

ACL/GP-IV/8/EC(Mine)/2024-25/ 6

Date: 04/04/2024

To,

Integrated Regional Office, Western Region Ministry of Environment, Forest & Climate Change Aranya Bhawan North Block, Sector-19, Nava Raipur Atal Nagar, Chhattisgarh - 492002

Sub: Submission of six monthly EC Compliance Report for the period of Oct 2023 to March

2024 w.r.t. Gare Palma IV/8 Coal Mine of Ambuja Cements Limited_ reg.

Ref: EC No J-11015/352/2006-IA.II(M) dated 22.12.2008

EC Corrigendum No J-11015/352/2006-IA.II(M) dated 26.10.2010

EC Transfer: J-11015/352/2006-IA.II(M) dated 10.06.2015

Dear Sir,

The MoEF&CC issued to Environmental Clearance for opencast mining 0.7 MTPA and underground mining 0.5 MTPA located in Gare Palma IV/8 coal mine on 22.12.2008 in name of M/s Jaiswal Neco Ltd. (prior allottee). Later on Environmental Clearance was transferred from M/s Jaiswal Neco Ltd. (prior allottee) to M/s Ambuja Cements Limited vide J-11015/352/2006-IA.II(M) dated 10.06.2015.

With reference to subject, enclosed herewith six monthly EC Compliance Report for the period of Oct 2023 March 2024 w.r.t. Gare Palma IV/8 Coal Mine of Ambuja Cements Limited.

CEMEN

This is for your kind information please.

Thanking You

Yours Faithfully

For, Ambuja Cements Limited

Venkatareddy Vennaparedy Authorized Signatory

(Coal Block- Gare Palma IV/8)

Encl: Six monthly EC compliance report for coal mining.

Copy To:

1. The Central Pollution Control Board, Aranya Bhawan North Block, Sector-19 ,Nava Raipur Atal Nagar, Chhattisgarh – 492002

2. The Scientist "C", Integrated Regional Office, MOEF&CC, Aranya Bhawan, North Block, Sector-19, Atal Nagar, Raipur (C.G.)

3. The Member Secretary, CECB, Sector-19, Atal Nagar Raipur (C.G.).

4. The Regional Office, CECB, TV Tower Road, Raigarh (C.G.)

HALF – YEARLY ENVIRONMENT CLEARANCE COMPLIANCE REPORT

For the Period of October -2023 to March -2024

by

AMBUJA CEMENTS LTD.

Village- Khamaria and Karwahi, Tehsil- Ghardhoda,
District- Raigarh, Chhattisgarh

W.R.T.

GARE PALMA IV/8 COAL BLOCK

EC J-11015/352/2006-IA.II(M) dated 22.12.2008
EC Corrigendum J-11015/352/2006-IA.II(M) dated 26.11.2010
EC Transfer J-11015/352/2006-IA.II(M) dated 10.06.2015



1.0 INTRODUCTION

Ministry of Coal, Govt. of India through Nominated Authority conducted 2nd phase of e-auction of coal blocks during February, 2015 in which Ambuja Cements Limited (ACL) emerged as a successful bidder for Gare Palma IV/8 Coal Block with an extractable reserves of 45.85 MT & approved Mixed (Both underground & opencast) Mine plan capacity of 1.2 MTPA was listed under schedule III of the Coal Mines (Special Provision) Act, 2015 earmarked for un-regulated sector. Subsequently Coal Mine Development & production agreement was signed between ACL and Nominated Authority on 16th March, 2015 followed by issuance of Vesting Order by Nominated Authority on 22nd April, 2015 & corrigendum no. 1 to the vesting order with co-ordinate dated 14th December, 2015. The mining lease execution and registration of the lease agreement has been completed for an area of 474.703 Ha on 31st December, 2015. We have got the **Bhu Prabesh** on 06/06/2018.

The development operations has been started in the open cast coal mine Gare Palma IV/8 (Scheduled coal production capacity 0.70 MTPA from opencast) since 2nd April, 2018, it has been intimated to the CECB – Naya Raipur vide our letter no. ACL/GP-IV*8/Coal Mine/CTO-Develop/CECB/Raipur/01, Date: 27/03/2018. We have obtained the Consent To Operate for Coal Production vide letter no. 5670/TS/CECB/2018 dated on 15/10/2018 from Chhattisgarh Environment Conservation Board. We have started the Coal Production from 22nd Oct' 2018.

Chhattisgarh Environment Conservation Board vide letter no. **8380/TS-CECB/2020** dated 29/12/2020 granted us Mining of Coal (by underground method) 0.50 MTPA.

Environmental Monitoring for proposed mine lease area is being performed regularly. This summarized half-yearly report presents the current environmental status in and around the proposed mine lease area regarding Ambient Air Quality, Noise Level monitoring, Fugitive Emissions, Wastewater and Dust Fall measurement. Detailed observations and respective interpretations for the period from Oct 2023 to March 2024 have been explained in the report.



2.0 POINT WISE COMPLIANCE REPORT FOR THE ENVIRONMENT CLEARANCE CONDITION

2.1 Transfer of EC in name of ACL vide letter no 11015/352/2006-IA -II(M) dated 10th June, 2015

S. No	Conditions	Remarks
1.	Any change in scope of work will attract the provisions of Environment Act (EPA),1986 and Environment Impact Assessment Notification,2006 in conjunction with the subsequent amendments/circulars.	Agreed.
2.	All conditions stipulated in the EC letter no J-11015/352/2006/-IA.II(M) dated 22 nd June'2008 & corrigendum issued to EC dated 26 th November 2010 shall remain unchanged.	
3.	The successful bidder shall be liable, if any, for any act of violation of the EPA/1986 /EIA Notification 2006 subsequent amendments and circulars which it has inherited during the transfer.	Agreed.
4.	Successful bidder shall be liable for compliance of all court directions if any.	Agreed.

2.2 Environment Clearance from MoEF No. J -11015/352/2006/-IA.II(M) dated 22nd December'2008

A. SPECIFIC CONDITIONS:

S. No.	Conditions	Remarks
1.	No Mining operations shall be undertaken in the forestland until clearance has been obtained under the provisions of FC Act, 1980.	Requisite forest final clearance has been obtained by MoEF&CC vide letter no. F.No.8-75-2007-FC dated 01.01.2013. Copy of final forest clearance enclosed as Annexure-1 .
2.	Maximum production by opencast mining shall not exceed 0.7 MTPA and that by underground mining shall not exceed 0.5 MTPA. The maximum combined production at any given time shall not exceed 1.2 MTPA from both opencast and underground mining	Maximum production will be kept within by OC is 0.7 MTPA & UG is 0.5 MTPA. Production is being carried out as per Consent granted by Chhattisgarh Environment Conservation Board vide 9640/TS/CECB/2022 on 31.03.2022 and valid till 31.03.2025. Copy of valid CTO enclosed as Annexure-2.
3.	Mining shall be carried out as per statute at a safe distance from Kelo river and the rivulets and streams flowing within the lease boundary. At the time of depillaring, protective bunds and garland drains shall be provided so that no water from the surface enters the subsidence area and the shaft	The OB removal of opencast mine is being dumped within the lease boundary at safe distance about 2 km away from Kelo River. OB soil is being used in preparation of protective bunds also. No water from the surface enters OC mine as well as in the subsidence area and the shaft.

S. No.	Conditions	Remarks
4.	While extracting panels in the lower seam, all water bodies in the subsidence area shall be drained. Dewatering of the old goaves of the upper seam shall be continued as long as the lower seam is worked to prevent accumulation of large water bodies over working area.	Suitable strategy shall be framed after through safety management plan and extraction of lower seams will be done as per the DGMS permission conditions.
5.	Sufficient coal pillars shall be left unextracted around the airshaft (within the subsidence influence area) to protect from any damage from subsidence, if any.	Noted and Agreed.
6.	Solid barriers shall be left below the village, roads falling within the blocks to avoid any damage to the roads	As per the CMR 2017 strategy already framed for UG working.
7.	No depillaring operation shall be carried out below the roads and habitation area found within the lease	Agreed, currently UG mining under the developing stage only. However, depillaring operation shall be carried out as per DGMS permission conditions.
8.	Regular monitoring of subsidence movement on the surface over and around the working area and impact on natural drainage pattern, water bodies, vegetation, structure, roads, and surroundings should be continued till movement ceases completely. In case of observation of any high rate of subsidence movement, appropriate effective corrective measures should be taken to avoid loss of life and material. Cracks should be effectively plugged with ballast and clayey soil/suitable material.	Underground mine is under development stage only. Hence there is no subsidence movement on the surface over & around the working area. However, regular monitoring will be done during the depillaring operation of underground working & appropriate measured will be taken as per the DGMS permission conditions.
9.	Garland drains (size, gradient and length) around the safety areas such as mine shaft and low lying areas and sump capacity should be designed keeping 50% safety margin over an above the peak sudden rainfall and maximum discharge in the area adjoining the mine sites. Sump capacity should also be provided adequate retention period to allow proper settling of silt material.	Garland drain of 5550-m (length) X 2.15-m width 2.0-m depth is made around excavation of open cast area & OB dump to navigate catch the rain water & runoff water of the dump to 3 nos. settling pond/sedimentation pond of size 120 m X 90 m X 4.5 m, 30 m X 25 m X 2 m, & 35 m X 25 m X 4.5 m 20 m X 10 m X 4.5 m, combined capacity is 54,937 m³. The capacity of settling pond is adequate to arrest silt and sediment flows from soil of OB Dump. The pond water is being used in plantation, dust suppression with water sprinkler of 4 nos. Tanker capacity 18 KL each. This water is also being used in mine operation.
10.	OB should be stacked at the area earmarked for external OB dump site within ML area. The maximum height of the dump is 60m with two benches of 30m each. The ultimate slope of the dump shall not exceed 28°. Monitoring and management of existing reclaimed dumpsites should continue until the vegetation becomes	OB is being stacked at the earmarked external OB dumpsite within ML area. Height is not more than 60 meter. All the slope of external dumps are being maintained at a maximum of 28 degrees. The ultimate slope of dumps does not

S.	Conditions	Remarks
No.		Remarks
	self-sustaining. Compliance status should be submitted to the Ministry of Environment & Forests and its Regional office located at Bhopal on a yearly basis. No external dumping of OB shall be undertaken after 10 th year of mining operation	exceed 28 degree. Agreed, not to take up external OB dump after 10 th Year.
11.	Catch drains and siltation ponds of appropriate size should be constructed to arrest silt and sediment flows from soil, OB and mineral dumps. The water so collected should be utilised for watering the mine area, roads, green belt development, etc. The drains should be regularly desilted and maintained properly. Garland drains (size, gradient and length) and sump capacity should be designed keeping 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper settling of silt material.	The catch drains and de-silting chamber of appropriate size has been constructed to arrest silt and sediment flows from soil of OB dump and this water will be stored in rain water harvesting ponds.
12.	Dimension of the retaining wall at the toe of the dumps and OB benches within the mine to check run-off and siltation should be based on the rainfall data.	Retaining wall of OB dump is made on the external perimeter of the Garland drain which is made to arrest the run of from dumps & surface run off from the mining area, soil dumps, waste dump etc. Garland drain with proper gradient & sumo has been constructed all along the periphery of the mine. Sedimentation pits have also been constructed.
13.	Crushers at the CHP should be operated with high efficiency bag filters/water sprinkling system should be provided to check fugitive emissions from crushing operations, conveyor system which shall be closed, haulage roads, transfer points, etc	Noted. So far CHP constructed.
14.	Drills should be wet operated only	Wet Drilling and control blasting are being done as per DGMS approval.
15.	No coal washery shall be established within the ML without prior environmental clearance from the MOEF	Noted & Agreed.
16.	Controlled blasting should be practiced with use of delay detonators and only during daytime. The mitigative measures for control of ground vibrations and to arrest the fly rocks and boulders should be implemented	Implemented. Control blasting is being done as per DGMS approval.
17.	NO mineral processing unit such as a coal washery shall be installed in the ML without prior approval of this ministry.	Agreed.
18.	A progressive afforestation plan covering an area not less than 133.53 ha shall be implemented, which includes reclaimed external OB dump (39 ha), backfilled area (80 ha), along ML boundary,	We are agreed to undertake the progressive aforestration of 133.53 ha, Currently OB dumps not being reclaimed & dumps have not reached

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S. No.	Conditions	Remarks
	barrier zone (6 ha), along roads (4.5 ha) and infrastructure (4 ha), undisturbed/vacant land by planting native species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2500 plants per ha.	the maximum height. Total 44,720 nos. of local native species has been planted till date. Photographs of green belt enclosed as Annexure-3.
19.	Backfilling shall start by the 4th year of operations and concurrent backfilling form the 8th year. Of the total excavated area of 84.33 ha, an area of 80 ha shall be backfilled and reclaimed with plantation/afforestation by planting native plant species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2500 plants per ha. The balance area of 4 ha of the decoaled area left as void and being converted into a water reservoir shall be of a max. Depth of 35 m and shall be gently sloped and the upper benches of the reservoir shall be stabilised with plantation and the periphery of the reservoir fenced.	Agreed. Shall be complied.
20.	A Programme for conservation of the wildlife particularly the rare and endangered species/Schedule-I fauna such as the Sloth Bear and Leopard and endangered flora and species of medicinal importance shall be formulated and implemented in consultation with the Forest and Wildlife Departments in the State Government. Separate funds shall be earmarked for implementation of the various activities there under and the status thereof shall be regularly reported to this Ministry and the MOEF Regional Office, Bhopal. The project authorities shall participate in a Regional Action Plan of the State Government for conservation of flora and fauna found within the study area.	Noted and agreed to participate in the plan prepared by Government.
21.	The company shall obtain prior approval of CGWA/CGWB Regional Office for use of groundwater, if any, for mining operations. Further requirement of water, if any, will be from rainwater harvesting measures.	NOC no
22.	Regular monitoring of groundwater level and quality should be carried out by establishing a network of existing wells and construction of new piezometers. The monitoring for quantity should be done four times a year in pre-monsoon (May), monsoon (August), post-monsoon (November) and winter (January) seasons and for quality in May. Data thus collected should be submitted to the Ministry of Environment & Forests and to the Central Pollution Control Board quarterly within one month of monitoring.	Regular monitoring of ground water level and quality is being carried out by establishing a network of existing wells. We have constructed a new bore well of depth 400 feet from 50 meter distance of the existing bore well for installation of Piezometer. The Piezometer has already been installed with telemetry systems. Ground Water monitoring is carried out by Environ Techno Consultants and reports submitted accordingly. Ground water monitoring is carried out

Vill. Kanvahi Po. Saraitola, Tarinar, Ralgam 496107 (C.G.)

Six Monthly Compliance Report for Gare Palma IV/8 Coal Mine at Village- Khamaria and Karwahi, P.O- Tanmar, Dist.- Raigarh (C.G.)

[Period-October 2023 to March 2024]

S. No.	Conditions	Remarks
		by M/s Environ Techno Consultants as per CGWA NOC. Photograph of Piezometer enclosed as Annexure-4.
23.	The Company shall put up artificial groundwater recharge measures for augmentation of groundwater resource in case monitoring of groundwater levels indicate decline of water table. Any additional water requirement for mining operation shall be met from rainwater use only. The project authorities should meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine. It shall be ensured that if the river/nala discharge of mine water takes place, it shall be treated to conform to prescribed standards before discharge.	Agreed to comply.
24.	ETP should also be provided for treatment of effluents from workshop, CHP. There shall be zero discharge from the coal washery.	Waste water from workshop is being treated with ETP and treated water is being used for vehicle wash, plantation and dust suppression. At present there is no coal washery, in future if coal washery will be established by us after obtaining clearance from concerned environment department we will maintain zero discharge.
25.	Besides carrying out regular periodic health check-up of their workers, 10% of the workers identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any, through an agency such as NIOH, Ahmadabad within a period of one year and the results reported to this Ministry and to DGMS	As per DGMS initial medical examination in form-O has been complied for all employees. Health check-up for occupational diseases from NIOH, shall be complied.
26.	For monitoring land use pattern and for post mining land use, a time series of land use maps, based on satellite imagery (on a scale of 1: 5000) of the core zone and buffer zone, from the start of the project until end of mine life shall be prepared once in 3 years (for any one particular season which is consistent in the time series), and the report submitted to MOEF and its Regional office at Bhopal.	Agreed.
27.	A Final Mine Closure Plan along with details of Corpus Fund should be submitted to the Ministry of Environment & Forests five year before mine closure for approval	Mine Closure Plan has been approved by Ministry of Coal vide letter no. 34011/19/2016 CPAM dtd on 15th May, 2017. Attached in Annexure-5

B. GENERAL CONDITIONS:

M/s Ambuja Cements Ltd, Raigarh (C.G.)

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Six Monthly Compliance Report for Gare Palma IV/8 Coal Mine at Village- Khamaria and Karwahi, P.O- Tanmar, Dist.- Raigarh (C.G.)

[Period-October 2023 to March 2024]

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SI. no	General condition	Compliance
1.	No change in mining technology and scope of	Agreed.
	working should be made without prior approval	
	of the Ministry of Environment and Forests.	
2.	No change in the calendar plan including	Agreed.
	excavation, quantum of mineral coal and waste	
	should be made	
3.	Four ambient air quality monitoring stations	One Nos. of CAAQMS has been
	should be established in the core zone as well as	installed within premises.
	in the buffer zone for monitoring SPM, RSPM, SO2	Photograph of CAAQMS station is
	and NOx. and heavy metals such as Hg, Pb, Cr, As, etc. Location of the stations should be	enclosed as Annexure-6 .
	decided based on the meteorological data,	Acknowledgement copy regarding CAAQMS installation and connection
	topographical features and environmentally and	to CECB server is enclosed as
	ecologically sensitive targets in consultation with	Annexure-7.
	the State Pollution Control Board.	Except this regular monitoring is being
	The state i olionori corniorbodia.	carried out at four location by NABL
		accredited laboratory M/s Gyan
		Enviro Ltd.
4.	Data on ambient air quality (SPM, RSPM, SO2,	Ambient Air Quality is being regular
	NOx and heavy metals such as Hg, Pb, Cr, As,	monitoring by NABL accredited
	etc) should be regularly submitted to the Ministry	laboratory M/s Gyan Enviro Ltd. Data
	including its Regional Office and to the State	of AAQ is being submitted with six
	Pollution Control Board and the Central Pollution	monthly EC compliance report, also
	Control Board once in six months	attached in table no 3.2, 3.3, 3.4,3.5.
		3.6
5.	Fugitive dust emissions (SPM, RSPM, and heavy	Fugitive emission is being regular
	metals such as Hg, Pb, Cr, As, etc) from all the	monitoring by NABL accredited
	sources should be confrolled regularly monitored	laboratory M/s Gyan Enviro Ltd.
	and data recorded properly. Water spraying	Regular water sprinkling is being
	arrangement on haul roads, wagon loading,	carried on roads engaged for
	dump trucks (loading and unloading) points should be provided and properly maintained.	transportation; water sprinkling arrangements has been made at
	should be provided and properly maintained.	loading and unloading area.
		Plantation has been carried out to
		arrest fugitive dust within mine lease
		area.
6.	Adequate measures should be taken for control	Regular maintenance is being
	of noise levels below 85 dBA in the work	carried of moving equipments
	environment. Workers engaged in blasting and	engaged in mining operation. We
	drilling operations, operation of HEMM, etc should	are monitored noise levels on
	be provided with ear plugs/muffs.	monthly basis and data recorded.
		We have provided ear plugs/muffs to
		the workers for engaging in blasting
		and drilling operations during mining
		operation. Company has provided
		appropriate noise barriers. Workers
		engaged in blasting and drilling
		operations, operations of heavy
		earth moving machinery (HEMM) etc.
		have been provided with ear plugs/muffs. Plantation has been
		plugs/muffs. Plantation has been developed.
7.	Industrial wastewater (workshop and wastewater	Waste water from workshop is being
/.	from the mine) should be properly collected,	treated with Effluent Treatment Plant
	The mile time, should be proporty concered,	CEMEN THAT

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SI. no	General condition	Compliance
	treated so as to conform to the standards	and treated water is being utilized in
	prescribed under GSR 422 (E) dated 19th May	dust suppression and green belt
	1993 and 31st June 1993 or as amended from time	development.
	to time before discharge. Oil and grease trap	
	should be installed before discharge of workshop	
	effluents	
8.	Vehicular emissions should be kept under control	PUC certified vehicles are engaged
	and regularly monitored. Vehicles used for	for mining operation.
	transporting the mineral should be covered with	It is strictly ensured by logistic safety
	tarpaulins and optimally loaded.	team that vehicles engaged for
		transportation of coal is fully covered
		with tarpaulin.
9.	Environmental laboratory should be established	NABL accredited laboratory M/s
	with adequate number and type of pollution	Gyan Enviro Ltd. is being monitoring
	monitoring and analysis equipment in	on regular basis.
	consultation with the State Pollution Control	Monitoring Photos enclosed as
	Board	Annexure-8.
10.	Personnel working in dusty areas should wear	Agreed. The Personnel working in
	protective respiratory devices and they should	mine area are wearing protective
	also be provided with adequate training and	respiratory device mask. They have
	information on safety and health aspects.	been provided with adequate
	Occupational health surveillance programme of	training and information on safety
	the workers should be undertaken periodically to	and health aspects through our
	observe any contractions due to exposure to dust	Occupational health & safety
	and to take corrective measures, if needed.	department.
11.	A separate environmental management cell with	Environment management cell has
	suitable qualified personnel should be set up	been established under supervision of
	under the control of a Senior Executive, who will	competent and senior executive
	report directly to the Head of the company	technical personnel.
		Site Head
		Î
		Mine Manager
		<u> </u>
10	The first second of the	Assistant Manager
12.		Agreed, Statutory fund have been
	protection measures should be kept in separate	provided by Company. The funds
	account and should not be diverted for other	earmarked for environmental
	purpose. Year-wise expenditure should be	protection measures are being used
	reported to this Ministry and its Regional Office at	for Environmental conservation works
12	Bhopal	only.
13.	The Regional Office of this Ministry located at	Agreed.
	Bhopal shall monitor compliance of the stipulated	
	conditions. The Project authorities shall extend full	
	cooperation to the office(s) of the Regional	
	Office by furnishing the requisite data/	
	information/monitoring reports	



Sl.no	General condition	Compliance
14.	A copy of the will be marked to concerned Panchayat/ local NGO, if any, from whom any suggestion/representation has been received while processing the proposal.	Condition already complied by the prior allottee.
15.	State Pollution Control Board should display a copy of the clearance letter at the Regional Office, District Industry Centre and Collector's Office/Tehsildar's Office for 30 days	State Pollution Board has been intimated about the letter of transfer of EC dated 10 th June 2015 issued from MoEF&CC.
16.	The Project authorities should advertise at least in two local newspapers widely circulated around the project, one of which shall be in the vernacular language of the locality concerned within seven days of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution control Board and may also be seen at the website of the ministry of Environment & Forests at http://envfor.nic.in . The compliance status shall also be uploaded by the project authorities in their website so as to bring the same in the public domain	Newspaper advertising was done by prior allottee M/s Jaiswal Neco Limited. The compliance status shall also be uploaded in ACL website so as to bring the same in public domain.



3.0 AMBIENT AIR QUALITY

3.1 GENERAL

To assess the ambient air quality in & around Gare Palma IV/8 Coal mine lease of M/s Ambuja Cements Ltd at village-Khamaria, Dist. Raigarh (C.G.), total five number of ambient air quality monitoring locations were selected. Different air pollution parameters like PM_{10} , $PM_{2.5}$, SO_2 , NO_x , CO and heavy metals were identified as related to the mining activities. All the sampling stations were identified in & around the mine. Descriptive listing of the air quality monitoring stations is given in **Table – 3.1** and **Figure 4.**

TABLE - 3.1: DESCRIPTION OF AMBIENT AIR QUALITY (AAQ) MONITORING STATIONS

S.N	Sampling Stations	Station Code	Distance from Mine Lease	Direction from Mine Lease
1.	At Site Office	AAQ-1	Within	Within
2.	At Banjari Temple	AAQ-2	0.3 km	North
3.	Khamaria village	AAQ-3	0.5 km	NW
4.	Nr School, Rampura village	AAQ-4	0.4 km	East
5.	At Durga House	AAQ-5	0,3 km	South

3.2 OBSERVATIONS

The results of Ambient Air Quality monitoring with regard to the parameters are given below in **Table –** 3.2, 3.3, 3.4, 3.5 and 3.6. The **National Ambient Air Quality Standards** are given in **Table –** 3.7.



TABLE - 3.2: RESULTS OF AMBIENT AIR QUALITY MONITORING

FOR PARTICULATE MATTER (<10 µm)

Code	Stations	OCT-	NOV -23	DEC -23	JAN - 24	FEB -24	MAR-24	NAAQM
		23						STANDARD
AAQ-1	At Site Office	56.5	57.7	58.1	57.3	57.8	58.6	100
AAQ-2	At Banjari Temple	57.8	58.5	58.9	57.9	58.2	57.9	100
AAQ-3	Khamaria village	55.9	56.8	57.1	56.5	56.9	57.3	100
AAQ-4	Nr School, Rampura village	55.7	56.3	56.7	55.9	56.3	56.8	100
AAQ-5	At Durga House	58.6	59.3	59.8	58.4	58.2	58.7	100

^{*}Values are in µg/m³

TABLE – 3.3: RESULTS OF AMBIENT AIR QUALITY MONITORING FOR PARTICULATE MATTER (<2.5 µm)

Code	Stations	OCT-	NOV -23	DEC -23	JAN - 24	FEB -24	MAR-24	NAAQM
		23						STANDARD
AAQ-1	At Site Office	17.9	18.4	18.7	17.8	18.1	18.9	60
AAQ-2	At Banjari Temple	18.7	19,2	19.7	18.6	18.8	18.6	60
AAQ-3	Khamaria village	18,2	18.8	19.0	18.4	18.7	19.1	60
AAQ-4	Nr School, Rampura village	17.4	18.0	18,4	17.6	17.8	18.6	60
AAQ-5	At Durga House	19.1	11.1	20.0	19.2	18.9	19.3	60

^{*}Values are in µg/m³

TABLE - 3.4: RESULTS OF AMBIENT AIR QUALITY MONITORING

FOR SULPHUR DIOXIDE (SO₂)

Code	Stations	OCT - 23	NOV -23	DEC -23	JAN - 24	FEB -24	MAR-24	NAAQM STANDARD
AAQ-1	At Site Office	11.0	11.7	12.1	11.4	11.7	12.5	80
AAQ-2	At Banjari Temple	11.6	12.1	12.6	11.7	12.0	12.6	80
AAQ-3	Khamaria village	9.9	10.7	10.9	10.3	10.5	11.1	80
AAQ-4	Nr School, Rampura village	11.3	12.0	12.3	11.9	12.1	12.5	80
AAQ-5	At Durga House	10.2	11.1	11.4	11.7	11.4	11.8	80

^{*}Values are in µg/m³

Pos Karwahi
Pos Sambali,
Tamaar, Raigath 498107
(C.G.)

TABLE - 3.5: RESULTS OF AMBIENT AIR QUALITY MONITORING

FOR OXIDES OF NITROGEN (NOx)

Code	Stations	OCT-	NOV -23	DEC -23	JAN - 24	FEB -24	MAR-24	NAAQM
		23						STANDARD
AAQ-1	At Site Office	14.8	15.3	15.8	15.0	15.4	15.2	80
AAQ-2	At Banjari Temple	14.9	15.6	15.9	15.2	15.6	14.7	80
AAQ-3	Khamaria village	14.5	15,1	15.5	14.6	14.7	13.7	80
AAQ-4	Nr School, Rampura village	13.4	14,2	14.6	13.7	13.9	14.3	80
AAQ-5	At Durga House	15.3	15.9	16.3	16.6	16.2	15.6	80

^{*}Values are in µg/m³

TABLE - 3.6: RESULTS OF AMBIENT AIR QUALITY MONITORING

FOR CARBON MONOXIDE (CO)

Code	Stations	OCT - 23	NOV -23	DEC -23	JAN - 24	FEB -24	MAR-24	NAAQM STANDARD
AAQ-1	At Site Office	518	534.0	554.0	542.0	550.0	566.0	4000
AAQ-2	At Banjari Temple	525	547.0	556.0	533.0	538.0	532.0	4000
AAQ-3	Khamaria village	549	563.0	568.0	557.0	561.0	554.0	4000
AAQ-4	Nr School, Rampura village	557	568.0	574.0	555.0	559.0	548.0	4000
AAQ-5	At Durga House	531	543.0	558.0	560.0	557.0	551.0	4000

^{*}Values are in µg/m³

HEAVY METALS-

Heavy metals (i.e. Pb, As, Ni, Hg) have been monitored & analyzed simultaneously, however, every time concentrations of heavy metals are observed as BDL (below detectable level).



TABLE - 3.7: NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQMS) (REVISED-2009)

S.N.	Pollutant	Unit	Area	Concentration in A	Ambient Air
				Annual Average	24 Hours
1.	Sulphur Dioxide (SO ₂)	$\mu g/m^3$	Industrial	50.0	0.08
2.	Nitrogen Dioxide (NO _x)	$\mu g/m^3$	Industrial	40.0	0.08
3.	Particulate Matter PM ₁₀	$\mu g/m^3$	Industrial	60.0	100.0
4.	Particulate Matter PM _{2.5}	$\mu g/m^3$	Industrial	40.0	60.0
5.	Ozone (O ₃)	$\mu g/m^3$	Industrial	100.0	180.0
6.	Lead (Pb)	$\mu g/m^3$	Industrial	0.50	1.2
7.	Carbon Monoxide(CO) mg/m ³	mg/m³	Industrial	2.0	4.0
8.	Ammonia (NH ₃)	$\mu g/m^3$	Industrial	100.0	400.0
9.	Benzene (C_6H_6) $\mu g/m^3$	$\mu g/m^3$	Industrial	05.0	05.0
10.	Benzo(α) Pyrene,	$\mu g/m^3$	Industrial	01.0	01.0
11.	Arsenic (As) μg/m ³	$\mu g/m^3$	Industrial	6.0	6.0
12.	Nickel (Ni) μg/m ³	$\mu g/m^3$	Industrial	20.0	20.0

- Annual arithmetic mean of minimum 104 measurements in a year at a particular site taken twice in a week 24 hourly at uniform intervals.
- 24 hourly or 08 hourly or 01 hourly monitored values as applicable shall be complied with 98% of the time in a year 2% of the time, then may exceed the limits but not on two consecutive days of monitoring.

3.3 RESULTS AND DISCUSSION

On the basis of above observations, the parameter-wise results have been discussed below.

3.3.1 PARTICULATE MATTER<10 µ (PM₁₀)

All monitored stations have PM10 concentrations well within stipulated 24 hour limit, 100 μ g/m³ as prescribed for residential, rural and other areas in longstanding NAAQ Standards of CPCB.

3.3.2 PARTICULATE MATTER<2.5 µ (PM_{2.5})

Vill. Kerwahi
Po, Saraitola,
Temast, Raggan 496197

C.G. Willer

All monitored stations have $PM_{2.5}$ concentrations well within stipulated 24 hour limit, $60\mu g/m^3$ prescribed for industrial, residential, rural and other areas in revised NAAQ Standards from CPCB.

3.3.3 SULPHUR DIOXIDE (SO₂)

Average Sulphur Dioxide (SO_2) concentrations at all five sampling stations are $\mu g/m^3$ respectively and well within the stipulated 24 hour limit, 80 $\mu g/m^3$ recommended for industrial, residential, rural and other areas in revised NAAQ Standards of CPCB.

OXIDES OF NITROGEN (NO_x)

Average Oxides of Nitrogen (NO_x) concentrations at all sampling stations are also well within the stipulated 24 hour limit, $80 \,\mu\text{g/m}^3$ recommended for industrial, residential, rural and other areas in revised NAAQ Standards of CPCB.

3.3.4 CARBON MONOXIDE (CO)

Average Carbon Monoxide (CO) concentrations at all sampling stations are well within stipulated 8 hours limit, 2000 $\mu g/m^3$ recommended for industrial, residential, rural and other areas in revised NAAQ Standards.



4.0 AMBIENT NOISE LEVEL

4.1 LOCATIONS OF NOISE LEVEL MEASUREMENT

Noise Levels have measured at following **Eight Stations** coded as NL - 1, NL - 2, NL - 3, NL - 4, NL - 5, NL - 6, NL - 7 and NL - 8. Details of Noise level measurement stations have described below in **Table - 4.1** and **Figure -10**.

TABLE - 4.1: DETAILS OF NOISE LEVEL MEASUREMENT STATIONS

S.N	Sampling Stations	Station Code	Zone	Stations
1.	Nr Main Gate	NL - 1	Core zone	Ambient
2.	At Site Office	NL - 2	Core zone	Ambient
3.	Nr Weigh Bridge	NL - 3	Core zone	Ambient
4.	Nr Parking	NL - 4	Core zone	Ambient
5.	Nr Khamaria village	NL - 5	Buffer zone	Ambient
6.	Nr School, Rampura village	NL - 6	Buffer zone	Ambient
7.	At Durga House	NL - 7	Buffer zone	Ambient
8.	At Banjari Temple	NL - 8	Buffer zone	Ambient

4.3 OBSERVATIONS

The observations for noise level measurement were taken randomly in day and night hours. Measured noise levels are given below in **Table – 4.2** and Graphical presentation in **Figure 12**.

[Period-October 2023 to March 2024]

TABLE - 4.2: RESULTS OF AMBIENT NOISE LEVEL MEASUREMENT

NOISE LEVEL (DAY HOURS)

Code	Stations	Unit	OCT -	NOV -23	DEC-23	JAN -	FEB-	MAR -24	MIN	MAX	AVG
NL-1	Nr Main Gate		46.8	56.6	49.7	48.1	49.7	56.8	46.8	56.8	51.8
NL-2	At Site Office		62.5	62.7	56.4	63.5	58.1	58.3	56.4	63.5	59.9
NL-3	Nr Weigh Bridge		68.6	68.4	68.7	68.9	67.2	66.4	66.4	68.9	67.7
NL-4	Nr Parking		66.2	64.8	65.1	68.4	68.1	59.8	59.8	68.4	64.1
NL-5	Nr Kha maria village	dB(A)	58.1	57.3	57.3	58.2	59.4	54.8	54.8	59.4	57.1
NL-6	Nr School, Rampura village		43.7	43.1	44.6	42.9	43.9	42.9	42.9	44.6	43.8
NL-7	At Durga House		51.4	55.7	51.9	53.4	52.8	46.8	46.8	55.7	51.3
NL-8	At Banjari Temple		56.3	59.4	56.2	56.1	54.3	45.2	45.2	59.4	52.3

NOISE LEVEL (NIGHT HOURS)

		Unit	OCT-	NOV	DEC-23	JAN-	FEB-	MAR			
Code	Stations		23	-23		24	24	-24	MIN	MAX	AVG
NL-1	Nr Main Gate		32.6	33.8	32.7	31.6	33.5	34.6	31.6	34.6	33.1
NL-2	At Site Office		38.1	37.6	36.4	38.7	35.8	36.7	35.8	38.7	37.3
NL-3	Nr Weigh Bridge		41.9	40.7	41.2	39.2	37.7	37.1	37.1	41.9	39.5
NL-4	Nr Parking		41.2	40.2	40.9	39.0	38.2	36.5	36.5	41.2	38.9
NL-5	Nr Khamaria village	dB(A)	37.7	37.1	37.7	34.6	34.2	33.9	33.9	37.7	35.8
NL-6	Nr School, Rampura village		33.0	32.6	31.6	32.3	36.1	34.4	31.6	36.1	33.9
NL-7	At Durga House		36,5	35.4	34.8	35.0	35.4	34.0	34.0	36.5	35.3
NL-8	At Banjari Temple		39.8	39.1	38.9	33.3	33.8	33.3	33.3	39.8	36.6

Note: All values are in dB(A)



4.4 AMBIENT NOISE LEVEL STANDARDS

Ambient Air Quality standards in respect of noise have been notified by the Ministry of Environment & Forests vide **Gazette Notification Dated 26thJune 1989**. It is based on a weighted equivalent noise level (Leq). National Ambient Noise Level Standards are given below in **Table – 4.3**.

TABLE -4.3: NATIONAL AMBIENT NOISE LEVEL STANDARDS

Area Code	Category of Area	Limits in	dB(A) Leq
		Day time	Night time
Α	Industrial Area	75	70
В	Commercial Area	65	55
С	Residential Area	55	45
D	Silence Zone**	50	40

^{**} Silence zone is defined as area up to 100 meters around premises of hospitals, educational institutions and courts. Use of vehicle horns, loud speakers and bursting of crackers are banned in these zones.

4.5.1 RESULTS AND DISCUSSION

Recorded Noise Levels in & around the mine lease, well within the prescribed standards.

Po Saraitola, Tambar Raigath 495107 (C.G.)

5.0 FUGITIVE EMISSION

5.1 GENERAL

To assess the fugitive emission quality, total two number of sampling sites have been selected. To check the detailed emissions, PM10 and PM2.5 along with heavy metals (i.e. Pb, As, Ni, Hg) were identified as related to the lease activities. Descriptive listing of the Fugitive Emissions monitoring stations are given in Table –5.1.

TABLE - 5.1: DESCRIPTION OF FUGITIVE EMISSION MONITORING STATIONS

S.N	Sampling Stations	Station Code
1.	Near Parking	FE-1
2.	Near Weigh Bridge/Near Lamp Area	Cap FE-2

5.2 OBSERVATIONS

The results of Fugitive emissions monitoring with regard to the parameters are given in **Table** – **5.2**.

TABLE - 5.2: RESULTS OF FUGITIVE EMISSION MONITORING

Code	Sampling	Unit	OCT -	NOV -	DEC-	JAN-	FEB-	MAR-
	Stations		23	23	23	24	24	24
FE-1	PM ₁₀		67.3	67.8	68.2	65.3	66.4	65.2
	PM _{2.5}		20.1	20.5	21.3	19.6	20.7	21.0
FE- 2	PM ₁₀	µg/m³	69.8	70.2	71.5	68.1	68.7	68.1
	PM _{2.5}		20.9	21.1	22.0	20.3	21.5	22.3

Heavy metals (i.e. Pb, As, Ni, Hg) have been monitored & analyzed simultaneously, however, every time concentrations of heavy metals are observed as below detectable level.

5.3 RESULTS AND DISCUSSION

From the above result the given parameter are found to be well within the conditions mentioned in the Environment Clearance.

Vni. Karwahi
Po. Saraitola,
Tannas (Aigash 496 107)

6.0 WATER QUALITY ANALYSIS

			00	CT-23	NOV	-23	DEC	C-23	JAN	I-24	FEI	B-24	MARCI	H - 24
Sr. No.	Parameters	Ref. Method	Mine water	Drin king water	Mine water	Drinking water	UG Mine Seepage water	Drinking water	TMC Worksh op	Drinking water	GW Banjari Temple	Borewell water khamari a village	Mine water	Drin king wate
1	pH at 250 C	IS:3025 (Part 11)-1983	7.28	6.58	7.51	6.45	7.7	6.62	7.11	6.71	7.12	7.04	6.86	7.07
2	TDS	IS:3025 (Part 16)-1984	401	100	259	95	385	103	171	60	253	226.0	204	75
3	TSS	IS:3025 (Part 16)-1984	65	<3	21.4	<3	42	<3	20	<3	<3	<2	33	<3.0
4	Chloride as Cl	IS:3025 (Part 32)-1988	67	12	73.1	11.7	57.6	13.3	14.8	6	26	15.8	127	6.0
5	Sulphate as SO4	iS:3025 (Part 24)-1986	41	9	61	8.4	52.7	11	21.5	7.3	23.1	24.5	81	16.4
6	COD	IS:3025 (Part 58)-2006	40	<4.0	48	4	63.4	<4	20	<4.0	<4	<4.0	76	<4.0
7	BOD	IS:3025 (Part 44)-1993	14	<3.0	15	<3.0	13	<3.0	7	<3.0	<3	<3.0	12.0	<3.0
8	Oil & Grease	IS:3025 (Part 39)-1991	0.38	8DL	0.22	BDL	0.35	BDL	0.66	BDL	BDL	BDL	0.51	BDL

Note – Threshold limits for discharge and drinking water are different as per the guideline however both values of all parameters are within limit.

6.2 OBSERVATIONS

The observed values for waste water are within the permissible limits prescribed by CPCB.

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Forest Clearance

F. No. 8-75/2007 - FC
Government of India
Ministry of Environment, Forests and Climate Change
(Forest Conservation Division)

Indira ParyavaranBhawan, Aliganj, Jor Bag Road, New Delhi - 110003. Dated: May, 2015

To

The Principal Secretary (Forests), Government of Chhattisgarh, Raipur.

Sub: Transfer of lease in respect of diversion of 224.22 ha of forest land for coal mining in Gare Pelma IV/8 Coal Block in Raigarh District in the State of Chhattisgarh from the original user i.e. M/s Jayaswal Neco Industries Limited, in whose favour forest land was diverted, to new user agency i.e. M/s Ambuja Cement Limited, in whose favour the coal block was auctioned/re-allotted by the Ministry of Coal – regarding.

Sir,

I am directed to refer to the Ministry of Coal's letter no. 13016/38/2015-CA-III dated 01.05.2015 on the above subject requesting this Ministry to transfer its approvals granted under the Forest (Conservation) Act, 1980 for coal mining in Gare Pelma IV/8 Coal Block in Raigarh District in the State of Chhattisgarh from the original user i.e. M/s Jayaswal Neco Industries Limited, in whose favour forest land was diverted, to new user agency i.e. M/s Ambuja Cement Limited, in whose favour the coal block was auctioned/re-allotted by the Ministry of Coal, in accordance with para 2.8 of the Guidelines issued under the Forest (Conservation) Act, 1980 read with the Guidelines dated 3.05.2010, 3.05.2013 and latest Guidelines dated 31.03.2015.

In this connection, I am directed to say that after careful examination of the proposal for transfer of approvals granted by the Ministry under the Forest (Conservation) Act, 1980 and on the basis of recommendations of the Ministry of Coal, the Central Government hereby conveys its approval for transfer of Stage-I and Stage-II approvals granted by the Ministry vide its letters of even number dated 27.02.2009 and 01.01.2013 respectively, in respect of diversion of 224.22 ha of forest land for coal mining in Gare Pelma IV/8 Coal Block in Raigarh District in the State of Chhattisgarh from the original user i.e. M/s Jayaswal Neco Industries Limited, in whose favour forest land was diverted, to new user agency i.e. M/s Ambuja Cement Limited, in whose favour the coal block was auctioned/re-allotted by the Ministry of Coal, subject to the conditions as given below:

- (i) Lease transfer charges @ 10% of the NPV or Rs. 1,00,000/- (1 Lakh) whichever is less will be realized from the new user agency and will be deposited in the account of Ad-hoc CAMPA before execution of lease in favour of the new user agency.
- (ii) Reimbursement of amount paid by the original user agency shall be dealt with in the manner, as provided in the Coal Mines (Special Provisions) Second Ordinance, 2014 and Rules framed thereunder.
- (iii) The new user agency shall pay the NPV as per the approval granted under FC Act if not paid earlier. The new user agency shall also furnish an undertaking to pay the additional NPV, if so determined by the Hon'ble Supreme Court of India.
- (iv) The new user agency shall abide by all the conditions on which the forest land was leased to the original user agency.

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(v) The new user agency shall abide by any other condition that may be stipulated by the Central Government/Regional Offices/State Government in future in the interest of conservation, protection and development of forests & wildlife.

Yours faithfully,

(B. K. Singh) Director) FC

Copy to:

1. Secretary, Ministry of Coal, Shastri Bhawan, New Delhi.

2. Principal Chief Conservation of Forests, Government of Chhattisgarh, Raipur.

3. Addl. PCCF (Central), Regional Office, Nagpur.

4. Nodal Officer, O/o the PCCF, Government of Chhattisgarh, Raipur.

5. User Agencies;

a) Ms Jayaswal Neco Industries Limited.

(b) M/s Ambuja Cement Limited

6. Monitoring Cell, FC Division, MoEF&CC, New Delhi

7. Guard File.

(B. K. Singh) Director) FC





F. No. 8-75-2007-FC Government of India Ministry of Environment & Forests (FC Division)

Paryavaran Bhawan, C.G.O Complex, Lodhi Road, New Delhi - 110510. Dated: 01st January, 2013

To

The Principal Secretary (Forests), Government of Chhattisgarh, Raipur.

Sub: Diversion of 224.22 ha of forest land for coal mining in IV/8 sub block of Gare-Palma Block in favour of M/s Jayaswal NECO Limited in Raigarh Forest Division of Raigarh district of Chhattisgarh – reg.

Sir,

I am directed to refer to the State Government's letter no. F5-47/07/10-2 dated 14.08.2007 on the above subject seeking prior approval of the Central Government under section 2 of the Forest (Conservation) Act, 1980. After careful consideration of the proposal by the Forest Advisory Committee constituted under section-3 of the said Act, 'in-principle' approval was granted vide this Ministry's letter of even number dated 27.02.2009 subject to fulfillment of certain conditions prescribed therein. The State Government has furnished compliance report in respect of the conditions stipulated in the 'in-principle' approval and has requested the Central Government to grant final approval.

In this connection, I am directed to say that on the basis of the compliance report furnished by the State Government, vide letter no. *Bhoo Prabandh' Khaniji*331-41/2403 dated 16.12.2011, 07.02.2012 and 16.11.2012, final approval of the Central Government is hereby granted under section-2 of the Forest (Conservation) Act, 1980 for diversion of 224.22 ha of forest land for coal mining in IV/8 sub block of Gare-Palma Block in favour of M/s Jayaswal NECO Limited in Raigarh Forest Division of Raigarh district of Chhattisgarh subject to fulfillment of the following conditions:

- Legal status of the diverted forest land shall remain unchanged;
- The compensatory afforestation over the orange forest land double in extent to the area to be diverted (56.89 ha) shall be raised and maintained by the State Forest Department at the project cost;
- The orange forest land identified for raising Compensatory Afforestation shall be notified by the State Government as RF under Section-4 or PF under Section-29 of the Indian Forest Act, 1927 or under the relevant Section(s) of the local Forest Act, as the case may be, within a period of six months;
- 4. Wherever possible and technically feasible, the User Agency shall undertake by involving local community, the afforestation measures in the blanks within the lease area, as well as along the roads outside the lease area diverted under this approval, in consultation with the State Forest Department at the project cost;
- The period of diversion under this approval shall be twenty (20) years subject to possession of valid lease by User Agency under the MMDR Act, 1957;

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- The User Agency shall pay the additional NPV, if so determined as per the final decision of Hon'ble Supreme Court of India;
- 7. No labour camp shall be established on the forest land;
- The layout plan of the proposal shall not be changed without the prior approval of the Central Government;
- 9. The forest land shall not be used for any purpose other than that specified in the proposal;
- 10. The forest land proposed to be diverted shall under no circumstances be transferred to any other agency, department or person without prior approval of the Central Government;
- 11. No damage to the flora and fauna of the adjoining area shall be caused;
- Any tree felling shall be done only when it is unavoidable and that too under strict supervision of the State Forest Department.
- 13. The user agency shall submit the annual self compliance report in respect of the above conditions to the State Government and to the concerned Regional Office of the Ministry regularly.
- 14. Any other condition that the concerned Regional Office of this Ministry may stipulate, from time to time, in the interest of conservation, protection and development of forests and wildlife; and
- 15. The User Agency and the State Government shall ensure compliance to provisions of the all Acts, Rules, Regulations and Guidelines, for the time being in force, as applicable to the project.

Yours faithfully,

(Shiv Pal Singh)
Sr. Assistant Inspector General of Forests

Copy to:-

1. The Principal Chief Conservator of Forests, Government of Chhattisgarh, Raipur.

The Addl. PCCF (Central), Regional Office, MoEF, Bhopal.

3. The Nodal Officer (FCA), O/o the PCCF, Government of Chhattisgarh, Raipur.

4. User Agency.

5 Monitoring Cell, FC Division, MoEF, New Delhi.

6. Guard File.

(Shiv Pat Singh)
Sr. Assistant Inspector General of Forests



CTO Copy:



CHHATTISGARH ENVIRONMENT CONSERVATION BOARD Paryavas Bhawan, North Block, Sector - 19, Nava Raipur Atal Nagar, District - Raipur (C.G.) e-mail - hocecb@gmail.com

No. 9640/TS/CECB/2022

Nava Raipur Atal Nagar, Raipur, Dated 31/03/2022

To,

M/s Ambuja Cements Limited, Gare Palma IV/8 Coal Mine, Villages – Khamharia, Karwahi, Lamdarha and Milupara, Tehsil – Gharghoda, District – Raigarh (C.G.)

Sub: -

Renewal of the consent of the Board under section 25 of the Water (Prevention and Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention and Control of Pollution) Act, 1981.

Ref: -

- Transfer of Environmental Clearance issued vide letter no. J-11015/352/2006-IA-II.(M), dated 10/06/2015 by MoEF&CC, Govt. of India from M/s Jayswal Neco Industries Limited to M/s Ambuja Cements Limited.
- Transfer of lease by Ministry of Environment and Climate Change vide letter no. F.No.8-75/2007-FC dated 10/06/2015 from M/s Jayswal Neco Industries Limited to M/s Ambuja Cements Limited.
- Transfer of the consent granted to establish Gare Palma IV/8, Coal Mining Project of Capacity-1.2 MTPA by Chhattisgarh Environment Conservation Board from M/s Jayswal Neco Industries Limited to M/s Ambuja Cements Limited issued vide letter no. 1895/TS/CECB/2015, Raipur, dated: 23/07/2015.
- Consent of the Board issued under section 25 of the Water (Prevention and Control of Pollution) Act, 1974 vide letter no. 4348/TS/CECB/2017, dated: 13/11/2017 and under section 21 of the Air (Prevention and Control of Pollution) Act, 1981 vide letter no. 4350/TS/CECB/2017, dated: 13/11/2017 for Mining of Coal-MTPA (Open Cast-0.7 MTPA and Underground-0.5 MTPA).
- Consent of the Board issued under section 25 of the Water (Prevention and Control of Pollution) Act, 1974 vide letter no. 5670/TS/CECB/2018, dated: 15/10/2018 and under section 21 of the Air (Prevention and Control of Pollution) Act, 1981 vide letter no. 5672/TS/CECB/2018, dated: 15/10/2018 for Mining of Coal- (By Open Cast Method) - 0.7 MTPA.

Will. Kerwaht
Po. Saraitola,
Tamnar Raigan 498 107
(C.G.)

- Amendment in consent issued under section 25/26 of the Water (Prevention and Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention and Control of Pollution) Act, 1981 vide letter no. 8380/TS/CECB/2020 Nava Raipur Atal Nagar, Raipur, dated: 29/12/2020 for Mining of Coal- (By Open Cast Method) - 0.7 MTPA & Mining of Coal - (By Underground Method) - 0.5 MTPA Total – 1.2 MTPA.
- Last renewal of consent under section 25/26 of the Water (Prevention and Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention and Control of Pollution) Act, 1981 vide letter no. 11474/TS/CECB/2021 Nava Raipur Atal Nagar Raipur, dated: 30/03/2021.
- Your online application no. 9274638, dated 12/02/2022 and subsequent correspondence ending dated 24/03/2022.

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With reference to your above application, consents under section 25 of the Water (Prevention and Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention and Control of Pollution) Act, 1981 are hereby renewed for a period of three years i.e. from 01/04/2022 to 31/03/2025, subject to the fulfillment of the terms and conditions incorporated in the water consent letter no. 4348/TS/CECB/2017, dated: 13/11/2017 & 5670/TS/CECB/2018, Atal Nagar, Raipur dated: 15/10/2018 and air consent letter no. 4350/TS/CECB/2017, dated: 13/11/2017 & 5670/TS/CECB/2018, Atal Nagar, Raipur dated: 15/10/2018 and subsequent renewal(s)/amendment(s) issued by the Board and additional conditions mentioned below.

This renewal of consent is valid for production capacity of: -

Product	Production Capacity
Mining of Coal	0.70 MTPA
(By Open Cast Method)	(Zero Point Seven Zero Million Tonnes Per Annum
Mining of Coal	0.50 MTPA
(By Underground Method)	(Zero Point Five Zero Million Tonnes Per Annum
Total	1.2 MTPA

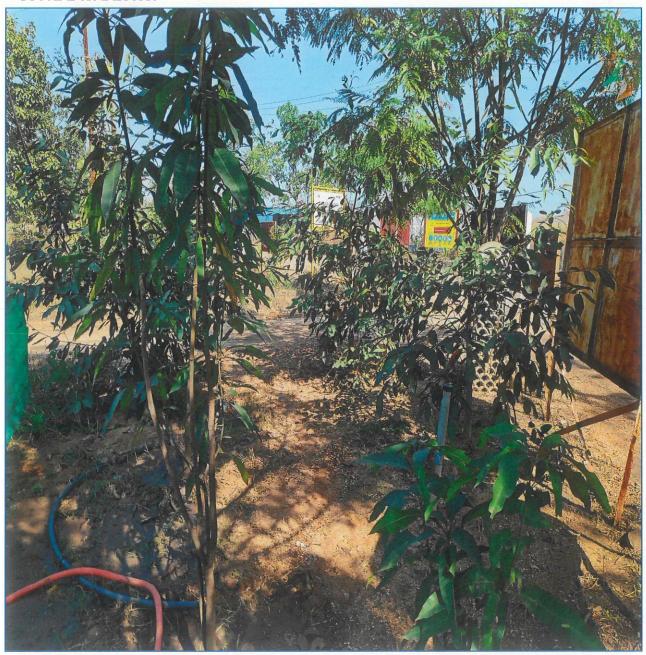
Additional Conditions

A. Water (Prevention and Control of Pollution) Act, 1974

- Mine Management shall operate and maintain effluent treatment system regularly to meet prescribed standards all the time. No effluent shall be discharged outside of the Mine premises in any circumstances; hence zero discharge condition outside of the Mine Premises promises shall be maintained all the time.
- Mine management shall execute the works such as contraction of setting tanks, pucca roads, utilization of fly ash in stowing & mine back filling etc.



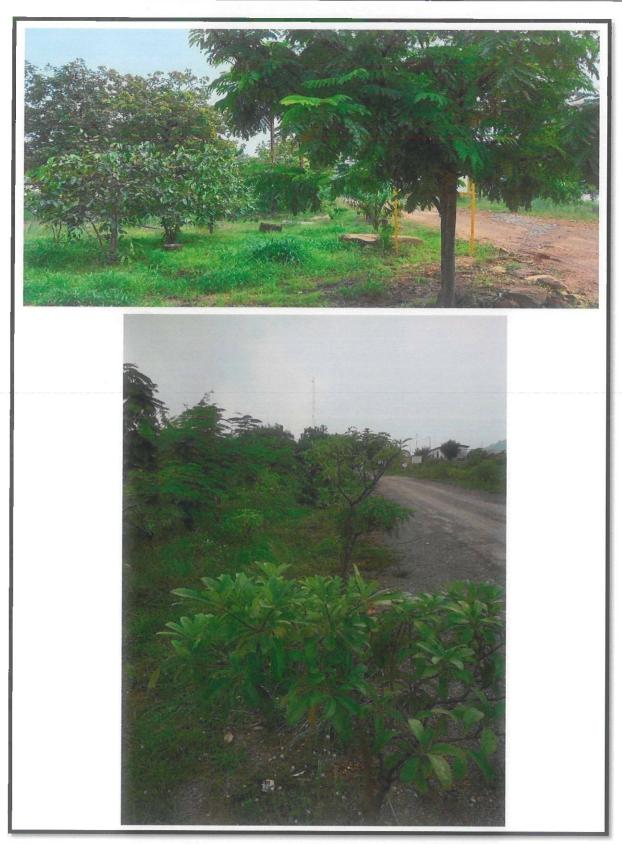
Green Belt Photos:





Kharra, Chhattisgarh, India Kharra, Chhattisgarh, India Unnamed Road, Kharra, Chhattisgarh 496111, India Unnamed Road, Kharra, Chhattisgarh 496111, India Lat 22.167637° Lat 22.167638° Long 83.500975° Long 83.500971° Google 20/03/23 02:53 PM Google 20/03/23 02:53 PM







Photograph of Piezometers:







Approved Mine Closure Plan

File No.34011/19/2016-CPAM

No.34011/19/2016-CPAM Government of India Ministry of Coal

> Shastri Bhawan, New Delhi the 15-05-2017

M/s Ambuja Cements Limited 306-307, 3rd Floor, Ambuja City Centre Mall Vidhan Sabha Road, Saddu Raipur, Chattisgarh-492007 e-mail: c.bansal@ambujacement.com

Subject: Mine Closure Plan for Gare Palma IV/8 of M/s Ambuja Cements Ltd.

Sir.

I am directed to refer to your letter No. ACL/GP/IV-8/MCP/2015-16/71 dated 15-03-2016 for approval of Mine Closure Plan for Gare Palma IV/8 Coal Mine, Raigarh, Chhattisgarh allocated to M/s. Ambuja Cements Limited for approval of the Central Government and to state that the Mine Closure Plan of Mine Closure Plan for Gare Palma IV/8 Coal Mine (March 2017) located in , Raigarh, Chhattisgarh of M/s. Ambuja Cements Ltd to be read alongwith company's letter No. ACL/GP/IV-8/MCP/2016-17/08 dated 25/04/2016 and letter no ACL/GP/IV-8/MCP/2016-17/81 dated 18/01/2017 incorporating clarifications has been considered and the approval of the Central Government thereon is hereby conveyed under Section 5(2)(b) of the Mines & Minerals (Development & Regulation) Act, 1957 subject to the following conditions:

- The Mining Company will come up with revised Mining Plan in case of unfavorable result of the subsidence study for the block.
- The Mining company shall take all necessary precautions regarding safety of mineworkings and persons deployed therein.
- 3. Mining lease of this block shall not encroach into any other adjacent block.
- 4. The cost of abandonment for carrying out the closure activities envisaged in the Mineclosure plan is indicative, the actual cost for carrying out the activities at the time of finalclosure may be higher. The actual cost of abandonment will have to be borne by the project proponent for carrying out the closure activities;
- The approval of the mine closure plan is without prejudice to the requirement of approvals from competent /prescribed authority under the relevant rules/ regulations etc;



File No.34011/19/2016-CPAM

Two copies of the approved mine closure plan duly signed by the competent authority are returned herewith with the request that a copy of the approved mine closure plan may be submitted to the concerned State Government for necessary action and also a photocopy of the approved mine closure plan may be sent to the Coal Controller for monitoring the block.

Yours Faithfully

Signature valid >

Digitally signed by ANAMISA KUMAR MANDAL Date: 2017 DS 18-23 BS 28 BS (A.K. Mandal)

Reason Approved (A.K. Mandal)
Under Secretary to the Govt of India(CPAM)

Encl. As Above

Copy to:

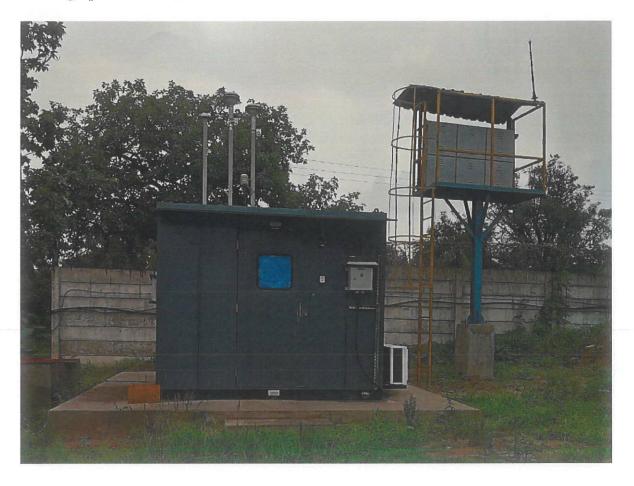
1 Under Secretary (CA-III Section) along with one copy of approved Mine Closure Plan.

2 Section Officer (Nominated Authority)



Annexure- 6

Photo graph of CAAQMS:



CHAR



[Period-October 2023 to March 2024]

Annexure-7

CAAQMS login credentials submitted to CECB:

Ambuja Cement

ACL/GP-IV-8/ENV/22-23/916

Date: 20.05.2022

To.

The Regional Officer Chhattisgarh Environment Conservation Board T.V. Tower Road, Raigarh Dist: Raigarh (C.G.)

Sub: Intimation letter regarding commissioning of CAAQMS in Gare Palma IV/8 Coal Mine of Ambuja Cements Limited, village- Khamaria and Karwahi, Tehsil- Tamnar, District- Raigarh (C.G.)

Dear Sir,

In respect of subject matter, we have installed One Continuous Ambient Air Quality Monitoring Station w.r.t. to Gare Palma IV/8 Coal Mine of Ambuja Cements Limited, village- Khamaria and Karwahi, Tehsil- Tamnar, District- Raigarh (C.G.). Now the real time data of CAAQMS can be seen vide below mentioned login credentials:

Website:

cecb.glensserver.com

User ID:

ACLT

Password:

Aclt@123

This is for your kind information please. Thanking You

For, Ambuja Cements Limited

Authorized Signatory (Gare Palma IV/8 Coal Min

Email: unit-head-garepalma@ambujacement.com

Mo.: 7225054477

C.C.: The Member Secretary, Chhattisgarh Environment Conservation Board, Paryavash Bhawan, Sector-19, Atal Nagar, District- Raipur Chhattisgarh.

AMBUJA CEMENTS LIMITED Gare Palma IV/8 Coal Mine

SITE OFFICE: Village - Karwahi, Post. - Saraitola, Tahsil - Tamnar, Dist. - Raigarh (C.G.) 496 107 www. ambujacement.com, E-mail: unit-head-garepalma@ambujacement.com Regd. 0ff.: PO. Ambujanagar, Taluka - Kodinar, Dist. Gir Somnath, Gujrat

CIN: L26942GJ1981PLC004717



Monitoring Photos:





28/COAL WIT



भारत सरकार जल सर्वित संज्ञालय जल संस्थाल गर्दी विकास और गंधा संस्था विभाग कंजीय भूमि जल प्रविकारण Government of India Ministry of Jal Shakti Department of Water Resources, River Development & Garga Rejuvenation Central Ground Water Authority

(भूजल निकासी हेतु अनापत्ति ग्रमाण पत्र) NO OBJECTION CERTIFICATE (NOC) FOR GROUND WATER ABSTRACTION

Project Name:	Gare Palma Iv/8 Coal Mine - M/s Ambuja Cements Limited								
Project Address:	M's Ambuja Cements Limited - Gare Palma Iv/8 Coal Mine, Village - Khamhariya,karwahi, Post - Saraitoal,block - Tamnar, District - Raigarh (chhattisgarh) Pin - 496107								
Village:	Khamahariya	Block:	Tamnar						
District:	Raigarh	State:	Chhatisgarh						
Pin Code:									
Communication Address:	M/s Ambuja Cements Limited, Gare Plama IWS Coal Mine, Village - Karwahi, Post - Saraitola, Block - Tamnar, District - Raigarh, chhattisgarh Pin -496107, Tamnar, Raigarh, Chhattisgarh - 496107								
Address of CGWB Regional Office :	Central Ground Water Board North Central Chhattisgarh, 2nd Floor, Lk Corporate And Logistic Park, Dhamtari Road, Nh-30, Dumartaral, Raipur, Chhattisgarh - 492015								

1.	NOC No.:		CGWANOC/MIN/ORIG/2022/16990														
2.	Application	n No.:	21-4/6064/CT/MIN/2022						3	Cat (GV	ategory: GWRE 2020)			Semi Critical			
4.	Project St	atus:	Existi	ng Pro	ject		- 7		5	NO.	С Туре	manusus (Areas open o M	New				
6.	Valid fron	nc	11/11/2022						7	. Val	Valid up to:			10/11/2024			
В.	Ground W	fater Abst	straction Permitted:														
Fresh Water Saline Water					г	Dewatering				Total							
	m ⁹ /day m ⁹ /yes		ear	m¹	Vday	/ m³	Yyear	ar m³/d			m ^a /year		m	m%day		m³/year	
	100.00	36500	0.00					4615.0		1	1684475.00						
9.	Details of	ground w	vater ab	stracti	on /Dew	artering	stru	ctures									
			Tota	d Exis	ting No	.:2						Tot	al Prop	osed h	a.:0		
DW DCB BW TV						TW	MP	MP	J D	W D	CB	BW	TW	MP	MPu		
Abstraction Structure*				0	0	2	0	0	0	()	0	0	D	0	0	
Dewatering Structure* 0 0 0 0					0	0	0	(0	0	0	0	0	7			
'DW	V- Dug Well; D	CB-Dup-cu	m-Bore t	Well; SW	/-Bore We	d; TW-T	ube W	ul; MP-M	ine Pit,M	Pu-Min	e Pumpi						
10.	Ground W	fater Abst	traction/Restoration Charges paid (Rs.):							12985110.00							
11.	Number of Piezometers/Observation wells) to be constructed/monitored & Monitoring mechanism.						No. of Piezometers		Monitoring Mechanism								
										Man	sal D	WLR"	DWLF	With T	elemetr		
	**DWLR - Digital Water Level Recorder							2 0 1				1					

18/11, जामनगर इस्तरा, मानशिंकु सोत, नई दिल्ली – 110811 / 18/11, Jammagar Bloom, Massingh Road, New Delhi-110813 Phone: (811) 2330361 Fax: 2330361, 23306743 Website: egwa-nec.gov.in

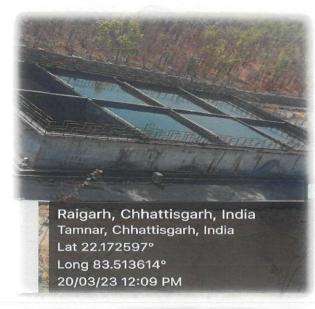
पानी क्वाचे - सीवन क्याचे SAVE WATER - SAVE LINE





Effluent Treatment Plant

• Capacity of ETP: 200m3/hr, No of Tank: 8 and Tank Capacity – 3,00,000 x 8 = 24 Lakh Ltr











Annexure-11

Sewage Treatment Plant
• Capacity of STP: 20,000 Ltr/ Day



