989		
09	Type of Fuel Used	NA*		
Analysis Results of Flue Gas				
S. No.	Parameter(s)	Result(s)	Unit(s)	Limit(s)
i.	PM- Particulate Matter	15	mg/Nm ³	30
ii.	Sulphur Dioxide (as SO ₂)	412	mg/Nm ³	1000
iii.	Oxides of Nitrogen (as NO _x)	244	mg/Nm ³	800

*NA: Not Applicable



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(Unit of Dalmia Cement (Bharat) Ltd.)
Village: Jamunagar-16 Kilo, Umrangso, Dist.- Dima Hasao; Assam- 788931

STACK EMISSION TEST RESULTS

01	Stack Emission Test Ref. No.	CAL/SE/2022/02 02		
02	Date of Sampling	12.02.2022		
03	Material of Construction	M. S.		
04	Stack Attached To (with GPS co-ordinate)	Coal Mill (25.51204, 92.76478)		
05	Stack Height From Ground Level (Meter)	54		
05	Stack Diameter (Meter)	1.15		
06	Flue Gas Temperature (°C)	70		
07	Extt Velocity of Gas (m/sec)	5.1		
08	Flow Rate (Nm ³ /hr)	16570		
09	Type of Fuel Used	NA*		
Analysis Results of Flue Gas				
S. No.	Parameter(s)	Result(s)	Unit(s)	Limit(s)
i.	PM- Particulate Matter	22	mg/Nm ³	30
ii.	Sulphur Dioxide (as SO ₂)	726	mg/Nm ³	1000
iii.	Oxides of Nitrogen (as NO _x)	368	mg/Nm ³	800

*NA: Not Applicable



Checked By: Mr. Pankaj Baroi, ENVIROCON

NOTE:

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Report No.: ENV/CCIL/DMH/21-22/SE-06
Date : 23/02/2022

Order No.: 4556000733/236
Date :

Report Issued To : **CALCOM CEMENT INDIA LIMITED**
(Unit of Dalmia Cement (Bharat) Ltd.)
Village: Jamunagar-16 Kilo, Umrangso, Dist- Dima Hasao; Assam- 788931

STACK EMISSION TEST RESULTS

01	Stack Emission Test Ref. No.	CAI/SE/2022/02-03		
02	Date of Sampling	12.02.2022		
03	Material of Construction	M. S.		
04	Stack Attached To (with GPS co-ordinate)	E. S. P (25.51256, 92.76428)		
05	Stack Height From Ground Level (Meter)	50		
05	Stack Diameter (Meter)	3.4		
06	Flue Gas Temperature (°C)	155		
07	Exit Velocity of Gas (m/sec)	8.5		
08	Flow Rate (Nm ³ /hr)	193463		
09	Type of Fuel Used	NA*		
Analysis Results of Flue Gas				
S. No.	Parameter(s)	Result(s)	Unit(s)	Limit(s)
i.	PM- Particulate Matter	17	mg/Nm ³	30
ii.	Sulphur Dioxide (as SO ₂)	BDL#	mg/Nm ³	1000
iii.	Oxides of Nitrogen (as NO _x)	BDL#	mg/Nm ³	800

*NA: Not Applicable
BDL: Below Detection Level



Checked By: Mr. Pankaj Baroi, ENVIROCON

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Core Services: Environmental Monitoring & Data Generation, FIA & FMP, Environmental Audit & Allied Environmental Management jobs
Associate Services: Certification by Competent Person (CIP), NDT, Hydraulic Testing, Chartered Engineer Services etc.

Report No.: ENV/CCIL/DMH/21-22/RW-03
Date : 23/02/2022

Order No.: 4556000733/236
Date :

Report Issued To : **CALCOM CEMENT INDIA LIMITED**
(Unit of Dalmia Cement (Bharat) Ltd.)
Village: Jamunagar-16 Kilo, Umrangso, Dist.- Dima Hasao; Assam- 788931

RAW WATER ANALYSIS RESULTS

Sample Ref. No. : CCIL/2022/RW-1302/01

Sample Source : 12 Kilo Well
(25.51087, 92.73624)

Sample Type : Ground Water

Collected On : 13-02-2022

Received On : 14-02-2022

Collected By : ENVIROCON Representative

Sl. No.	Parameters	Results	Desirable Limit (IS:10500:2012)
01	Colour, Hazen Units, Max	1	5
02	Odour	Odourless	Agreeable
03	Taste	Acceptable	Agreeable
04	Turbidity, NTU, Max	0.3	1.0
05	pH	6.72	6.5 – 8.5
06	Total Dissolved Solids, mg/l, Max	87	500
07	Aluminium (as Al), mg/l, Max	ND	0.03
08	Boron (as B), mg/l, Max	ND	0.5
09	Calcium (as Ca), mg/l, Max	25	75
10	Chloride (as Cl), mg/l, Max	8.6	250
11	Copper (as Cu), mg/l, Max	ND	0.05
12	Fluorides (as F), mg/l, Max	0.2	1.0
13	Free Residual Chlorine, mg/l, Min	ND	0.2
14	Iron (as Fe), mg/l, Max	0.0	0.3
15	Magnesium (as Mg), mg/l, Max	5	30
16	Manganese (as Mn), mg/l, Max	ND	0.1
17	Zinc (as Zn), mg/l, Max	ND	5.0
18	Nitrate (as NO ₃), mg/l, Max	2.9	45
19	Phenolic Compounds (as C ₆ H ₅ OH), mg/l, Max	ND	0.001
20	Sulfate (as SO ₄), mg/l, Max	28	200
21	Total Alkalinity (as CaCO ₃), mg/l, Max	35	200
22	Total Hardness, (as CaCO ₃), mg/l, Max	182	200
23	Cadmium (as Cd), mg/l, Max	ND	0.003
24	Cyanide (as CN), mg/l, Max	ND	0.05
25	Lead (as Pb), mg/l, Max	ND	0.01
26	Mercury (as Hg), mg/l, Max	ND	0.001
27	Total Arsenic (as As), mg/l, Max	ND	0.01
28	Total Chromium, (as Cr), mg/l, Max	ND	0.05
29	E. Coli / 100 ml	NIL	Absent

Analysis Protocol: IS 3025
ND: Not Detected



Checked By: Mr. Pankaj Baroi, ENVIROCON

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Associate Services: Certification by Competent Person (CIP), NDT, Hydraulic Testing, Chartered Engineer Services etc.

Report No.: ENV/CCIL/DMH/21-22/DW-05
Date : 23/02/2022

Order No.: 4556000733/236
Date :

Report Issued To : **CALCOM CEMENT INDIA LIMITED**
(Unit of Dalmia Cement (Bharat) Ltd.)
Village: Jamunagar-16 Kilo, Umrangso, Dist.- Dima Hasao; Assam- 788931

DRINKING WATER ANALYSIS RESULTS

Sample Ref. No. : CCIL/2022/DW-1302/01

Sample Source : 250.0 Bigha
(25.51311, 92.7602)

Sample Type : Drinking Water (RO)

Collected On : 13-02-2022

Received On : 14-02-2022

Collected By : ENVIROCON Representative

Sl. No.	Parameters	Results	Desirable Limit (IS:10500:2012)
01	Colour, Hazen Units, Max	<1	5
02	Odour	Odourless	Agreeable
03	Taste	Acceptable	Agreeable
04	Turbidity, NTU, Max	<0.1	1.0
05	pH	6.63	6.5 - 8.5
06	Total Dissolved Solids, mg/l, Max	52	500
07	Aluminium (as Al), mg/l, Max	ND	0.03
08	Boron (as B), mg/l, Max	ND	0.5
09	Calcium (as Ca), mg/l, Max	10	75
10	Chloride (as Cl), mg/l, Max	4.2	250
11	Copper (as Cu), mg/l, Max	ND	0.05
12	Fluorides (as F), mg/l, Max	<0.1	1.0
13	Free Residual Chlorine, mg/l, Min	ND	0.2
14	Iron (as Fe), mg/l, Max	<0.001	0.3
15	Magnesium (as Mg), mg/l, Max	<1.0	30
16	Manganese (as Mn), mg/l, Max	ND	0.1
17	Zinc (as Zn), mg/l, Max	ND	5.0
18	Nitrate (as NO ₃), mg/l, Max	ND	45
19	Phenolic Compounds (as C ₆ H ₅ OH), mg/l, Max	ND	0.001
20	Sulfate (as SO ₄), mg/l, Max	<1	200
21	Total Alkalinity (as CaCO ₃), mg/l, Max	36	200
22	Total Hardness, (as CaCO ₃), mg/l, Max	7.2	200
23	Cadmium (as Cd), mg/l, Max	ND	0.003
24	Cyanide (as CN), mg/l, Max	ND	0.05
25	Lead (as Pb), mg/l, Max	ND	0.01
26	Mercury (as Hg), mg/l, Max	ND	0.001
27	Total Arsenic (as As), mg/l, Max	ND	0.01
28	Total Chromium, (as Cr), mg/l, Max	ND	0.05
29	E. Coli / 100 ml	NII.	Absent

Analysis Protocol: IS 3025
ND: Not Detected



Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No.: ENV/CCIL/DMH/21-22/DW-06

Order No.: 4556000733/236

Date : 23/02/2022

Date :

Report Issued To : **CALCOM CEMENT INDIA LIMITED**

(Unit of Dalmia Cement (Bharat) Ltd.)

Village: Jamunagar-16 Kilo, Umrangso, Dist.- Dima Hasao; Assam- 788931

DRINKING WATER ANALYSIS RESULTS

Sample Ref. No. : CCIL/2022/DW-1302/02

Sample Source : CCR
(25.51203, 92.76375)

Sample Type : Drinking Water (RO)

Collected On : 13-02-2022

Received On : 14-02-2022

Collected By : ENVIROCON Representative

Sl. No.	Parameters	Results	Desirable Limit (IS:10500:2012)
01	Colour, Hazen Units, Max	<1	5
02	Odour	Odourless	Agreeable
03	Taste	Acceptable	Agreeable
04	Turbidity, NTU, Max	<0.1	1.0
05	pH	6.65	6.5 - 8.5
06	Total Dissolved Solids, mg/l, Max	62	500
07	Aluminium (as Al), mg/l, Max	ND	0.03
08	Boron (as B), mg/l, Max	ND	0.5
09	Calcium (as Ca), mg/l, Max	8	75
10	Chloride (as Cl), mg/l, Max	2.6	250
11	Copper (as Cu), mg/l, Max	ND	0.05
12	Fluorides (as F), mg/l, Max	<0.1	1.0
13	Free Residual Chlorine, mg/l, Min	ND	0.2
14	Iron (as Fe), mg/l, Max	<0.001	0.3
15	Magnesium (as Mg), mg/l, Max	<1.0	30
16	Manganese (as Mn), mg/l, Max	ND	0.1
17	Zinc (as Zn), mg/l, Max	ND	5.0
18	Nitrate (as NO ₃), mg/l, Max	ND	45
19	Phenolic Compounds (as C ₆ H ₅ OH), mg/l, Max	ND	0.001
20	Sulfate (as SO ₄), mg/l, Max	10	200
21	Total Alkalinity (as CaCO ₃), mg/l, Max	24	200
22	Total Hardness, (as CaCO ₃), mg/l, Max	9.3	200
23	Cadmium (as Cd), mg/l, Max	ND	0.003
24	Cyanide (as CN), mg/l, Max	ND	0.05
25	Lead (as Pb), mg/l, Max	ND	0.01
26	Mercury (as Hg), mg/l, Max	ND	0.001
27	Total Arsenic (as As), mg/l, Max	ND	0.01
28	Total Chromium, (as Cr), mg/l, Max	ND	0.05
29	E. Coli / 100 ml	NIL	Absent

Analysis Protocol: IS 3025
ND: Not Detected



Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No.: ENV/CCIL/DMH/21-22/DW-07
Date : 23/02/2022

Order No.: 4556000733/236
Date :

Report Issued To : **CALCOM CEMENT INDIA LIMITED**
(Unit of Dalmia Cement (Bharat) Ltd.)
Village: Jamunagar-16 Kilo, Umrangso, Dist.- Dima Hasao; Assam- 788931

DRINKING WATER ANALYSIS RESULTS

Sample Ref. No. : CCIL/2022/DW-1302/03
Collected On : 13-02-2022

Sample Source : Down Colony
Received On : 14-02-2022

Sample Type : Drinking Water (RO)
Collected By : ENVIROCON Representative

Sl. No.	Parameters	Results	Desirable Limit (IS:10500:2012)
01	Colour, Hazen Units, Max	<1	5
02	Odour	Odourless	Agreeable
03	Taste	Acceptable	Agreeable
04	Turbidity, NTU, Max	<0.1	1.0
05	pH	6.69	6.5 - 8.5
06	Total Dissolved Solids, mg/l, Max	58	500
07	Aluminium (as Al), mg/l, Max	ND	0.03
08	Boron (as B), mg/l, Max	ND	0.5
09	Calcium (as Ca), mg/l, Max	11	75
10	Chloride (as Cl), mg/l, Max	4.9	250
11	Copper (as Cu), mg/l, Max	ND	0.05
12	Fluorides (as F), mg/l, Max	<0.1	1.0
13	Free Residual Chlorine, mg/l, Min	ND	0.2
14	Iron (as Fe), mg/l, Max	<0.001	0.3
15	Magnesium (as Mg), mg/l, Max	<1	30
16	Manganese (as Mn), mg/l, Max	ND	0.1
17	Zinc (as Zn), mg/l, Max	ND	5.0
18	Nitrate (as NO ₃), mg/l, Max	ND	45
19	Phenolic Compounds (as C ₆ H ₅ OH), mg/l, Max	ND	0.001
20	Sulfate (as SO ₄), mg/l, Max	4	200
21	Total Alkalinity (as CaCO ₃), mg/l, Max	32	200
22	Total Hardness, (as CaCO ₃), mg/l, Max	8.9	200
23	Cadmium (as Cd), mg/l, Max	ND	0.003
24	Cyanide (as CN), mg/l, Max	ND	0.05
25	Lead (as Pb), mg/l, Max	ND	0.01
26	Mercury (as Hg), mg/l, Max	ND	0.001
27	Total Arsenic (as As), mg/l, Max	ND	0.01
28	Total Chromium, (as Cr), mg/l, Max	ND	0.05
29	E. Coli / 100 ml	NIL	Absent

Analysis Protocol: IS 3025
ND: Not Detected



Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No.: ENV/CCIL/DMH/21-22/DW-08
Date : 23/02/2022

Order No.: 4556000733/236
Date :

Report Issued To : **CALCOM CEMENT INDIA LIMITED**
(Unit of Dalmia Cement (Bharat) Ltd.)
Village: Jamunagar-16 Kilo, Umrangso, Dist.- Dima Hasao; Assam- 788931

DRINKING WATER ANALYSIS RESULTS

Sample Ref. No. : CCIL/2021/DW-1302/04
Collected On : 13-02-2022

Sample Source : WTP
Received On : 14-02-2022

Sample Type : Drinking Water (Treated)
Collected By : ENVIROCON Representative

Sl. No.	Parameters	Results	Desirable Limit (IS:10500:2012)
01	Colour, Hazen Units, Max	<1	5
02	Odour	Odourless	Agreeable
03	Taste	Acceptable	Agreeable
04	Turbidity, NTU, Max	<0.1	1.0
05	pH	6.85	6.5 - 8.5
06	Total Dissolved Solids, mg/l, Max	85	500
07	Aluminium (as Al), mg/l, Max	ND	0.03
08	Boron (as B), mg/l, Max	ND	0.5
09	Calcium (as Ca), mg/l, Max	16	75
10	Chloride (as Cl), mg/l, Max	8.6	250
11	Copper (as Cu), mg/l, Max	ND	0.05
12	Fluorides (as F), mg/l, Max	<0.1	1.0
13	Free Residual Chlorine, mg/l, Min	ND	0.2
14	Iron (as Fe), mg/l, Max	0.021	0.3
15	Magnesium (as Mg), mg/l, Max	2	30
16	Manganese (as Mn), mg/l, Max	ND	0.1
17	Zinc (as Zn), mg/l, Max	ND	5.0
18	Nitrate (as NO ₃), mg/l, Max	ND	45
19	Phenolic Compounds (as C ₆ H ₅ OH), mg/l, Max	ND	0.001
20	Sulfate (as SO ₄), mg/l, Max	18	200
21	Total Alkalinity (as CaCO ₃), mg/l, Max	46	200
22	Total Hardness, (as CaCO ₃), mg/l, Max	78	200
23	Cadmium (as Cd), mg/l, Max	ND	0.003
24	Cyanide (as CN), mg/l, Max	ND	0.05
25	Lead (as Pb), mg/l, Max	ND	0.01
26	Mercury (as Hg), mg/l, Max	ND	0.001
27	Total Arsenic (as As), mg/l, Max	ND	0.01
28	Total Chromium, (as Cr), mg/l, Max	ND	0.05
29	E. Coli / 100 ml	NIL	Absent

Analysis Protocol: IS 3025
ND: Not Detected



Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No.: ENV/CCIL/DMII/21-22/STP-01
Date : 23/02/2022Order No.: 4556000733/236
Date :Report Issued To: **CALCOM CEMENT INDIA LIMITED**
(Unit of Dalmia Cement (Bharat) Ltd.)
Village: Jamunagar-16 Kilo, Umrangso, Dist.- Dima Hasao; Assam- 780931**STP WATER ANALYSIS RESULTS**Sample Ref. No. : CCIL/2022/STP-1302/01
Collected On : 13-02-2022Sample Source : 5 KLD STP (25.5118, 92.76368)
Received On : 14-02-2022Sample Type : STP Treated Water
Collected By : ENVIROCON Representative

Sl. No.	Parameters	Results	Limit [G.S.R. 1265 (E), 2017]
1	pH	7.53	6.5 - 9.0
2	Biochemical Oxygen Demand (as BOD), mg/l	17	30
3	Total Suspended Solids (as TSS), mg/l	12	<100
4	Fecal Coliform (as FC), MPN/100 ml	300	<1000

Analysis Protocol: IS 3025

MPN: Most Probable Number



Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No.: ENV/CCIL/DMH/21-22/STP-02
Date : 23/02/2022Order No.: 4556000733/236
Date :Report Issued To : **CALCOM CEMENT INDIA LIMITED**
(Unit of Dalmia Cement (Bharat) Ltd.)
Village: Jamunagar-16 Kilo, Umrangso, Dist.- Dima Hasao; Assam- 788931**STP WATER ANALYSIS RESULTS**Sample Ref. No. : CCIL/2022/STP-1302/01 Sample Source : 20 KLD STP (25.51007, 92.76543) Sample Type : STP Treated Water
Collected On : 13-02-2022 Received On : 14-02-2022 Collected By : ENVIROCON Representative

Sl. No.	Parameters	Results	Limit [G.S.R. 1265 (E), 2017]
1	pH	7.32	6.5 - 9.0
2	Biochemical Oxygen Demand (as BOD), mg/l	19	30
3	Total Suspended Solids (as TSS), mg/l	10.2	<100
4	Fecal Coliform (as FC), MPN/100 ml	410	<1000

Analysis Protocol: IS 3025

MPN: Most Probable Number



Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No.: ENV/CCIL/DMII/21-22/STP-03
Date : 23/02/2022Order No.: 4556000733/236
Date :Report Issued To : **CALCOM CEMENT INDIA LIMITED**
(Unit of Dalmia Cement (Bharat) Ltd.)
Village: Jamunagar-16 Kilo, Umrangso, Dist.- Dima Hasao; Assam- 788931**STP WATER ANALYSIS RESULTS**Sample Ref. No. : CCIL/2022/STP-1302/03 Sample Source : 10 KLD STP (25.51108, 92.76301) Sample Type : STP Treated Water
Collected On : 13-02-2022 Received On : 14-02-2022 Collected By : ENVIROCON Representative

Sl. No.	Parameters	Results	Limit [G.S.R. 1265 (E), 2017]
1	pH	7.12	6.5 - 9.0
2	Biochemical Oxygen Demand (as BOD), mg/l	15	30
3	Total Suspended Solids (as TSS), mg/l	12	<100
4	Fecal Coliform (as FC), MPN/100 ml	280	<1000

Analysis Protocol: IS 3025

MPN: Most Probable Number

Checked By: Mr. Pankaj Baroi, **ENVIROCON**

- NOTE:**
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Report No.: ENV/CCIL/DMH/21-22/ETP-03
Date : 23/02/2022Order No.: 4556000733/236
Date :Report Issued To : **CALCOM CEMENT INDIA LIMITED**
(Unit of Dalmia Cement (Bharat) Ltd.)
Village: Jamunagar-16 Kilo, Umrangso, Dist.- Dima Hasao; Assam- 788931**ETP WATER ANALYSIS RESULTS**Sample Ref. No. : CCIL/2022/ETP-1302/02
Collected On : 13-02-2022Sample Source : ETP Outlet
Received On : 14-02-2022Sample Type : ETP Treated Water
Collected By : ENVIROCON Representative

Sl. No.	Parameter(s)	Result(s)	Limits [G.S.R. 422 (E), 19.05.1993]
01	pH	6.69	5.5 - 9.0
02	Temperature, °C	22.4	shall not exceed 5°C above the receiving water temperature
03	Total Suspended Solids, mg/l	19	100
04	Biochemical Oxygen Demand, mg/l	23	30
05	Chemical Oxygen Demand, mg/l	104	250
06	Oil & Grease, mg/l	BDL	10
07	Total Residual Chlorine, mg/l	<0.01	1.0
08	Ammonical Nitrogen (as N), mg/l	9.2	50
09	Total Kjeldahl Nitrogen (as NH ₃), mg/l	34	100
10	Free Ammonia (as NH ₃), mg/l	<0.01	5.0

Analysis Protocol: IS 3025

BDL: Below Detectable Limit



Checked By: Mr. Pankaj Baroi, ENVIROCON

- NOTE:**
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CALCOM CEMENT INDIA LIMITED -UMRONGSHO

ENVIRONMENT, HEALTH & SAFETY POLICY

Calcom Cement reaffirms its commitment to provide safe work place and healthy environment to its employees and other stakeholders as an integral part of its business philosophy & values. We will continually enhance our Occupational Health, Safety and Environmental (EHS) performance in our activities, products and services through a structured EHS management framework. Towards this commitment, we shall;

- Comply with applicable EHS legislations and other requirements to which our organization subscribes.
- Conduct operations in safe and environment friendly manner to minimize the impacts on Environment, Health & Safety.
- Use and maintain equipment, system and facilities to provide a safe work atmosphere to our stake holders and aim towards becoming a zero harm company.
- Conserve resources and prevent pollution.
- Create Health, Safety and Environment awareness and develop the required level of knowledge to all employees through need based training and internal communication.

This policy, its objectives & targets and the levels of implementation shall be periodically reviewed to ensure continual improvement and that it remains relevant and communicated to all concerned.

R. A. Krishna Kumar

KRISHNAKUMAR R.A

Date: 01.03.2016

Environment Management Cell - USO

Sl. No	Name	Deapartment	Designation	Qualification	Cell No.	Email Id
1	Mr. Padmanav Chakravarty	Regional Operation Head	Regional Manufacturing Head	Diploma in Instrumentation Engineer	8811017766	Chakravarty.Padmanav@dalmiabharat.com
2	Mr. Ambuj Srivastava	Unit operation Head	Unit Head	M Tech in Chemical Engineer	9824442179	Srivastava.Ambuj1@dalmiacement.com
2	Mr. Subodh kumar	EHS	DGM	Graduate Diploma in Mechanical ,PGDIS Industrial Safety,Post Graduate Diploma in Environmental Health & Safety Science ,MBA, NEBOSH IGC	8811018071	Kumar.Subodh@dalmiacement.com
3	Mr. Chandra Prakash Mishra	EHS	Asst. Manager	Diploma in Mechanical & PGDIS EHS	8811046681	Mishra.Chandra@dalmiacement.com
4	Mr. Ravindra Routela	Mechanical	Technical Head	Diploma in Mechanical Engg.	6900011081	routela.ravindra@dalmiacement.com
5	Mr.Vemula Dhananjaya	Mines	Sr.GM	Diploma in Mining Engg.(MBA in Mining Techno	8811028649	Dhananjaya.vemula@dalmiacement.com
6	Mr. M. Dash	Electrical & Instrumentation	DGM	AMIE	8811018069	dash.m@dalmiacement.com
7	Mr. Pallab Kumar Kalita	Operation	AGM	B.E. in Mechanical Engineering	9678075714	Kalita.Pallab@Dalmiabharat.com
8	Mr. Chandan Kumar Singh	Mechanical	Deputy Manager	B.E-Mechanical Engg	8811046719	kumar.singh.chandan@dalmiabharat.com
9	Mr. Pankaj Saha	Mechanical	Manager	BE in Mechanical Engineering	7099044278	SAHA.PANKAJ@dalmiacement.com
10	Mr. Krishan Sethi	Mechanical	DGM	MBA in material Management	7086015714	Sethi.Krishan@dalmiacement.com
11	Mr. Mahendra singh Jhala	Process	AGM	B.Tech in Chemical Engineering	8811028644	jhala.mahender@dalmiacement.com
12	Mr. Golap Nath	Process	DGM	B.E-Chemical in Chemical Engg.	8011002458	Nath.Golap@dalmiacement.com
13	Mr. Amitava Roy	Quality	AGM	M.Sc. (Chemistry)	8011002436	roy.amitava@dalmiacement.com
14	Mr. Sukhwinder singh	Mechanical	AGM	Diploma in Mechanical Engg.	8811028653	singh.sukhwinder@dalmiacement.com
15	Mr. Vinay Tripathi	Mechanical	Sr. Manager	B.Tech in Mechanical Engg.	8811046702	tripathi.vinay@dalmiabharat.com
16	Mr. V. Jagadeesh	Mechanical	Manager	Diploma in Mech. Engg.	8811028652	v.jagadeesh@dalmiacement.com
17	Mr.Shivnath Agrawal	Finance	DGM	C.A.	9733541122	Agarwal.Shivnath@dalmiacement.com
18	Mr.Rohini Baishya	CSR	Deputy Manager	B.Sc. [Agri]	8811028656	baishya.rohini@dalmiacement.com

of service to the nation

LATE CITY

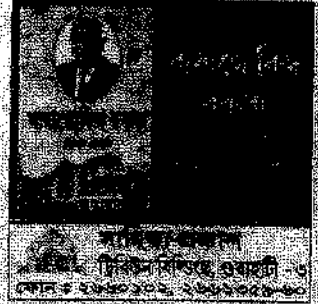
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GUWAHATI, WEDNESDAY, MAY 11, 2022



PUBLIC NOTICE

This is to inform you that M/s Calcom Cement India Limited, A subsidiary of Dalmia Cement (Bharat) Ltd., Anil Plaza II, 4th floor, ABC, G.S. Road, Kamrup, Guwahati, Assam 781005, has been accorded the Environmental Clearance for its Expansion in Clinker Capacity from 0.98 MTPA to 1.52 MTPA along with the installation of waste heat recovery system (8 MW) for its unit located at 16 Kilo, Langcherui (Jamuna Nagar), Tehsil: Umrongso, District: Dima Hasao (Earlier North Cachar Hills), Assam, by Ministry of Environment, Forest & Climate Change vide F.No. JEL/1011/307/2006-IA. II (I) dated 05.05.2022 & EC Identification no. EC22A009AS128343. A copy of the EC along with the environmental conditions and safeguards is available with the Offices of Pollution Control Board, Assam, Office of the Dima Hasao District Autonomous Council, GaonBura 16 Kilo, GaonBura 19 Kilo, Umrongso Town Committee in addition to the relevant offices of the Government and Company and also on the website of the Ministry of Environment, Forest & Climate Change at <http://parivesh.nic.in/> and company's website (<https://www.dalmiacement.com/>)

অসমীয়া খবৰ

বাৰ্তা জাননী

ইয়াৰ দ্বাৰা জনোৱা হয় যে ডালমিয়া চিমেণ্ট ভাৰত লিমিটেড, অমিল
প্লাজা ২, চতুৰ্থ মহলা, এৰিচি, জিএছ ৰোড, কামৰূপ, গুৱাহাটী, অসম-
৭৮১০০৫ৰ এক সহযোগী প্রতিষ্ঠান মেছাৰ্ছ কেএলকম চিমেণ্ট ইণ্ডিয়া
লিমিটেডক পৰিবেশ, বন আৰু জলবায়ু পৰিৱৰ্তন মন্ত্ৰালয়ৰ দ্বাৰা আইল
নং J-11011/307/2006-1A, II (I), দিনাংক ০৫-০৫-২০০২ আৰু
ইচি চিনাক্তকৰণ নং EC22A009AS128343ৰ জৰিয়তে এই
প্ৰমাণপত্ৰ প্ৰদান কৰা হৈছে। এই প্ৰমাণপত্ৰখন ক্ৰিঙ্কাৰ ক্ষমতা ০.৯৮
এমটিপিএৰ পৰা ১.৫২ এমটিপিএলৈ সৰ্বস্বত্বাধীন নগতে আৱৰ্জনাৰ
পৰা তাপ পুনৰুদ্ধাৰ পদ্ধতি (এএম ডব্লিউ)ৰ কাৰণে মেছাৰ্ছ কেএলকম
চিমেণ্ট ইণ্ডিয়া লিমিটেডক প্ৰদান কৰা হৈছে। এই গোটটো অসমৰ
ডিব্ৰুগড় জিলা (পূৰ্বৰ উত্তৰ কাছাৰ পাহাৰ জিলা)ৰ ১৬ কিলোমিটাৰ
দূৰত্বত বৈ (ধমুনা নগৰ), টেহচিল : উমৰা চুত অৱস্থিত। পৰিবেশ
সমস্যাৰ চৰ্ত আৰু সুৰক্ষাজনিত বিশেষমূহৰ লগতে ইচিৰ প্ৰতিবিধি
প্ৰদূষণ নিয়ন্ত্ৰণ পৰিবেশ, অসম, ডিব্ৰুগড় জিলা স্বায়ত্তশাসিত পৰিবেশ
কামালয়, ১৬ কিলোমিটাৰ গাঁওবুঢ়া, ১৯ কিলোমিটাৰ গাঁওবুঢ়া, উমৰা চুত নগৰ
সমিতিৰ লগতে চৰকাৰ আৰু কোম্পানীৰ সংশ্লিষ্ট কাৰ্যালয়সমূহত পোহৰ
ব্যৱস্থা আছে। পৰিবেশ, বন আৰু জলবায়ু পৰিৱৰ্তন মন্ত্ৰালয়ৰ ৱেবছাইট
<http://parivesh.nic.in> আৰু কোম্পানীৰ ৱেবছাইট www.dalmiacement.com তো

Ref. No.: CCIL/EC/2022-23/03

Date: 9th May 2022

To,
The Gaon Bura,
Village 19 Kilometer District - Dima Hasao,
Haflong, Assam

Subject: Expansion in Clinker Production Capacity from 0.98 MTPA to 1.52 MTPA along with the installation of waste heat recovery system (8 MW) by M/s. Calcom Cement India Limited located at 16 Kilo - Langcherui (Jamunanagar), Tehsil: Umrangso, District: Dima Hasao (Earlier North Cachar Hills), Assam- Environment Clearance regarding.

Ref.: 1. Environmental Clearance granted by Ministry of Environment, Forest & Climate Change vide F. No. J-11011/307/2006-IA.II(I) dated 05.05.2022. (Attached as Annexure-I)

Dear Sir,

With reference to the aforesaid subject and reference; we would like to inform you that M/s Calcom Cement India Limited, A subsidiary of Dalmia Cement (Bharat) Ltd., has been accorded the Environmental Clearance vide EC Identification no. EC22A009AS128343 for its Expansion in Clinker Capacity from 0.98 MTPA to 1.52 MTPA along with the installation of waste heat recovery system (8 MW) for its unit Located at 16 Kilo- Langcherui (Jamuna Nagar), Tehsil: Umrangso, District: Dima Hasao (Earlier North Cachar Hills), Assam, by Ministry of Environment, Forest & Climate Change vide letter mentioned above under Ref.-1.

In compliance of General Conditions; under Section X-MISCELLANEOUS, Sn 2 of granted EC, copy of Environmental Clearance is being submitted herewith for your information & record. As per this condition, copy of granted EC need to be displayed at your office for 30 days from the date of receipt.

Thanking you & with regards,
For M/s. Calcom Cement India Limited



Padmanav Chakravarty
(Authorized Signatory)

Encl: as above



U. B. of
Umrangso Village (19Km.,
P.O. Umrangso, N. G. Hills

Calcom Cement India Limited

Subsidiary of Dalmia Cement (Bharat) Limited

Registered Office : 3rd & 4th Floor, Anil Plaza II, ABC G.S. Road, Guwahati - 781005 (Assam) India

T 91 361 7156700 F 91 361 7156707 Toll Free 1800 2020 W www.dalmiacement.com CIN: U26942AS2004PLC007538

A Dalmia Bharat Group company, www.dalmiabharat.com

No: CCIL/USO/EHS/2021-2022/15

Date: 01.06.2022

To

The Senior Environmental Engineer,
Pollution control board, Assam
Bamunimaidam Guwahati

Subject: Submission of annual return Environment Statement Form V for the period 1st April 2021 to 31st March 2022, in respect of **M/S Calcom Cement India Limited at 16 Kilo Jamuna Nagar Umrongso, Assam - 788931.**

Respected Sir,

Referring to the above-mentioned subject we are submitting Annual Return form V in respect of M/S Calcom Cement India Limited at 16 Kilo Jamuna Nagar, Assam - 788931, document is enclosed here.

We trust you find the compliance in order and assure you to comply with all your directions as always.

Thanking you,

For Calcom Cement India Ltd



Authorized Signatory

Enclosed - Form V

C.C Regional Office Silchar

(See Rule 14) *

From:**M/S Calcom Cement India Limited****A subsidiary of Dalmia Cement Bharat Limited****16 Kilo Jamuna Nagar Umrongso****Dist. Haflong Assam - 788931****To,****Assam Pollution Control Board**

“Bamunimaidam”,

Guwahati

ENVIRONMENTAL STATEMENT for the financial year ending 31st March 2022.**PART – A**

(i)	Name and address of the owner/ occupier of the industry operation or process:	Mr. Padmanav Chakravarty Regional Manufacturing Head M/s Calcom Cement India Limited. 16 Kilo Jamuna Nagar Umrongso
(ii)	Industry category - Primary – (STC Code) Secondary – (STC Code)	Red ---
(iii)	Production capacity Units:	0.98MMTPA
(iv)	Year of establishment:	April – 2015
(v)	Date of the last	19/05/2021

	Environmental Statement submitted:	
--	---	--

- * Submission of Environmental Statement is in accordance with the provisions of Rule-14 of the Environment (Protection). Amendment Rules, 1993 of the Environment (Protection) Act, 1986 (29 of 1986) published vide Notification dated 22-4-1993 G.S.R. 386 (E) in the Gazette of India-Extraordinary- Part-II Section-3 Subsection (i), No. 155 dated 28-4-1993 by the Ministry of Environment and Forests, Government of India; read with the Notification dated 13-3-1993 G. S. R. 329 (E), of the Gazette of India –Extraordinary Part – II Section –3 Subsection (i) No. 120 dated 13-3-1993.

“Every person carrying on an industry, operation or process requiring Consent under Section-25 of the Water (Prevention & Control of Pollution) Act, 1974 (6 of 1974) or under Section-21 of the Air (Prevention & Control of Pollution) Act, 1981 (14 of 1981) or both or authorization under the Hazardous Wastes (Management and Handling) Rules, 1989 published under the Environment (Protection) Act, 1986 (29 of 1986) Shall submit an Environmental Statement for the financial year ending the 31st March in Form V to the concerned State Pollution Control Board on or Before the Thirtieth day of September every year, beginning 1993.”

PART –B

Water and Raw Material Consumption

(i)	Water Consumption M ³ /day	
	Process	55 M3/day
	Cooling	Nil
	Domestic	89 M³/day

Please refer Annexure-II (Month wise Water Consumption)

Name of Products	Process water consumption per unit of product output	
	During the previous financial year 20-21	During the current financial year 21-22
	(1)	(2)
01. Clinker	59 M3/Day	52 M3/Day

(ii) Raw material consumption

* Name of raw material	Name of Products	Consumption of raw material per unit of output	
		During the previous Financial year 2020-2021	During the current Financial year 2021-2022
Raw Mix	Clinker	1.53	1.60
Lime stone	Clinker	1.47	1.55
River/ Hill Sand	Clinker	0.06	0.075
Coal	Clinker	0.135	0.140

* Industry may use codes if disclosing details of raw material would violate contractual obligations, otherwise all industries have to name the raw materials used.

PART – C
Pollution discharged to environment per unit of output
(Parameters as specified in the consent issued)

Pollutants	Quantity of Pollutants discharged (mass/day)	Concentration of pollutants in discharged (mass/volume)	Percentage of variation from prescribed Standards with reason
(a) Water	Not applicable, because no waste water is generated from the process	---	---
(b) Air			
	Online Ambient Air Quality & Stack has been done & concentrations are found within the permissible limit. Online data are connecting with PCBA & CPCB servers.		

PART – D

HAZARDOUS WASTES

(As specified under Hazardous Wastes (Management, Handling and Transboundary) Rules, 2008)

Hazardous Wastes	Total Quantity (kg.)	
	During the previous financial year 20-21	During the current financial year 21-22
(a) From Process	Used Oil-2.780 KL	Used Oil-2.250 KL
(b) From pollution control facilities	---	---

PART – E

SOLID WASTE

	Total Quantity (kg.)	
	During the previous financial year	During the current financial year
(a) From Process	Due to the dry process, no solid waste has been generated.	
	Due to the dry process, we are reusing the same.	
(b) From pollution control facilities	Due to the dry process, we are reusing the same.	Due to the dry process, we are reusing the same.
	Due to the dry process, no solid waste has been generated.	
(c) (1) Quantity recycled or re-utilized	Due to dry process we are reuse the same.	Due to dry process we are reuse the same.
(2) Sold	NIL	
(3) Disposed		

PART – F

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

Sl. No.	Name of Hazardous Waste / Solid Waste	Quantity	Mode of Disposal/ Co processed
1	28.1,28.4 & 35.3- Pharma Process Residue & Waste, Off specification product and Sludge	1423.5 MT	Co processed in Cement Kiln
2	Plastic & RDF	10391 MT	Co processed in Cement Kiln

PART – G

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

As per present requirement, we have already installed ESP, baghouses for Raw Mill and Coal Mill, and 27 nos. of bag filters at different locations of Pyro sections, Coal Mill, Raw mill, all transfer points, and Clinker loading area to maintain the Particulate Matters (PMs) within the prescribed limit. All these systems were found effective in arresting and putting back the recovered material into the production line thus preventing wastage of the raw materials & finished products and avoiding getting lost in the atmosphere.

Thus, pollution control measures are being taken to maintain a healthy work environment as well as conservation of natural resources and consequently optimization the cost of production.

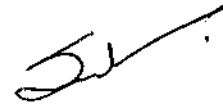
PART – H

Plantation work is going on in full swing. More than Five Hundred (500 nos.) plants have been planted. The trees planted are Amla, Krishnachuda, Jack Fruit, Mango, Trifala, Nahar, Jamun, Bakul, Nim, Litchi etc.

PART –I MISCELLANEOUS:

Any other particulars for improving the quality of the environment.

1. Two full-time vehicles have been deployed for a sprinkling of water within and around the plant area on regular basis to minimize dust emission from the vehicular movement and lay down a permanent sprinkling system in the coal transportation area.
2. In order to maintain the air quality in/around our factory premises, maintenance of Air Pollution Control equipment is carried out periodically.



(Signature of a person carrying out an industry - operation or process)

Name : Subodh Kumar

Designation : DGM – EHS

M/s Calcom Cement India Limited

Address : 16 Kilo Jamunanagar Umrongso,

Assam PIN-788931



Pollution Control Board:: Assam Bamunimaidam; Guwahati-21

(Department of Environment & Forests :: Government of Assam)
Phone: 0361-2652774 & 2550258; Fax: 0361-2550259
Website: www.pcbassam.org



No. WB/SLC/T-637/14-15/371

Dated Guwahati, the 19th February, 2022

"CONSENT TO ESTABLISH (EXPANSION)"

CONSENT TO ESTABLISH (EXPANSION) under Section 25 of the Water (Prevention & Control of Pollution) Act, 1974, as amended and under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981, as amended to-

- i) Name of Industry : **M/s. Calcom Cement India Limited**
- ii) Name of the Occupier / Applicant and Designation : Sri Padmanav Chakravarty, Regional Manufacturing Head
- iii) Address of the unit : 16 Kilo, Langcherui (Jamunanagar), Umrangso, Pin-788931, Dist- Dima Hasao, Assam
- iv) Type of the Project : Clinker manufacturing unit (**Red Category**)
- Cost of the project : 8453.00 Lakhs
- v) Details of Project:

Sl No.	Product	Quantity/ Capacity
1	Capacity Expansion for Clinker production	0.98 MTPA to 1.52 MTPA

- vi) Waste Heat Recovery System : 8.0 MW

General Conditions:

1. This **Consent to Establish (CTE)** has been accorded based on the particulars furnished by the applicant vide Application ID **1011286** and subject to addition of further or more conditions, if so warranted by subsequent developments. The CTE will automatically become invalid if any change or alteration or deviation is made in actual practice;
2. This "CTE" will be valid till the date of commissioning of the unit or seven (7) years whichever is earlier.
3. **The project authority should install a Display Board as per the Boards notification No. PCBA/LGL-95/2021/Notification/01 dtd.11.11.2021 (Copy enclosed as Appendix-A).**
4. All the haul roads shall be made metallic.
5. Proper housekeeping shall be maintained. Burning of solid wastes inside the premises is prohibited.
6. The project proponent must develop a greenbelt/plantation area with native trees only at least 33% of the total plot area to develop Green Belt and Carbon Sink.

Contd....P/2

21/2/22



7. The Company shall comply with all the environment protection measures and safeguards recommended in the EIA/EMP.
8. Domestic Wastewater generated shall be treated in a Sewage Treatment Plant. This treated water shall be utilized in greenbelt development and for dust suppression measures in all the haul roads.
9. Permission of the Central Ground Water Authority shall be obtained for extraction of Ground Water, if applicable.
10. Environmental Statement in prescribed Form-V should be submitted on or before the 30th September every year.
11. Rain water harvesting facility shall be install and maintained.
12. The unit shall install Cameras focusing feeding of AFR in the plant and AFR handling areas. Data captured shall be sent to PCBA for continuous display.

Specific Conditions:

A) Air Aspect:-

1. **The minimum height of all the chimneys shall not be less than 30 meters.**
2. Location of sampling port shall be provided as specified in **CPCB guidelines for Emission Regulations (December 1985), Part-III (Appendix-B)**
3. The unit shall comply with the industry specific emission standards, notified by the **MoEF & CC, Govt. of India, vide GSR.497(E) dated 10th May,2016** as applicable for all its chimney emission (Appendix-C)
4. The unit shall comply with noise level standard as notified by the **MoEF & CC, Govt. of India vide, GSR 7, dated Dec.22, 1998** as mentioned herein under.

Limit in dB (A) Leq	
Day Time (6:00am-9:00pm)	Night Time (9:00pm-6:00am)
75	70

5. On-line Continuous Emission Monitoring System should be provided for Particulate Matter (PM), SO_x, NO_x emission shall be properly maintained and **OCMMS RT-DAS** data should be regularly transmitted to **Pollution Control Board, Assam** and Central Pollution Control Board.
6. Appropriate dust suppression measures shall be adopted to reduce fugitive emission at all the materials transfer and dropping points.
7. Vehicle wheel washing system shall be installed at entry and exit gate of the factory.



8. The Ambient Air Quality within the Plant premises shall be maintained within the National Ambient Air Quality Standards, notified by the CPCB, vide No.B-29016/20/90/PCI-L, dated 18th November, 2009 as mentioned herein under-

Sl. No.	Pollutants	Time Weighted average	Concentration in Ambient Air (Industrial, Residential, Rural Areas) $\mu\text{g}/\text{m}^3$
1.	SO ₂	Annual 24 hours	50 80
2.	NO ₂	Annual 24 hours	40 80
3.	Particulate Matter, PM ₁₀ (size less than 10 μm)	Annual 24 hours	60 100
4.	Particulate Matter, PM _{2.5} (size less than 2.5 μm)	Annual 24 hours	40 60

B) Water Aspect:

1. ETP shall be installed to treat service water. The treated water shall meet with industry specific standards, notified by the MoEF & CC, Govt. of India, vide GSR.497(E) dated 10th May, 2016 (Part-B of Appendix-C)
2. The unit shall maintain 'Zero Liquid Discharge' condition.
3. Adequate covered storage sheds for fly-ash shall be provided to prevent leachate and runoff from the storage yard.

C) E-Waste Aspects:

Electronic wastes generated in the unit shall be disposed of as per the provisions of E-Waste Management Rules, 2016. The unit shall submit the Annual Report in the Form-III within 30th June every year.

D) Plastic Waste Aspect:

1. Plastic Waste generated in the unit shall be disposed of in accordance of the provisions under Plastic Waste Management Rules, 2016.
2. The unit shall submit the Annual return under the Plastic Waste Management Rules, 2016 within 30th June every year.

E) Solid Waste Aspect-

1. Adequate facility should be created for collection, storage, transportation, treatment & disposal of non-hazardous industrial solid waste generated from the Industry.
2. Adequate system should be adopted on reduction of waste generation and enhancement of re-utilization & recycling of waste materials.



-4-

3. Solid waste generated in the unit shall be disposed of as per the provisions of the Solid Waste Management Rules, 2016.

F) Hazardous Waste Aspect/Co-incineration of Hazardous & Other waste:

1. The utilization of Fly-ash should be in accordance to the provisions of the Notification No. S.O. 2804(E), dated 03.11.2009 issued by the ministry of Environment and Forests, GOI under the Environment (Protection) Acts 1986 for which action plan is to be prepared and submit to this Board.
2. The unit shall apply for authorization under the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.
3. Adequate facility shall be provided for collection and storage of spent oil, which shall be sent to registered recyclers for recycling.
4. Appropriate facility shall be created for handling, storage, treatment & disposal of Hazardous waste generated from the industry in accordance to the provisions of the Hazardous & Other Waste (Management & Trans Boundary Movement) Rules 2016.
5. The unit should submit the annual return under the Hazardous & Other Waste (Management & Trans Boundary Movement) Rules 2016 in the Form-IV within 30th June every year.

The unit shall submit compliance report of the mandated conditions by April, 15, every year to Member Secretary, PCBA as well as to Regional Office, Guwahati-I, PCBA. The Board will have the liberty to withdraw the CTE if adequate pollution control and safety measures are not taken and mandated conditions are not complied with.

sd/f
(Shantanu Kr. Dutta)
Member Secretary

Memo No. WB/ SLC/T-637/14-15/371-A,

Dated Guwahati, the 19th February, 2022

Copy to:

✓ M/s Calcom Cement India Limited, 16 Kilo, Langcherui (Jamunanagar), Umrangso, Pin-788931, Dist- Dima Hasao, Assam for information and necessary action.

sd/f
(Shantanu Kr. Dutta)
Member Secretary



**Pollution Control Board, Assam
Bamunimaidam, Guwahati-21**



NOTIFICATION

No. PCBA/LGL-95/2021/Notification/01

Dated Guwahati, the 11th Nov, 2021

In exercise of the powers conferred under Section-5 of the Environment (Protection) Act, 1986 as amended till date and keeping in view the need of public interest towards dissemination of vital information regarding Consent/Authorization of this Board, all industries are hereby directed to install a Display Board of minimum size 5'x4', near the main entrance gate.

The format of the display board is given below:

Name and Address of the Unit : M/s.	
Description of Consent/Authorization	Details
Consent to Establish (CTE)	No.: Date of Issue:
Consent to Operate (CTO)	No.: Date of validity:
Authorization under Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016 (if applicable)	No.: Date of Issue: Date of validity:

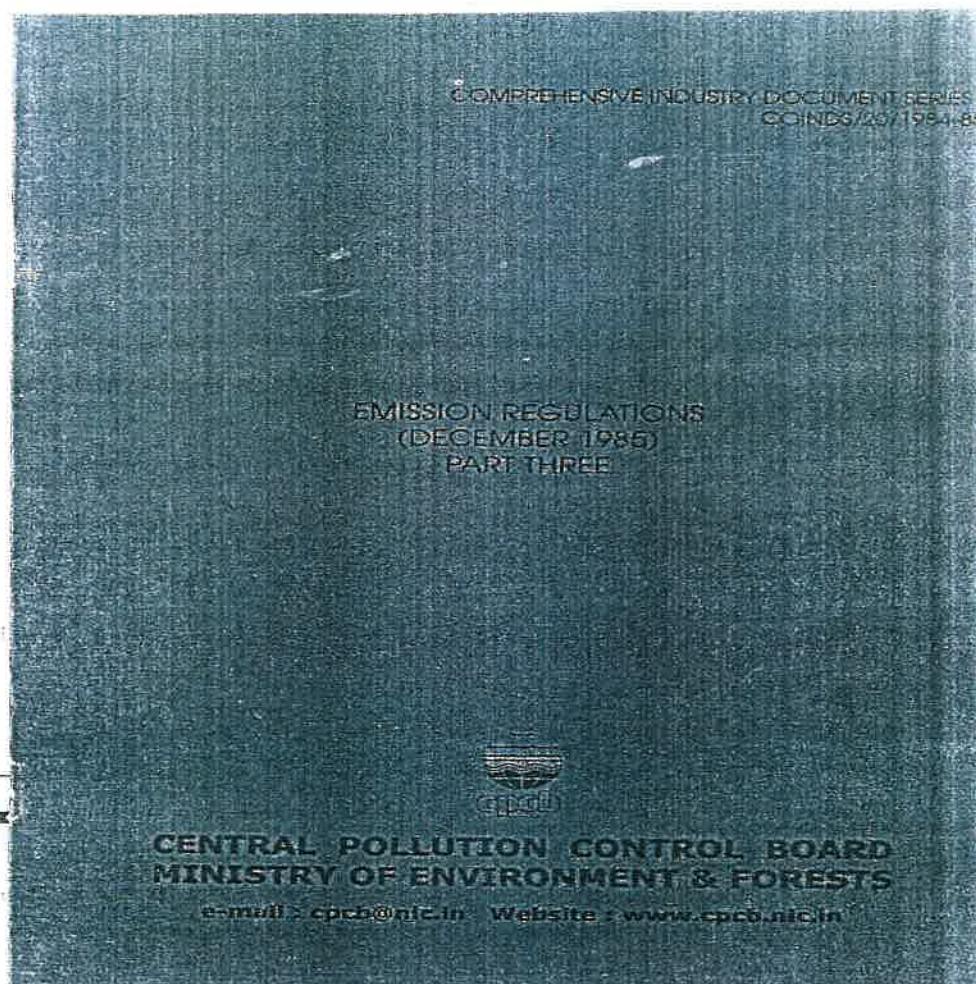
Member Secretary

Memo No. PCBA/LGL-95/2021/Notification/01-A
Copy to:

Dated Guwahati, the 11th Nov, 2021

1. The Commissioner & Secretary to the Govt. of Assam, Department of Environment & Forest, Dispur for kind information.
2. P.A. to the Chairman, PCBA for kind appraisal of the Hon'ble Chairman.
3. The All Regional Heads, PCBA for information & necessary action.
4. M/S APS Advertising Pvt. Ltd, Guwahati-1. They are requested to publish the "NOTICE" in "the Assam Tribune" and "Dainandini Barta" on 12.11.2021.
5. Notice Board, Head Office / Website (www.pcbassam.org), PCBA.

[Signature]
Member Secretary



2.5.0 Location of Sampling Port

To ensure laminar flow the sampling ports shall be located at atleast 8 times chimney diameter down stream and 2 times up stream from any flow disturbance. For a rectangular cross section the equivalent diameter (D_e) shall be calculated from the following equation to determine up stream, down stream distances.

$$D_e = \frac{2LW}{L+W}$$

Where L = Length in m, W = width in m.

Sometimes it may so happen for existing chimneys that sufficient physical chimney height is not available for desired sampling location in such cases additional traverse points shall be taken as given under 2.4.0.

The sampling port should be preferably provided on the delivery side of duct or chimney and not on the suction side.



MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
NOTIFICATION

New Delhi, the 10th May, 2016

G.S.R. 497 (E). – In exercise of powers conferred by sections 6 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government hereby makes the following rules further to amend the Environment (Protection) Rules, 1986, namely :-

1. Short title and commencement - (1) These rules may be called the Environment (Protection) Third Amendment Rules, 2016.
(2) They shall come into force on the date of their publication in the Official Gazette.

2. In the Environment (Protection) Rules, 1986,-

(a) in schedule I, after serial number 10 and the entries relating thereto, the following serial number and entries shall be inserted, namely:-

"S. No. (1)	Industry (2)	Parameter (3)	Standards (4)		
"10A.	Cement Plant with co-processing of wastes	A. Emission Standards.			
		Rotary Kiln – with co-processing of Wastes			
			Date of Commissioning (a)	Location (b)	Concentration not to exceed, in mg/Nm ³ (c)
		Particulate Matter (PM)*	on or after the date of notification. (25.8.2014)	anywhere in the country	30
			before the date of notification. (25.8.2014)	critically polluted area or urban centres with population above 1.0 lakh or within its periphery of 5.0 kilometer radius	30
				other than critically polluted area or urban centres	30
		SO ₂ *	irrespective of date of commissioning	anywhere in the country	100, 700 and 1000 when pyritic sulphur in the limestone is less than 0.25%, 0.25 to 0.5% and more than 0.5% respectively.
NO _x *	After the date of notification (25.8.2014)	anywhere in the country	(1) 600		
	Before the date of notification	anywhere in the country	(2) 800 for rotary kiln with In Line Calciner		



		(25.8.2014)	(ILC) technology. (3) 1000 for rotary kiln using mixed stream of ILC, Separate Line Calciner (SLC) and suspension pre-heater technology or SLC technology alone or without calciner.
		HCl	10 mg/Nm ³
		HF	1 mg/Nm ³
		TOC	10 mg/Nm ³ **
		Hg and its compounds	0.05 mg/Nm ³
		Cd +Tl and their compounds	0.05 mg/Nm ³
		Sb+As+Pb+Co+Cr+Cu+Mn+Ni+V and their compounds	0.5 mg/Nm ³
		Dioxins and Furans	0.1 ngTEQ/ Nm ³
		<p>Note: The abbreviations used in the Table shall mean as under: SO₂- Sulphur dioxide; NO_x - Oxides of Nitrogen; HCl – Hydrogen Chloride; HF – Hydrogen Flouride; TOC - Total Organic Carbon; Hg – Mercury; Cd – Cadmium; Tl – Thallium; Sb – Antimony; As – Arsenic; Pb – Lead; Co – Cobalt; Cr – Chromium; Cu – Copper; Mn – Manganese; Ni – Nickel; and V - Vanadium.”;</p> <p>* The concentration values and timeline for implementation in respect of PM, SO₂ and NO_x shall be governed in accordance with the provisions under notification published vide GSR No. 612 (E), dated the 25th August, 2014 and amended from time to time.</p> <p>**Permitting authority may prescribe separate standards on case to case basis, if Total Organic Carbon (TOC) does not result from the co-processing of waste.</p> <p>(a) The height of each individual stack connected to Kiln, Clinker Cooler, Cement Mill, Coal Mill, Raw Mill, Packaging section, etc. shall be of a minimum of 30 metres or, as per the formula $H = 14 (Q1)^{0.3}$ and $H = 74 (Q2)^{0.27}$ whichever is more, where “H” is the height of stack in metres and “Q1” is the maximum quantity of SO₂ expected to be emitted in kg/hr and “Q2” is the maximum quantity of PM expected to be emitted in tonnes/hr through the stack at 100 percent rated capacity of the plant;</p> <p>(b) The monitored values of SO₂, NO_x, HCl, HF, TOC, Metals and Dioxins and Furans at main kiln stack shall be corrected to 10% Oxygen, on dry basis and the norms for SO₂, NO_x, HCl, HF, TOC, Metals and Dioxins and Furans shall be applicable to main kiln stack and the norms for Particulate Matter (PM) shall be applicable to all the stacks in the plant. PM, SO₂, NO_x shall be monitored continuously. HCl, HF, TOC, Metals and Dioxins and Furans shall be monitored once in a year;</p> <p>(c) Scrubber meant for scrubbing emissions shall not be used as quencher and plants having separate stack for gaseous emission for the scrubbing unit, the height of this stack shall be at least equal to the main stack.</p>	
		<p>B- Service waste water (with co-processing of wastes)</p> <p>All efforts shall be made by the industry for 'zero discharge' of service wastewater and in case, the industry prefers to discharge service wastewater, the following norms shall be complied with:</p>	
			Concentration not to exceed, milligram per litre (except pH and temperature)
		pH	5.5 to 9.0
		Suspended Solids	100



[भाग II-खण्ड 3(i)]

भारत का राजपत्र : असाधारण

	Oil and Grease	10
	Temperature	not more than 5°C higher than the intake water temperature
	C- Storm water	
	(I) Storm-water shall not be allowed to mix with effluent, treated sewage, scrubber water and or floor washings.	
	(II) Storm-water within battery limits of industry shall be channelised through separate drain(s)."	

(b) in Schedule VI, under 'Part-D' relating to General Emission Standards, in item III relating to Load or Mass based standards, after serial number 10 and the entries relating thereto, the following serial number and entries shall be inserted, namely:-

(1)	(2)	(3)	(4)
"10A	Cement Plants (with co-processing)	Rotary kiln based plants (Particulate Matter from raw mill, kiln and pre-calceiner system put together)	0.125 kg/ tonne of clinker."

[F. No.- Q-15017/30/2007-CPW]
Dr. RASHID HASAN, Advisor

Note :- The principal rules were published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (i), vide number S.O. 844 (E), dated the 19th November, 1986 and subsequently amended vide the following notifications, namely:-

S.O. 433 (E), dated the 18th April 1987; G.S.R. 176(E), dated the 2nd April, 1996; G.S.R. 97 (E), dated the 18th February, 2009; G.S.R. 149 (E), dated the 4th March, 2009; G.S.R. 543(E), dated the 22nd July, 2009; G.S.R. 739 (E), dated the 9th September, 2010; G.S.R. 809(E), dated, the 4th October, 2010, G.S.R. 215 (E), dated the 15th March, 2011; G.S.R. 221(E), dated the 18th March, 2011; G.S.R. 354 (E), dated the 2nd May, 2011; G.S.R. 424 (E), dated the 1st June, 2011; G.S.R. 446 (E), dated the 13th June, 2011; G.S.R. 152 (E), dated the 16th March, 2012; G.S.R. 266(E), dated the 30th March, 2012; and G.S.R. 277 (E), dated the 31st March, 2012; and G.S.R. 820(E), dated the 9th November, 2012; G.S.R. 176 (E), dated the 18th March, 2013; G.S.R. 535(E), dated the 7th August, 2013; G.S.R. 771(E), dated the 11th December, 2013; G.S.R. 2(E), dated the 2nd January, 2014; G.S.R. 229 (E), dated the 28th March, 2014; G.S.R. 232(E), dated the 31st March, 2014; G.S.R. 325(E), dated the 07th May, 2014, G.S.R. 612, (E), dated the 25th August 2014; G.S.R. 789(E), dated the 11th November 2014; S.O. 3305(E), dated the 7th December, 2015; S.O.4(E), dated the 1st January 2016; G.S.R. 35(E), dated the 14th January 2016 and lastly amended vide notification G.S.R. 281 (E), dated the 7th March, 2016.

ॐ नमो भगवते वासुदेवाय



Pollution Control Board:: Assam
Bamunimaidam; Guwahati-21
(Department of Environment & Forests :: Government of Assam)
Phone: 0361-2652774 & 2550258; Fax: 0361-2550259
Website: www.pcbassam.org



No. WB/SLC/T-637/14-15/384

Dated Guwahati. the 3rd June, 2022

“CONSENT TO OPERATE”

“CONSENT TO OPERATE” (CTO) under Section 25 of the Water (Prevention & Control of Pollution) Act, 1974 and Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 as amended and Rules Framed thereunder is granted to:

- i) Name of Industry : M/s Calcom Cement India Ltd.
- ii) Name of the Occupier / Applicant and Designation : Padmanav Chakravarty,
Regional Manufacturing Head
- iii) Address of the unit : 16 Kilo, Jamunanagar, Umrangso, Dist. Dima
Hasao, Assam-788931
- iv) Cost of the project : Rs. 79953.00 Lakhs.
- v) Details of the project & category : Clinker manufacturing unit (Red Category)

Sl. No.	Product	Capacity
1.	Clinker	1.52 MT/ Annum

vi) Capacity of various unit:

Sl. No.	Units	Capacity
1.	Kiln	4600 TPD
2.	Re claimer	450 TPH
3.	Stacker	850 TPH
4.	Raw Mill: 15% Residue on 90 micron 1.5% Residue on 212 micron	285 TPH 285 TPH
5.	Raw Mill Silo (storage capacity)	4800 MT
6.	Kiln Feed Elevator	285 TPH
7.	Lime Stone Crusher	700 TPH
8.	Coal Firing System – Pre calciner	25 TPH
9.	Coal Firing System – Kiln	15 TPH
10.	Coal Mill: 15% Residue on 90 micron	25 TPH
11.	Clinker Silo Storage Capacity	Design: 15000 MT Actual : 12500 MT

vii) D.G. sets : 2 x 500 KVA

General Conditions:

1. The Consent to Operate (CTO) has been accorded based on the particulars furnished by the applicant vide **Application ID: 1059228** and subject to addition of further or more conditions if so warranted by subsequent developments. The CTO will automatically become invalid if there is any changes, modification, alteration, expansion or deviation made in actual practice.
2. The CTO is valid till 31.03.23.

Contd...p/2

mrbg 1/3

3. The CTO may be modified, suspended in whole or in part or withdrawn by the Board during its term for cause including, but not limited to the following:-
- Violation of any Terms and Conditions of this CTO;
 - Obtaining the CTO by misrepresentation or failure to disclose fully all relevant facts;
 - If any genuine complaint received.
4. As per provisions of Water (Prevention & Control of Pollution) Act, 1974 and Air (Prevention & Control of Pollution) Act, 1981 any officer, employed by this Board in its behalf shall have without any interruption, the right at any time to enter the industry for inspection, to take samples for analysis and may call for any information etc. All the pollution control measures is to be adopted to control the dust, noise, etc. during construction.
5. The project proponent should strictly comply with the Environmental Clearance (EC) conditions, as stipulated by MoEF&CC vide No. J-11011/307/2006-IA.11(I), dtd. 05.05.2022.
6. The project proponent shall develop a greenbelt/plantation area with native trees only at least 33% of the total plot area to develop Green Belt and Carbon Sink.
7. Permission of the Central Ground Water Authority shall be obtained for extraction of Ground Water, if applicable.
8. **The project authority should install a Display Board as per the Boards notification no.PCBA/LGL-95/2021/Notification/01 dtd.11.11.2021 (Appendix-A).**
9. The unit shall apply for renewal of CTO before expiry. The Board has decided to grant renewal of CTO for five (5) years, subject to due payment of CTO fees as applicable.
10. **Proper housekeeping shall be maintained within unit premises. Burning of any wastes within the premises areas is strictly prohibited.**

Specific Conditions:

A) Air Aspects:

1. **The unit shall comply with the industry specific standards, Notified by MoEF&CC, Govt. of India vide GSR 612(E) & GSR 497(E) (Appendix-B).**

2. **i) Details of Kiln:**

1. Length of the Kiln	56 meters, $\phi = 3.8$ meters
-----------------------	--------------------------------

ii) Details of I.D. Fans

Sl. No.	Parameters	Capacity	Stack Height
1.	Cooler ESP Fan	406000 m ³ /hour	50 meters
2.	RABH Gas Volume	750000 m ³ /hour	55 meters
3.	PH Fan Volume	595000 m ³ /hour	
4.	Coal Mill	74880 m ³ /hour	54 meters

3. The unit shall follow the **Standards and Guidelines for control of Noise Pollution from Stationary Diesel Generator Sets** as notified by MoEF&CC, Govt. of India, vide GSR.7 dtd. Dec. 22, 1998 (**Appendix – C**).
4. The industry shall comply with the Noise Level Standards, notified by MoEF&CC, Govt. of India, vide as per GSR. 7, dated: Dec.22, 1998, as mentioned herein under:

Limit in dB (A) Leq	
Day Time (6:00am-10:00pm)	Night Time (10:00pm-6:00am)
75	70

11/3/23 43

5. On-line Continuous Emission Monitoring System (OCEMS) should be provided for Particulate Matter (PM), SO_x & NO_x monitoring OCMMS RT-DAS data shall be regularly transmitted to **Pollution Control Board, Assam** and Central Pollution Control Board.
6. The Ambient Air Quality within the Plant premises shall be maintained within the National Ambient Air Quality Standards, Notified by MoEF&CC, Govt. of India vide G.S.R.826(E) dtd.19.11.2009, especially with respect to PM₁₀, PM_{2.5}, SO₂ & NO₂, as mentioned herein under:

Sr. No.	Pollutant	Time Weighted Average	Concentration in Ambient Air	
			Industrial, Residential, Rural & Other Area	Ecologically Sensitive Area (notified by Central Government)
1.	Particulate Matter (size less than 10µg) or PM ₁₀ (µg/m ³)	Annual* 24 hours**	60 100	60 100
2.	Particulate Matter (size less than 2.5µg) or PM _{2.5} (µg/m ³)	Annual* 24 hours**	40 60	40 60
3.	Sulphur Dioxide (SO ₂)	Annual* 24 hours**	50 80	20 80
4.	Nitrogen Dioxide (NO ₂)	Annual* 24 hours**	40 80	30 80

7. Air Pollution Control (APC) devices shall be installed at all material transfer and dropping points to reduce fugitive emission.
8. Vehicle wheel washing system shall be installed at (entry/exit) gate of the factory.

B) Water Aspects:

1. Source of Water : Surface water
2. i) Water consumption : 975 KLD
- ii) Effluent generation : Nil
- iii) Effluent recycled : Not applicable
- iv) NOC from CGWA : Not obtained
- v) Capacity of ETP : 15 KLD
3. Any discharge from storm drain shall meet with general effluent discharge parameters notified by MoEF&CC, Govt. of India vide G.S.R.422(E) dated 19.05.1993.
4. Adequate covered storage sheds for fly-ash shall have to be provided to prevent leachate and runoff from the storage yard;
5. The unit shall quantify the raw water consumption in the cement plant and shall prepare and submit water balance diagram.
6. Storm water shall not be allowed to mix with effluent and/or floor washings.
7. Storm water within the battery limits of the unit shall be channelized through separate drain/pipe passing through an Oil & Grease Trap/sedimentation tank.
8. Rain water harvesting facility shall be installed.

C) Solid Waste Aspects:

1. Adequate system should be adopted on reduction of waste generation and enhancement of re-utilization & recycling of waste material.

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2. Solid waste generated in the unit shall be disposed of as per the provisions of **Solid Waste Management Rules, 2016**.

D) Plastic Waste Aspects:

1. Plastic Waste generated in the unit shall be disposed of in accordance of the provisions under the **Plastic Waste Management Rules, 2016**.
2. The unit shall submit a report on generation & disposal of Plastic wastes within 30th June every year.

E) E-Waste Aspects:

1. Electronic wastes generated in the unit shall be disposed of as per the provisions of E-Waste Management Rules, 2016.
2. The unit shall submit the Annual Report in the Form-III within 30th June every year.

F) Hazardous Waste Aspects:

1. **Authorization under Hazardous & Other Wastes (Management & Trans-boundary Movement) Rules, 2016 shall be obtained from the Pollution Control Board, Assam.**
2. The project authorities shall comply with the provisions of the said Rules.
3. Adequate facility shall be provided for collection and storage of used oil/spent oil, which shall be sent to registered recyclers for recycling.
4. The unit shall dispose of any other Hazardous Waste generated by the unit as per the provisions of the Rules.
5. The unit shall identify and quantify all streams of Hazardous Waste generation as per Schedule-I and maintain proper record in Form-III of the said Rules.
6. The unit should submit annual return in Form-IV under the said rules on or before 30th June every year.

The unit shall submit compliance report of the mandated conditions of this CTO by April 15, every year to the Member Secretary, PCBA as well as to Regional Office, Silchar. The Board will have the liberty to withdraw the CTO if adequate pollution control and safety measures are not taken.

Sd/-
(Shantanu Kr. Dutta)
Member Secretary

Memo No. WB/SLC/T-637/14-15/384 -A
Copy to: *518*

Dated Guwahati, the *3rd* June, 2022

- ✓ 1. M/s Calcom Cements India Ltd., 16 Kilo, Jamunanagar, Umrangso, Dist. Dima Hasao, Assam-788931 – for information & compliance of conditions.

MS
(Shantanu Kr. Dutta)
Member Secretary
MS

Annexure - A



pcba

Pollution Control Board, Assam
Bamunimaidam, Guwahati-21

NOTIFICATION

No. PCBA/LGL-95/2021/Notification/01

Dated Guwahati, the 11th Nov, 2021

In exercise of the powers conferred under Section-5 of the Environment (Protection) Act, 1986 as amended till date and keeping in view the need of public interest towards dissemination of vital information regarding Consent/Authorization of this Board, all industries are hereby directed to install a Display Board of minimum size 5'x4', near the main entrance gate.

The format of the display board is given below:

Name and Address of the Unit : M/s.	
Description of Consent/Authorization	Details
Consent to Establish (CTE)	No.: Date of Issue:
Consent to Operate (CTO)	No.: Date of validity:
Authorization under Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016 (if applicable)	No.: Date of Issue: Date of validity:

Member Secretary

Memo No. PCBA/LGL-95/2021/Notification/01-A
Copy to:

Dated Guwahati, the 11th Nov, 2021

1. The Commissioner & Secretary to the Govt. of Assam, Department of Environment & Forest, Dispur for kind information.
2. P.A. to the Chairman, PCBA for kind appraisal of the Hon'ble Chairman.
3. The All Regional Heads, PCBA for information & necessary action.
4. M/S APS Advertising Pvt. Ltd, Guwahati-1. They are requested to publish the "NOTICE" in "the Assam Tribune" and "Dainandin Barta" on 12.11.2021.
5. Notice Board, Head Office / Website (www.pcbassam.org), PCBA.

Member Secretary

Appendix - B

4

THE GAZETTE OF INDIA : EXTRAORDINARY

[PART II—SEC. 3(i)]

(ख) अनुसूची 6 में, साधारण उत्सर्जन मानक से संबंधित भाग घ के अधीन, भार/मात्रा आधारित मानक से संबंधित मद 3 में, क्रम सं. 9 और उससे संबंधित प्रविष्टियों के पश्चात् निम्नलिखित क्रम संख्यांक और प्रविष्टियां अंतःस्थापित की जाएगी, अर्थात् :—

(1)	(2)	(3)	(4)
"10	सीमेंट मानक (बिना प्रसंस्करण के)	पूर्णक भट्टा पर आधारित संयंत्र (अपरिष्कृत मिल, भट्टा और पूर्ण खांजर सिस्टम को साथ चलने से विवत्त पदार्थ)	खांजर का 0.125 कि.ग्रा./टन (01.01.2017 से)
		उर्ध्वाधर शाफ्ट भट्टा आधारित संयंत्र (अपरिष्कृत मिल, भट्टा के साथ चलने से प्राप्त विवत्त पदार्थ)	खांजर का 0.50 कि.ग्रा./टन (01.01.2017 से)।"।

[फा. सं. क्यू.-15017/30/2007-सी.पी.डब्ल्यू.]

डॉ. राशिद हुसन, सलाहकार

टिप्पण—मूल नियम भारत के राजपत्र में का.आ. सं. 844(अ), 19 नवंबर, 1986 द्वारा प्रकाशित किए गए थे और तत्पश्चात् अधिसूचना सं. 433(अ), तारीख 18 अप्रैल, 1987 ; सा.का.नि. सं. 97(अ), तारीख 18 फरवरी, 2009 ; सा.का.नि. सं. 149(अ), तारीख 4 मार्च, 2009 ; सा.का.नि. सं. 739(अ), तारीख 9 सितंबर, 2010 ; सा.का.नि. सं. 809(अ), तारीख 4 अक्टूबर, 2010 ; सा.का.नि. सं. 215(अ), तारीख 15 मार्च, 2011 ; सा.का.नि. सं. 221(अ), तारीख 18 मार्च, 2011 ; सा.का.नि. सं. 354(अ), तारीख 2 मई, 2011 ; सा.का.नि. सं. 424(अ), तारीख 1 जून, 2011 ; सा.का.नि. सं. 446(अ), तारीख 13 जून, 2011 ; सा.का.नि. सं. 152(अ), तारीख 16 मार्च, 2012 ; सा.का.नि. सं. 266(अ), तारीख 30 मार्च, 2012 ; और सा.का.नि. सं. 277(अ), तारीख 31 मार्च, 2012 ; और सा.का.नि. सं. 820(अ), तारीख 9 नवंबर, 2012 ; सा.का.नि. सं. 176(अ), तारीख 18 मार्च, 2013 ; सा.का.नि. सं. 535(अ), तारीख 7 अगस्त, 2013 ; सा.का.नि. सं. 771(अ), तारीख 11 दिसंबर, 2013 ; सा.का.नि. सं. 2(अ), तारीख 2 जनवरी, 2014 ; सा.का.नि. सं. 229(अ), तारीख 28 मार्च, 2014 ; सा.का.नि. सं. 232(अ), तारीख 31 मार्च, 2014 और सा.का.नि. सं. 325(अ), तारीख 7 मई, 2014 द्वारा संशोधित किए गए थे।

MINISTRY OF ENVIRONMENT, FORESTS AND CLIMATE CHANGE

NOTIFICATION

New Delhi, the 25th August, 2014

G.S.R. 612(E).— In exercise of the powers conferred by sections 6 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government hereby makes the following rules further to amend the Environment (Protection) Rules, 1986, namely :—

1. (1) These rules may be called the Environment (Protection) (Fifth Amendment) Rules, 2014.
- (2) They shall come into force on the date of their publication in the Official Gazette.
2. In the Environment (Protection) Rules, 1986,—
- (a) in Schedule I, for serial number 10 and entries relating thereto, the following serial number and entries shall be substituted, namely :—

S. No.	Industry	Parameter	Standards		
(1)	(2)	(3)	(4)		
"10	Cement Plant (without coprocessing), Standalone Clinker Grinding Plant or, Blending Plant	Particulate Matter	A.- Emission Standards		
(i) Rotary Kiln - without coprocessing					
Date of Commissioning			Location	Concentration not to exceed, in mg/ Nm ³	
(a)			(b)	(c)	
		on or after the date of notification	anywhere in the country	30 (with effect from 01.01.2016)	



			before the date of notification	critically polluted area or urban centres with population above 1.0 lakh or within its periphery of 5.0 kilometre radius	50 (with effect from 01.01.2015)
					30 (with effect from 01.06.2016)
			other than critically polluted area or urban centres	100 (with effect from 01.01.2015)	
				30 (with effect from 01.06.2016)	
		Sulphur Dioxide (SO ₂)	irrespective of date of commissioning	anywhere in the country	100
		Nitrogen Dioxide (NO ₂)	on or after the date of notification	anywhere in the country	600 (with effect from 01.06.2015)
before the date of notification	anywhere in the country		800 (with effect from 01.01.2016)		

(1)	(2)	(3)	(4)		
			(a)	(b)	(c)
			(ii) Vertical Shaft Kiln – (without coprocessing)		
		Particulate Matter (PM)	on or after the date of notification	anywhere in the country	50 (with effect from 01.06.2016)
			before the date of notification	critically polluted area or urban Centres with population above 1.0 lakh or within its periphery of 5 kilometre radius	100 (with effect from 01.06.2015)
				other than critically polluted area or urban centres	75 (with effect from 01.06.2016)
					150 (with effect from 01.01.2015)
		Sulphur Dioxide (SO ₂)	-	-	200 (with effect from 01.01.2016)
		Nitrogen Dioxide (NO ₂)	-	-	500 (with effect from 01.01.2016)

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<p>Note :—</p> <p>a. The height of each stack including Clinker Grinding Plant, Coal Mill, Raw Mill, Grinding, Packaging Section, etc. shall be of a minimum of 30 metres or, as per the formula $H=14(Q)^{0.3}$, whichever is more, where "H" is the height of stack in metres and "Q" is the maximum quantity of SO₂ expected to be emitted in kg/hr through the stack at 100 per cent rated capacity of the plant and calculated as per the norms of gaseous emission.</p> <p>b. Above norms shall be applicable even if pet-coke is mixed with coal or, used alone for clinker making in kiln provided, pet-coke has been notified as 'approved fuel' by the concerned State Pollution Control Board/ Pollution Control Committee under the Air (Prevention and Control of Pollution) Act, 1981.</p> <p>c. All monitored values for SO₂ and NO₂ shall be corrected to 10% Oxygen, on dry basis. The norms for SO₂ and NO₂ shall be applicable to stacks attached to kiln.</p> <p>d. Scrubber meant for scrubbing emissions shall not be used as quencher. Plants having separate stack for gaseous emission for the scrubbing unit, the height of this stack shall be atleast equal to the main stack.</p>				

(1)	(2)	(3)	(4)
		B.- Service wastewater- (without coprocessing)	
		All efforts shall be made by the industry for 'zero discharge' of service wastewater. In case, the industry prefers to discharge service wastewater, the following norms shall be complied with:	
		Concentration not to exceed, milligramme per litre (except pH and temperature)	
		pH	5.5 to 9.0
		Suspended Solids	100
		Oil and Grease	10
		Temperature	not more than 5°C higher than the intake water temperature
		C.- Stormwater	
		(I) Stormwater shall not be allowed to mix with effluent, treated sewage, scrubber water and/ or floor washings.	
		(II) Stormwater within battery limits of industry shall be channelized through separate drain(s) as per natural gradient passing through high density polyethylene lined pit(s) each having holding capacity of 10 minutes (hourly average) of rainfall for its catchment area."	



(b) in Schedule VI, under 'PART- D' relating to General Emission Standards, in item III relating to Load/Mass based standards, after serial number 9, and the entries relating thereto, the following serial number and entries shall be inserted, namely :—

(1)	(2)	(3)	(4)
"10	Cement Plants (without coprocessing)	Rotary kiln based plants (Particulate Matter from raw mill, kiln and pre-calciner system put together).	0.125 Kg/ tonne of clinker (with effect from 01.01.2017)
		Vertical shaft kiln based plants (Particulate Matter from raw mill and kiln put together)	0.50 Kg/ tonne of clinker (with effect from 01.01.2017). "

[F. No. Q-15017/30/2007-CPW]

DR. RASHID HASAN, Advisor

Note: —The principal rules were published in the Gazette of India vide number S.O. 844 (E), 19th November, 1986 and subsequently amended vide notifications numbers S.O. 433 (E), dated 18th April 1987; G.S.R. 97 (E), dated the 18th February, 2009; G.S.R. 149 (E), dated the 4th March, 2009; G.S.R. 739 (E), dated the 9th September, 2010; G.S.R. 809(E), dated, the 4th October, 2010, G.S.R. 215 (E), dated the 15th March, 2011; G.S.R. 221(E), dated the 18th March, 2011; G.S.R. 354 (E), dated the 2nd May, 2011; G.S.R. 424 (E), dated the 1st June, 2011; G.S.R. 446 (E), dated the 13th June, 2011; G.S.R. 152 (E), dated the 16th March, 2012; G.S.R. 266(E), dated the 30th March, 2012; and G.S.R. 277 (E), dated the 31st March, 2012; and G.S.R. 820(E), dated the 9th November, 2012; G.S.R. 176 (E), dated the 18th March, 2013; G.S.R. 535(E), dated the 7th August, 2013; G.S.R. 771(E), dated the 11th December, 2013; G.S.R. 2(E), dated the 2nd January, 2014; G.S.R. 229 (E), dated the 28th March, 2014; G.S.R. 232(E), dated the 31st March, 2014; and G.S.R. 325(E), dated the 7th May, 2014.

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

NOTIFICATION

New Delhi, the 9th May, 2016

G.S.R. 496(E).—In exercise of powers conferred by Sections 6 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government hereby makes the following rules further to amend the Environment (Protection) Rules, 1986, Namely :-

1. (1) These rules may be called the Environment (Protection) Fourth Amendment Rules, 2016.
- (2) They shall come into force on the date of their publication in the Official Gazette.
2. In the Environment (Protection) Rules, 1986 in Schedule I, for serial number 10 and the entries relating to SO₂ and NO_x, the following shall be substituted, namely:-

S. No	Industry	Parameter	Standards		
(1)	(2)	(3)	(4)		
"10.	Cement Plant (without co processing), Standalone Clinker Grinding Plant or, Blending Plant	A – Emission Standards			
		(i) Rotary Kiln –without co processing			
			Date of Commissioning	Location	Concentration not to exceed, in mg/Nm ³
			(a)	(b)	(c)
		Sulphur Dioxide (SO ₂) in mg/Nm ³	Irrespective of date of commissioning	Anywhere in the country	100, 700 and 1000 when pyritic sulphur in the limestone is less than 0.25%, 0.25 to 0.5% and more than 0.5% respectively.
Oxides of Nitrogen (NO _x) in mg/Nm ³	After the date of notification (25.8.2014)	Anywhere in the country	(1) 600		
	Before the date of notification (25.8.2014)	Anywhere in the country	(2) 800 for rotary kiln with In Line Calciner (ILC) technology.		
			(3) 1000 for rotary kiln using mixed stream of ILC, Separate Line Calciner (SLC) and suspension pre-heater technology or SLC technology alone or without calciner.		

- (i) The timeline for implementation of emission standards for all the parameters i.e. Sulphur Dioxide (SO₂), Oxides of Nitrogen (NO_x) and Particulate Matter (PM), with respect to Rotary Kiln without co-processing shall be up to the 31st March, 2017.
- (ii) The emission standards for Sulphur Dioxide (SO₂) shall be reviewed after a period of five years from the date of notification of these rules.
- (iii) The word 'NO₂' shall be substituted by 'NO_x' wherever it occurs in the notification vide G.S.R. 612(E) dated 25th August, 2014."

[F. No. Q-15017/32/2007-CPW]

Dr. RASHID HASAN, Advisor

Note:- The principal rules were published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (i), vide number S.O. 844 (E), dated the 19th November, 1986 and subsequently amended vide the following notifications, namely:--

S.O. 433 (E), dated the 18th April 1987; G.S.R. 176(E), dated the 2nd April, 1996; G.S.R. 97 (E), dated the 18th February, 2009; G.S.R. 149 (E), dated the 4th March, 2009; G.S.R. 543(E), dated the 22nd July, 2009; G.S.R. 739 (E), dated the 9th September, 2010; G.S.R. 809(E), dated, the 4th October, 2010, G.S.R. 215 (E), dated the 15th March, 2011; G.S.R. 221(E), dated the 18th March, 2011; G.S.R. 354 (E), dated the 2nd May, 2011; G.S.R. 424 (E), dated the 1st June, 2011; G.S.R. 446 (E), dated the 13th June, 2011; G.S.R. 152 (E), dated the 16th March, 2012; G.S.R. 266(E), dated the 30th March, 2012; and G.S.R. 277 (E), dated the 31st March, 2012; and G.S.R. 820(E), dated the 9th November, 2012; G.S.R. 176 (E), dated the 18th March, 2013; G.S.R. 535(E), dated the 7th August, 2013; G.S.R. 771(E), dated the 11th December, 2013; G.S.R. 2(E), dated the 2nd January, 2014; G.S.R. 229 (E), dated the 28th March, 2014; G.S.R. 232(E), dated the 31st March, 2014; G.S.R. 325(E), dated the 07th May, 2014, G.S.R. 612, (E), dated the 25th August 2014; G.S.R. 789(E), dated the 11th November 2014; S.O. 3305(E), dated the 7th December, 2015; S.O.4(E), dated the 1st January 2016; G.S.R. 35(E), dated the 14th January 2016 and lastly amended vide notification G.S.R. 281 (E), dated the 7th March, 2016.



MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
NOTIFICATION

New Delhi, the 10th May, 2016

G.S.R. 497 (E). – In exercise of powers conferred by sections 6 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government hereby makes the following rules further to amend the Environment (Protection) Rules, 1986, namely :-

1. Short title and commencement - (1) These rules may be called the Environment (Protection) Third Amendment Rules, 2016.
(2) They shall come into force on the date of their publication in the Official Gazette.
2. In the Environment (Protection) Rules, 1986,-
(a) in schedule I, after serial number 10 and the entries relating thereto, the following serial number and entries shall be inserted, namely:-

"S. No. (1)	Industry (2)	Parameter (3)	Standards (4)		
"10A.	Cement Plant with co-processing of wastes	A- Emission Standards			
		Rotary Kiln – with co-processing of Wastes			
			Date of Commissioning	Location	Concentration not to exceed, in mg/Nm ³
			(a)	(b)	(c)
		Particulate Matter (PM)*	on or after the date of notification (25.8.2014)	anywhere in the country	30
			before the date of notification (25.8.2014)	critically polluted area or urban centres with population above 1.0 lakh or within its periphery of 5.0 kilometer radius	30
				other than critically polluted area or urban centres	30
	SO ₂ *	irrespective of date of commissioning	anywhere in the country	100, 700 and 1000 when pyritic sulphur in the limestone is less than 0.25%, 0.25 to 0.5% and more than 0.5% respectively.	
	NO _x *	After the date of notification (25.8.2014)	anywhere in the country	(1) 600	
		Before the date of notification	anywhere in the country	(2) 800 for rotary kiln with In Line Calciner	



		(25.8.2014)	(ILC) technology. (3) 1000 for rotary kiln using mixed stream of ILC, Separate Line Calciner (SLC) and suspension pre-heater technology or SLC technology alone or without calciner.
		HCl	10 mg/Nm ³
		HF	1 mg/Nm ³
		TOC	10 mg/Nm ³ **
		Hg and its compounds	0.05 mg/Nm ³
		Cd +Tl and their compounds	0.05 mg/Nm ³
		Sb+As+Pb+Co+Cr+Cu+Mn+Ni+V and their compounds	0.5 mg/Nm ³
		Dioxins and Furans	0.1 ngTEQ/ Nm ³
	<p>Note: The abbreviations used in the Table shall mean as under: SO₂- Sulphur dioxide; NO_x - Oxides of Nitrogen; HCl - Hydrogen Chloride; HF - Hydrogen Flouride; TOC - Total Organic Carbon; Hg - Mercury; Cd - Cadmium; Tl - Thallium; Sb - Antimony; As - Arsenic; Pb - Lead; Co - Cobalt; Cr - Chromium; Cu - Copper; Mn - Manganese; Ni - Nickel; and V - Vanadium.”;</p> <p>* The concentration values and timeline for implementation in respect of PM, SO₂ and NO_x shall be governed in accordance with the provisions under notification published vide GSR No. 612 (E), dated the 25th August, 2014 and amended from time to time.</p> <p>**Permitting authority may prescribe separate standards on case to case basis, if Total Organic Carbon (TOC) does not result from the co-processing of waste.</p> <p>(a) The height of each individual stack connected to Kiln, Clinker Cooler, Cement Mill, Coal Mill, Raw Mill, Packaging section, etc. shall be of a minimum of 30 metres or, as per the formula $H = 14 (Q1)^{0.3}$ and $H = 74 (Q2)^{0.27}$ whichever is more, where “H” is the height of stack in metres and “Q1” is the maximum quantity of SO₂ expected to be emitted in kg/hr and “Q2” is the maximum quantity of PM expected to be emitted in tonnes/hr through the stack at 100 percent rated capacity of the plant;</p> <p>(b) The monitored values of SO₂, NO_x, HCl, HF, TOC, Metals and Dioxins and Furans at main kiln stack shall be corrected to 10% Oxygen, on dry basis and the norms for SO₂, NO_x, HCl, HF, TOC, Metals and Dioxins and Furans shall be applicable to main kiln stack and the norms for Particulate Matter (PM) shall be applicable to all the stacks in the plant. PM, SO₂, NO_x shall be monitored continuously. HCl, HF, TOC, Metals and Dioxins and Furans shall be monitored once in a year;</p> <p>(c) Scrubber meant for scrubbing emissions shall not be used as quencher and plants having separate stack for gaseous emission for the scrubbing unit, the height of this stack shall be at least equal to the main stack.</p>		
	<p>B- Service waste water (with co-processing of wastes) All efforts shall be made by the industry for ‘zero discharge’ of service wastewater and in case, the industry prefers to discharge service wastewater, the following norms shall be complied with:</p>		
		Concentration not to exceed, milligram per litre (except pH and temperature)	
	pH	5.5 to 9.0	
	Suspended Solids	100	

		Oil and Grease	10
		Temperature	not more than 5°C higher than the intake water temperature
		C- Storm water	
		(I) Storm-water shall not be allowed to mix with effluent, treated sewage, scrubber water and or floor washings.	
		(II) Storm-water within battery limits of industry shall be channelised through separate drain(s)."	

(b) in Schedule VI, under 'Part-D' relating to General Emission Standards, in item III relating to Load or Mass based standards, after serial number 10 and the entries relating thereto, the following serial number and entries shall be inserted, namely:-

(1)	(2)	(3)	(4)
"10A	Cement Plants (with co-processing)	Rotary kiln based plants (Particulate Matter from raw mill, kiln and pre-calciner system put together)	0.125 kg/ tonne of clinker."

[F. No.- Q-15017/30/2007-CPW]

Dr. RASHID HASAN, Advisor

Note :- The principal rules were published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (i), vide number S.O. 844 (E), dated the 19th November, 1986 and subsequently amended vide the following notifications, namely:-

S.O. 433 (E), dated the 18th April 1987; G.S.R. 176(E), dated the 2nd April, 1996; G.S.R. 97 (E), dated the 18th February, 2009; G.S.R. 149 (E), dated the 4th March, 2009; G.S.R. 543(E), dated the 22nd July, 2009; G.S.R. 739 (E), dated the 9th September, 2010; G.S.R. 809(E), dated, the 4th October, 2010, G.S.R. 215 (E), dated the 15th March, 2011; G.S.R. 221(E), dated the 18th March, 2011; G.S.R. 354 (E), dated the 2nd May, 2011; G.S.R. 424 (E), dated the 1st June, 2011; G.S.R. 446 (E), dated the 13th June, 2011; G.S.R. 152 (E), dated the 16th March, 2012; G.S.R. 266(E), dated the 30th March, 2012; and G.S.R. 277 (E), dated the 31st March, 2012; and G.S.R. 820(E), dated the 9th November, 2012; G.S.R. 176 (E), dated the 18th March, 2013; G.S.R. 535(E), dated the 7th August, 2013; G.S.R. 771(E), dated the 11th December, 2013; G.S.R. 2(E), dated the 2nd January, 2014; G.S.R. 229 (E), dated the 28th March, 2014; G.S.R. 232(E), dated the 31st March, 2014; G.S.R. 325(E), dated the 07th May, 2014, G.S.R. 612, (E), dated the 25th August 2014; G.S.R. 789(E), dated the 11th November 2014; S.O. 3305(E), dated the 7th December, 2015; S.O.4(E), dated the 1st January 2016; G.S.R. 35(E), dated the 14th January 2016 and lastly amended vide notification G.S.R. 281 (E), dated the 7th March, 2016.

10/10/20

Member Secretary
Pollution Control Board
Assam, Guwahati-21

APPENDIX – C

1.66.0 STANDARDS AND GUIDELINES FOR CONTROL OF NOISE POLLUTION FROM STATIONARY DIESEL GENERATOR (DG) SETS.

(A) Notes standards for DG sets (15-500KVA)

The total sound power level LW of DG set should be less than $94 + 10 \log 10\text{KVA}$, dB (A), at the manufacturing stage, whether; KVA is the nominal power rating of a DG set.

This level should fall by 5dB (A) every five years, till 2007, i.e. in 2002 and then in 2007.

(B) Mandatory Acoustic enclosure/Acoustic treatment of room for stationary DG sets (5 KVA and above):

Noise from the DG set should be controlled by providing an acoustic enclosure or by treating the room acoustically.

The acoustic enclosure/acoustic treatment of the room should be designed for minimum 25 dB (A) insertion Loss or for meeting the ambient noise standards, whichever is on the higher side (if the actual ambient noise is on the higher side, it may not be possible to check the performance of the acoustic enclosure/acoustic treatment. Under circumstances the performance may be checked for noise reduction up to actual ambient noise level, preferably, in the night time). The measurement for insertion Loss may be done at different points at 0.5 m from the acoustic enclosure/room, and then averaged. (See the Schematic Diagram).

The DG set should also be provided with proper exhaust muffler with Insertion Loss of minimum 25 dB (A).

Guidelines for the manufacturers Users of DG sets 5KVA and above:

- The manufacturer should offer to the user a standard acoustic enclosure of 25dB(A). Insertion Loss and also a suitable exhaust muffler with Insertion Loss of 25dB(A).
- The user should make efforts to bring down the noise levels due to the DG set, outside his premises, within the ambient noise requirements by proper siting and control measures.
- The manufacturer should furnish noise power levels of the unsalaried DG sets as per standards prescribed under (A).
- The total sound power level of a DG set, at the user's end, shall be within 2dB(A) of the total sound power level of the DG set, at the manufacturing stage, as prescribed under (A).
- Installation of DG set must be strictly in compliance with the recommendation of the DG set manufacturer.
- A proper routine and preventive maintenance procedure for the DG set manufacturer which would help prevent noise levels of the DG set from deteriorating with use.

2.44.0 NOISE (AMBIENT STANDARDS)

Area Code	Category of Area	Limit in dB(A) Leq.	
		Day time	Night time
A.	Industrial area	75	70
B.	Commercial area	65	55
C.	Residential area	55	45
D.	Silence Zone	50	40

Note – 1 : Day time is reckoned in between 6.00 A.M. and 9.00 P.M.

Note – 2 : Night time is reckoned in between 9.00P.M. and 6.00 A.M.

Note – 3 : Silence zone is defined as areas up to 100 meters around such premises as hospitals, educational institutions and courts. The silence zones are to be declared by the competent Authority.

Note – 4 : Mixed categories of areas should be declared as one of the four above mentioned categories by the competent Authority and the corresponding standard shall apply.

Source: EPA, 1986
[GSR 7, dated Dec.22, 1998]

Source : EPA, Notification
[GSR 1063 (E), dated Dec., 26, 1998]

3.22.0 DIESEL GENERATOR SETS : STACK HEIGHT

1. The minimum stack height to be provided with each generator set shall be worked out as per the following formula:- $H = h + 0.2 \sqrt{\text{KVA}}$, where H = Total height of stack in meter.

h = Height of the building in meters where generator set is installed.

KVA = Total generator capacity.

Adequate fire fighting measures have to be provided by the occupier of the premises. Based on the above formula the minimum stack height to be provided with different range of generator sets may be categories as follows:

Range of Generator sets	Minimum Stack Height
50 KVA	Ht. of the building + 1.5 metre.
50 - 100 KVA	Ht. of the building + 2.0 metre.
100 -150 KVA	Ht. of the building + 2.5 metre.
150 - 200 KVA	Ht. of the building + 3.0 metre.
200 - 250 KVA	Ht. of the building + 3.5 metre.
250 - 300 KVA	Ht. of the building + 3.5 metre.

Similarly for higher KVA rating a stack height can be worked out using the above formula.

Source : Evolved by CPCB
[Emission Regulations Part-IV: COINDS/26 1986-87]

4. A.32.0 Part - C

SI. No. 1 Stack Gas : PM - 150 $\mu\text{g}/\text{Nm}^3$

B. Ambient Air Standards:

Residential Area	Industrial Area	Sensitive Area
SO ₂ : 80* $\mu\text{g}/\text{m}^3$	120* : $\mu\text{g}/\text{m}^3$	30* : $\mu\text{g}/\text{m}^3$
NO ₂ : 80* $\mu\text{g}/\text{m}^3$	120* : $\mu\text{g}/\text{m}^3$	30* : $\mu\text{g}/\text{m}^3$
CO : 2.0** $\mu\text{g}/\text{m}^3$	5.0** : $\mu\text{g}/\text{m}^3$	1.0** : $\mu\text{g}/\text{m}^3$
*24 hourly; ** 8 hourly		

5. SCHEMATIC DIAGRAM OF D.G. SET IN AN ACOUSTIC ENCLOSURE No. Process/71/1998-99.

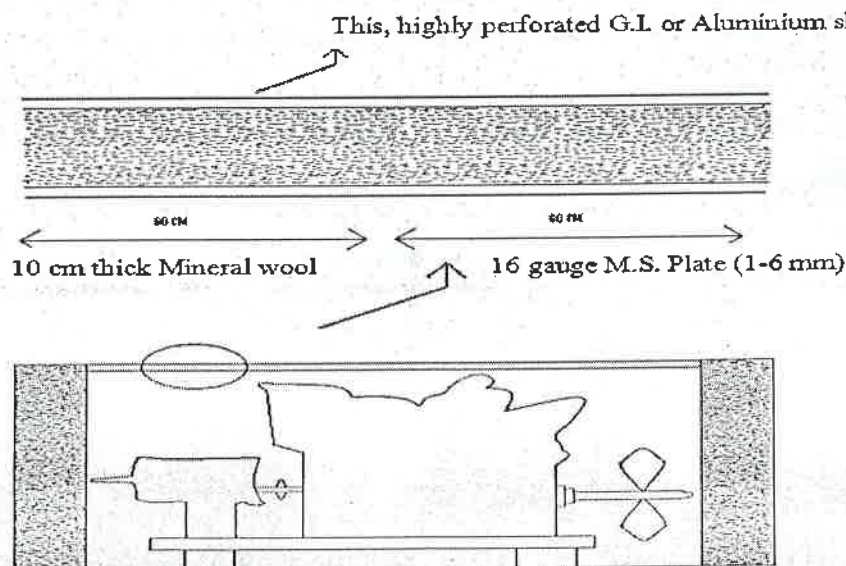


Fig. 4 Schematic Diagram of the DG set in an Acoustic Enclosure

Air required for the ventilation and breathing of the engine will have to be provided by means of intake louvers and exhaust louvers (called parallel baffle mufflers) projecting out of the enclosure.

Mr. G. V. S.
Member Secretary
Pollution Control Board, Assam
Bamunimaidam, Guwahati-21

Activities undertaken as per Public Commitments

Programs	Activities
Environment, Education & Skill Training, Employment	40,000 Bamboo plantation and beautification of school campus at 2 nearby schools completed. Constructed sports gallery at Dithur village. 20000 Nursery raising and plantation of Drumsticks with SHG members (28 SHG). Installation of smart class equipment to 2 schools. Sports items were distributed. Real-time data is uploaded to CPCB as well as SPCB. Ambient air quality data is displayed in the public domain outside the plant gate. Rs. 38,15,000 has been incurred for Environmental monitoring and management. Scholarship award to 18 meritorious and economically weaker students.
	Water quality has been monitored for all the parameters as per IS-10500. Also, as per EC condition, water was tested for fluoride & arsenic. No traces of arsenic were found.
Socio-Economic development activities	Training & Nutrition Garden development through SHGs. Installation of smart class equipment to schools.
	60 nos. Solar street installation. 3 nos Health Camps and 4 no. Veterinary Camp
	Micro Enterprise Development Program

Some of the Photographs of the activities









