

ACL/GP-IV/8/EC(Mine)/2024-25/292

Date: 16/10/2024

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 April 2024 to

September 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 26.11.2010

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

Dear Sir.

The MoEF8CC 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 April 2024 to September 2024 w.r.t. Gare Palma IV/8 Coal Mine of Ambuja Cements Limited.

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)

VIII. Karwahi Po. Saraihola, Tamnar, Rajaah 495107 (C:G.)

Encl: Six monthly EC compliance report for coal mining.

Copy To:

- 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.)

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@adani.com

Regd. Off.: Adani Corporate House, Near Vaishnav Devi Circle, S.G. Highway, Ahmedabad, Gujarat - 382421

CIN: L26942GJ1981PLC004717

HALF – YEARLY ENVIRONMENT CLEARANCE COMPLIANCE REPORT

For the Period of April -2024 to September -2024

By

AMBUJA CEMENTS LTD.

Village- Khamaria and Karwahi, Tehsil- Ghardhoda,

District- Raigarh, Chhattisgarh

FOR

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

Will Kerwahi Po. Sarahola, Tomar Rajaah 496107 (C.G.)

01. INTRODUCTION

Ministry of Coal, Govt. of India through Nominated Authority conducted 2nd phase of eauction 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 reserve 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 have 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 April 2024 – September 2024 have been explained in the report.



02. 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 10^{th} June 2015

Table 1: Transfer of EC

S. No	Conditions	Remarks	
1.	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.		
2.	2. All conditions stipulated in the EC letter no J-11015/352/2006/-IA-II.(M) dated status outline be 22 nd December '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.		
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

Table 2: Environment Clearance Specific Condition and General Condition

A. SPEC	A. SPECIFIC CONDITION			
S, No.	lo. Conditions Remarks			
1,	No Mining operations shall be undertaken in the forest land 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 <i>Annexure-1</i> and Transfer of forest Clearance enclosed as <i>Annexure - 2</i> .		
2.	Maximum production by opencast mining	Maximum production will be kept within		

Will Karwahi Po. Saraitoja, Tamna, Raigarh 496107 (C.G.)

	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.	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 <i>Annexure</i> - 3.	
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.	
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.	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	Underground mine is under development of stage only. Hence there is no subsidence of 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	



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	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.	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, 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 04 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 m ³ . 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 sprinklers and Tanker capacity 18 KL. 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 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	OB is being stacked at the earmarked external OB dumpsite within ML area. Height is not more than 60 m. All the slope of external dumps are being maintained at a maximum of 28 degrees. The ultimate slope of dumps does not exceed 28 degrees. Agreed, not to take up external OB dump after 10th Year. IIT BHU was engaged for scientific study they have submitted the report & the recommendations are being implemented,		
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	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 rainwater harvesting ponds.		

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	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.	
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 drains with proper gradient 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 has been 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. The 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	We agree to undertake the progressive

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	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, barrier zone (6 ha), along roads (4.5 ha) and infrastructure(4ha), 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.	afforestation of 133.53 ha, Currently OB dumps not being reclaimed & dumps have not reached the maximum height. Total 63720 nos. of local native species have been planted till date. Photographs of green belt enclosed as Annexure - 4.
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	Noted and agreed to participate in the plan prepared by Government.

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	of the State Government for conservation of flora and fauna found within the study area.	
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.	CGWA NOC has been obtained as per vide NOC no CGWA/NOC/MIN/ORIG/2022/16990 dated 11/11/2022 is attached as <i>Annexure - 5.</i>
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 with telemetry systems. Ground water monitoring is carried out by as per NOC. Photograph of Borewells and Piezometer enclosed as <i>Annexure - 6.</i>
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	Agreed to comply.

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	that if the river/nala discharge of mine	
	water takes place, it shall be treated to	
	conform to prescribed standards before	
	discharge.	
24.	ETP should also be provided for	Effluent is being treated in ETP and
	treatment of effluents from workshop,	treated water is being used for vehicle
	CHP. There shall be zero discharge from	wash, plantation and dust suppression.
	the coal washery.	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
1		will maintain zero discharge.
25.	Besides carrying out regular periodic	As per DGMS initial medical examination
	health check-up of their workers, 10% of	in form-O has been complied for all
	the workers identified from workforce	employees. Health check-up for
	engaged in active mining operations shall	occupational diseases from NIOH, shall be
	be subjected to health check-up for	complied.
	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	
26.	For monitoring land use pattern and for	Agreed.
	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.	
27.	A Final Mine Closure Plan along with	Mine Closure Plan has been approved by
	details of Corpus Fund should be	Ministry of Coal vide letter no.
	submitted to the Ministry of Environment	34011/19/2016-CPAM dtd on 15 th May,
	& Forests five year before mine closure	2017. Attached as <i>Annexure - 7.</i>
	for approval	



SI. no	General condition	Compliance	
1.	No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment and Forests.		
2.	No change in the calendar plan including excavation, quantum of mineral coal and waste should be made.	Agreed.	
3,	Four ambient air quality monitoring stations should be established in the core zone as well as in the buffer zone for monitoring SPM, RSPM, SO2 and NOx. and heavy metals such as Hg, Pb, Cr, As, etc. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board.	One Nos. of CAAQMS has been installed within premises. Photographs of CAAQMS station is enclosed as <i>Annexure - 8</i> . Acknowledgement copy regarding CAAQMS installation and connection to CECB server is enclosed as <i>Annexure-9</i> . Except this regular monitoring is being carried out by NABL Accredited laboratory.	
4.	Data on ambient air quality (SPM, RSPM, SO2, NOx and heavy metals such as Hg, Pb, Cr, As, etc) should be regularly submitted to the Ministry including its Regional Office and to the State Pollution Control Board and the Central Pollution Control Board once in six months	Ambient Air Quality is being regular monitoring by NABL accredited lab. Data of AAQ is being submitted with six monthly EC compliance report, also attached in table no 4 to table no 8 respectively.	
5.	Fugitive dust emissions (SPM, RSPM, and heavy metals such as Hg, Pb, Cr, As, etc) from all the sources should be controlled regularly monitored and data recorded properly. Water spraying arrangement on haul roads, wagon loading, dump trucks (loading and unloading) points should be provided and properly maintained.	Fugitive emission is being regular monitoring by NABL accredited lab. Regular water sprinkling is being carried on roads engaged for transportation; water sprinkling arrangements has been made at 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 of noise levels below 85 dBA in	Regular maintenance is being carried of moving equipment engaged in mining	

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	the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc should be provided with ear plugs/muffs.	operation. We are monitored noise levels of monthly basis and data recorded. We have provided ear plugs/muffs to the workers for engaging in blasting and drilling operation 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 developed.	
7.	Industrial wastewater (workshop and wastewater from the mine) should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May 1993 and 31st June 1993 or as amended from time to time before discharge. Oil and grease trap should be installed before discharge of workshop effluents	Wastewater from workshop is being treated with Effluent Treatment Plant and treated water is being utilized in dust suppression and greenbelt development.	
8.	Vehicular emissions should be kept under control and regularly monitored. Vehicles used for transporting the mineral should be covered with tarpaulins and optimally loaded.	PUC certified vehicles are engaged for mining operation. It is strictly ensured by logistic safety team that vehicles engaged for transportation of coal is fully covered with tarpaulin.	
9.	Environmental laboratory should be established with adequate number and type of pollution monitoring and analysis equipment in consultation with the State Pollution Control Board	Environmental laboratory has been established at site for pollution monitoring. Photographs of Environment Monitoring is enclosed as <i>Annexure-10</i> .	
10.	Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects. Occupational health surveillance programme of the workers should be undertaken periodically to observe any contractions due to exposure to dust and to take corrective measures, if needed.	are wearing protective respiratory device mask. They have been provided with adequate training and information or safety and health aspects through out occupational health & safety department.	
11.	A separate environmental management	Environment management cell has been	

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	cell with suitable qualified personnel should be set up under the control of a Senior Executive, who will report directly to the Head of the company.	established under supervision of competent and senior executive technical personnel.	
		Site Head Mine Manager Assistant Manager	
12.	The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to this Ministry and its Regional Office at Bhopal	Agreed, Statutory fund have been provided by Company. The funds earmarked for environmental protection measures are being used for Environmental conservation works only.	
13.	The Regional Office of this Ministry located at 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.	r s	
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	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	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.	

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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.



03. 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**.

Table 3: Description Of Ambient Air Quality (AAQ) Monitoring Stations

S.N	Sampling Stations	Station Code	Distance from Mine Lease	Direction from Mine Lease
1.	At Main Gate	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. Observation

The results of Ambient Air Quality monitoring with regard to the parameters are given below in Table – 4, 5, 6, 7 & 8 The National Ambient Air Quality Standards are given in Table – 9.

Table 4: Results of ambient air quality monitoring

		FOR	PARTICU	ILATE M	ATTER (<	10 µm)		
Code	Stations	APRIL	MAY -	JUNE	JULY	AUG -	SEP -	NAAQM
		- 24	24	-24	- 24	24	24	STANDARD
AAQ-1	At Main Gates	59.5	60.1	60.7	58.5	59.6	58.5	100
AAQ-2	At Banjari Temple	58.1	59.3	59.4	57.6	58.3	57.7	100
AAQ-3	Khamaria village	57.7	58.4	58.8	56.3	55.3	57.8	100

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AAQ-4	Nr School,	57.1	58.2	59.1	56.6	57.9	56.7	100
	Rampura							
	village							
AAQ-5	At Durga	59.4	60.5	60.0	58.4	61.5	58.4	100
	House							

^{*}Values are in µg/m³

Table 5: Results of ambient air quality monitoring

		F	OR PART	ICULATE	MATTE	R (<2.5 µ	ım)	
Code	Stations	APRIL	MAY -	JUNE	JULY	AUG -	SEP - 24	NAAQM
		-24	24	-24	- 24	24		STANDARD
AAQ-1	At Main	19.3	20.2	19.9	18.7	19.1	21.7	60
	Gate			=		5 5		
AAQ-2	At Banjari	20.2	21.0	22.6	20.5	21.9	22.8	60
	Temple						:	
AAQ-3	Khamaria	19.6	21.6	19.3	20.7	21.2	20.2	60
	village							
AAQ-4	Nr School,	19.2	20.3	20.4	19.8	20.7	21.6	60
	Rampura							
	village					!		
AAQ-5	At Durga	19.8	20.7	21.4	20.2	20.3	21,7	60
	House							

^{*}Values are in µg/m³

Table 6: Results of ambient air quality monitoring

			FOR S	ULPHUR	DIOXID	E (SO ₂)		
Code	Stations	APRIL	MAY -	JUNE	JULY	AUG -	SEP - 24	NAAQM
		- 24	24	-24	- 24	24		STANDARD
AAQ-1	At Main Gate	13.4	12.9	11.5	13.1	14.5	20.2	80
AAQ-2	At Banjari Temple	12.8	12.3	14.1	12.5	14.4	13.3	80

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AAQ-3	Khamaria	11.5	11.0	12.4	11.3	13.6	19.14	80
	village							
AAQ-4	Nr School,	12.9	12.4	14.0	12.5	14.8	13.2	80
	Rampura							
	village							
AAQ-5	At Durga	12.1	11.8	11.0	12.1	13.8	13.3	80
	House							

^{*}Values are in µg/m³

Table 7: Results of ambient air quality monitoring

			FOR OX	DES OF	NITROG	EN (NO _X)	
Code	Stations	APRIL - 24	MAY - 24	JUNE -24	JULY - 24	AUG -	SEP - 24	NAAQM STANDARD
AAQ-1	At Main Gate	15.7	15.0	16.7	15.2	14.8	15.9	80
AAQ-2	At Banjari Temple	15.0	14.7	16.7	14.9	14.2	13.4	80
AAQ-3	Khamaria village	14.3	13.8	16.0	14.1	15.9	15.8	80
AAQ-4	Nr School, Rampura village	14.6	13.9	17.8	14.0	15.02	15.4	80
AAQ-5	At Durga House	15.7	15.0	17.8	15.3	15.7	14.4	80

^{*}Values are in µg/m³

Table 8: Results of ambient air quality monitoring

			FOR C	ARBON I	MONOXID	E (CO)					
Code	Code Stations APRIL MAY- JUNE JULY- AUG- SEP- NAAQM -24 24 -24 24 24 STANDARD										
AAQ-1	At Main Gate	554.0	546.0	512.0	548.0	560	540	4000			
AAQ-2	At Banjari	525.0	520.0	540.0	525.0	520	580	4000			

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	Temple							
AAQ-3	At	549.0	543.0	520.0	544.0	550	530	4000
	Khamaria							
	village			1				
AAQ-4	Nr School,	543.0	540.0	511.0	542.0	590	510	4000
	Rampura							
	village	×					93	
AAQ-5	At Durga	544.0	541.0	552.0	546.0	450	590	4000
	House				¥			

^{*}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 9: National ambient air quality standards (NAAQMS) (Revised-2009)

S.N.	Pollutant	Unit	Area		ration in ent Air
S.IV.	Politicalit	Offic	Ales	Annual Average	24 Hours
1	Sulphur Dioxide (SO ₂)	hā/w ₃	Industrial	50	80
2	Nitrogen Dioxide (NO _x)	µg/m³	Industrial	40	80
3	Particulate Matter PM ₁₀	µg/m³	Industrial	60	100
4	Particulate Matter PM _{2,5}	µg∕m³	Industrial	40	60
5	Ozone (O ₃)	µg/m³	Industrial	100	180
6	Lead (Pb)	µg/m³	Industrial	0.5	1

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7	Carbon Monoxide (CO) mg/m³	mg/m³	Industrial	2	4
8	Ammonia (NH3)	µg/m³	Industrial	100	400
9	Benzene (C ₆ H ₆) µg/m ³	hā\w ₃	Industrial	5	5
10	Benzo(α) Pyrene.	µg/m³	Industrial	1	1
11	Arsenic (As) µg/m³	μg/m³	Industrial	6	6
12	Nickel (Ni) µg/m³	µg/m³	Industrial	20	20

- Annual arithmetic mean of minimum 1040 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 PM_{10} concentrations well within stipulated 24-hour limit, 100 $\mu g/m^3$ as prescribed for residential, rural and other areas in long standing NAAQ Standards of CPCB.

3.3.2. Particulate Matter $\langle 2.5 \mu (PM_{2.5}) \rangle$

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 (SO₂) 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.

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3.3.4. Oxides of Nitrogen (NOx)

Average Oxides of Nitrogen (NO_x) concentrations at all sampling stations are also 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.

3.3.5. 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.

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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 - 10**.

Table 10: 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 Railway Gate	NL - 2	Core zone	Ambient
3	Nr Weigh Bridge	NL - 3	Core zone	Ambient
4	Nr CDS	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

4.2. Observations

The observations for noise level measurement were taken randomly in day and night hours. Measured noise levels are given below in **Table – 11** and **12** respectively.

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Table 11: Results of ambient noise level measurement in days hours

			N	DISE LEVE	L (DAY H	DURS)					
Code	Stations	Unit	APRIL - 24	MAY - 24	JUNE -24	JULY - 24	AUG- 24	SEP -24	MIN	MAX	AVG
NL-1	Nr Main Gate		50.4	56.2	64.3	67.8	58.6	56.8	50.4	67.8	59.1
NL-2	At Railway Gate		57.8	59.4	58.0	56.8	51.1	50.8	50.8	59.4	55.1
NL-3	Nr Weigh Bridge		67.3	68.1	63.2	68.3	68.7	65.1	63.2	68.7	65,95
NL-4	Nr CDS	15(4)	66.7	69.5	67.0	65.7	61.5	60.3	60.3	69.5	64.9
NL-5	Nr Khamaria village	dB(A)	59.1	59.7	62.4	60.9	52.1	52.3	52.1	62.4	57.25
NL-6	Nr School, Rampura village		46.7	44.6	58.7	53.1	51.6	48.3	44.6	58.7	51.65
NL-7	At Durga House		51.2	54,9	56.5	52.4	50.8	49.4	49.4	56.5	52.95
NL-8	At Banjari Temple		54.9	55.5	50.1	44.6	49.7	50.9	44.6	55.5	50.05

Table 12: Results of ambient noise level measurement in night hours

			N	OISE LEVE	L (NIGHT	HOURS)					
Code	Stations	Unit	APRIL - 24	MAY - 24	JUNE -24	JULY -	AUG- 24	SEP -	WIN	MAX	AVG
NL-1	Nr Main Gate		33.2	34.1	35.6	33.7	45,9	42.8	33.2	45.9	39.55
NL-2	At Railway Gate		35.5	36.0	33,1	34.6	37.8	56.0	33.1	56	44.55
NL-3	Nr Weigh Bridge		35.8	35.1	38.0	36.7	45.6	44.8	35,1	45.6	40.35
NL-4	Nr CDS		34.6	35.8	39.6	35.3	41.9	42.7	34.6	42.7	38.65
NL-5	Nr Khamaria village	dB(A)	34.7	35.0	33.2	34.7	41.6	40.9	33.2	41,6	37.4
NL-6	Nr School, Rampura village		32.3	33,1	31,9	32.6	33.6	34.8	31.9	34.8	33.35
NL-7	At Durga House		34.4	34.7	30.5	33.3	38.6	39.4	30.5	39.4	34.95
NL-8	At Banjari Temple		33.8	33.5	33.7	32.9	34.7	35.4	32.9	35.4	34.15

Note: All values are in dB(A)

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4.3. 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 – 13.

Table 13: 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.

4.4. Results and Discussion

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



5.0. FUGITIVE EMISSION

5.1. General

To assess the fugitive emission quality, total four 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 – 14**.

Table 14: Description of fugitive emission monitoring stations

S.N	Sampling Stations	Station Code
1	Near CDs	FE – 1
2	Near Railway Gate	FE – 2
3	Near Security Check Post	FE ~ 3
4	Near Weigh Bridge	FE – 4

5.2. Observations

The results of Fugitive emissions monitoring with regard to the parameters are given in **Table – 15.**

Table 15: Results of Fugitive emission monitoring

Code	Sampling Stations	Unit	APRIL - 24	MAY - 24	JUNE -24	JULY - 24	AUG-24	SEP -24
FE- 1	PM ₁₀		66.3	67.0	64.8	70.4	67.9	68.1
FE- I	PM _{2.5}	µg/m³	22.7	23.5	22.5	26.5	25.8	28.3
FE- 2	PM ₁₀		67.6	68.4	66.8	68.9	62.5	67.1
FE- 2	PM _{2.5}		22.8	23.5	23.0	25.4	27.9	24.7
FE- 3	PM ₁₀		67.1	68.3	66.3	69.7	63.2	60.0
FE- 3	PM _{2.5}		21.6	22.4	22.1	24.0	25.9	29.9

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Code	Sampling Stations	Unit	APRIL -24	MAY - 24	JUNE -24	JULY - 24	AUG-24	SEP -24
FE- 4	PM ₁₀		68,4	68.4	67.7	71.2	68.1	67.6
FC- 4	PM _{2.5}		23.7	23.7	23.1	26.7	29.5	23.9

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.

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6.0. WATER QUALITY ANALYSIS

6.1. Water Quality Data

Table 16: Water quality data

			24	-Арг	24	-May	24	-Jun	24	-Jul	24-Au	9	24-5	ер
Sr N o.	Parameters	Ref. Method	Min e wat er	Drinki ng water	Min e wat er	Drinki ng water	Plan t RO- Reje ct	Drinki ng water	Plan t RO- Reje ct	Drinki ng water	GW_Villa ge- Khamari a	BW wat er	Mine water - seepa ge	ETP wat er
1	pH at 250 C	IS:3025 (Part 11)- 1983	7.85	8.13	7.93	7.62	6.75	7.45	6.89	7.15	7.25	7.5 8	7.27	7.13
2	TDS	IS:3025 (Part 16)- 1984	354	165	302	322	1856	175	134	373	160	169. 2	115	141.
3	Chloride as Cl	IS:3025 (Part 32)- 1988	65.4	15.3	64	20,9	62,6	21.7	19	28.9	38.2	15.3	11.8	-
4	Sulphate as SO4	IS:3025 (Part 24)- 1986	49. 8	10.1	181. 5	15.1	212	7	8	8.2	7.9	7.1	7.05	-
5	COD	IS:3025 (Part 58)- 2006	46	BLQ	33	BLQ	12	BLQ	BLQ	BLQ	BLQ	BLQ	-	59.0
6	BOD	IS:3025 (Part 44)- 1993	11	BLQ	7	BLQ	5	BLQ	BLQ	BLQ	BLQ	BLQ	_	22.0
7	Oil & Grease	IS:3025 (Part 39)- 1991	0.27	BDL	0.14	BDL	BDL	BDL	BDL	BDL	BLQ	BLQ		3.9

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

6.2. OBSERVATIONS

The observed values for wastewater are within the permissible limits prescribed by CPCB





Annexure_1- Copy of Forest Clearance

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/ Khanij/*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:

- 1. 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;
- 3. 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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Tamnar Reigath 496107
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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;
- 8. 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;
- 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;
- 12. 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.
- 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.

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

User Agency.

Monitoring Cell, FC Division, MoEF, New Delhi.

Guard File.

Sr. Assistant Inspector General of Forests

Annexure_2- Transfer of 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, Rainur

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/- (I 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.

M/s Ambuja Cement Limited

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

7. Guard File.

(B. K. Singh) Director) FC

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(C.G.)

Annexure 3 - Copy of CTO



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- 1.2 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.

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- 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.
- 9. 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.

FR. E. Barrell V., NOTC come Lett., Order CHIEF, Conductivity, Ann Revendamistics Commit Limited, Colaminativa, Mining of Co.A., LEW 4276 MPA & OCM 0.70 MTPA (DYALL 25 MEAP date)

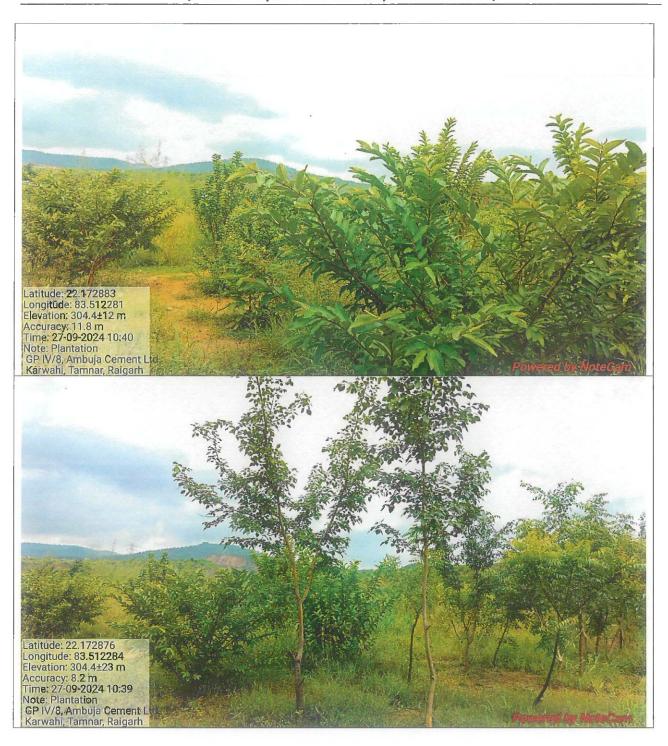
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Tamnar, Raigan 496107
(C.G.)

Annexure_4 - Photographs of Green Belt



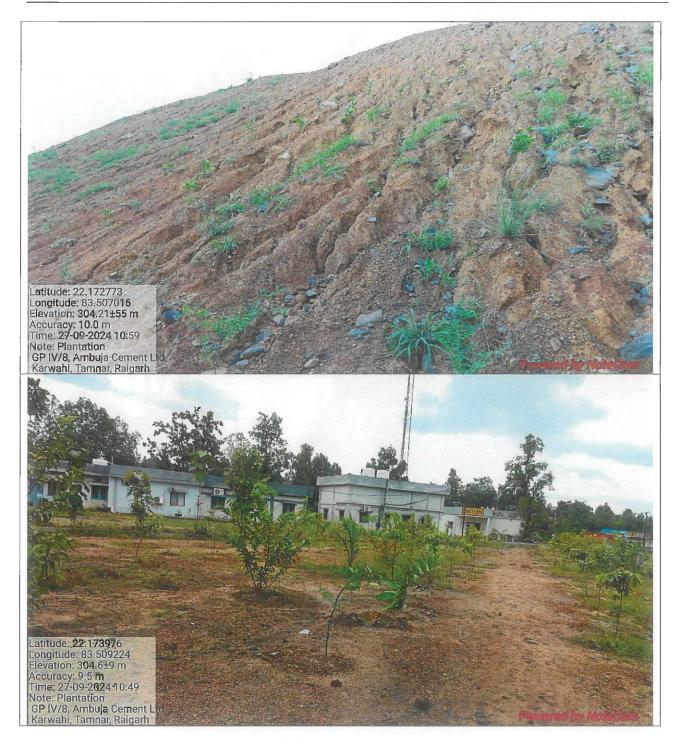
Vill. Karwahi Po. Saraitota, N-8/COAL M















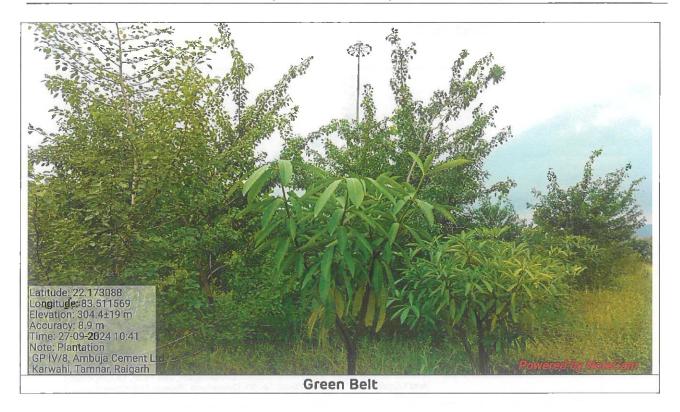














Annexure_5 - Copy of CGWA NOC



भारत सरकार जल यांकि मंत्रालय जल संसाधन, मदी विकास और गंगा संरक्ष्ण विभाग केन्द्रीय भूभि जल प्राधिकरण Government of India Ministry of Jai Shakti Department of Water Resources, River Development & Ganga Rejuvenation Cantral Ground Water Authority

(भूजल निकासी हेतु अनापित प्रमाण पत्र) NO OBJECTION CERTIFICATE (NOC) FOR GROUND WATER ABSTRACTION

Project Name:				Gare	Gare Palma Iv/8 Coal Mine - M/s Ambuja Cements Limited										
Project Address:				M/s / Khar	M/s Ambuja Cernents Limited - Gare Palma Iv/8 Coal Mine, Village - Khamhariya,karvahi, Post - Saraitoal,block - Tamnar, District - Raigarh (chhattisgarh) Pin - 496107										
١	Village:				Khamahariya					ck: Ta	amnar				
I	District:			Raig	Raigarh					e: C	Chhattisgarh				
F	Pin Code:														
Communication Address:				Post Tam	M/s Ambuja Cements Limited, Gare Plama Iv/8 Coal Mine, Village - Karwahi, Post - Saraitola, Block - Tamnar, District - Raigarh,chhattisgarh Pin -496107, Tamnar, Raigarh, Chhattisgarh - 496107										
Д	ddress of CGWB R	egional	Office		Logistic	und V Parl	Vater Bo k, Dham	eard Nort tari Road	th Ce J, Nh	ntral Chh -30, Dum	attisgarh artaral, R	2nd Flo alpur, Cl	or, Lk C nhattisg	orporate arh -	
1.	NOC No.:	No.: CGWA/NOC/MIN/ORIG/2022/16990													
2.	Application No.:		6064/0						gory: /RE 2020		emi Critic	>ritical			
4.	Project Status: Existing Project						A second second			Type:	lew				
6.	Valid from: 11/11/2022							7. Valid up to: 10/11/202					04		
8.	8. Ground Water Abstraction Permitted:											*************			
	Fresh Water				Wale		Dewate			ering Total					
	m³/day m³/year m³/d			/day	day m³/year			m³/day	***************************************	m³/year		m³/day m³/year		/vear	
	100.00 36500.00							4615.00		1684475.00				en et destate a estate a	
9.	Details of ground w	water at	stracti	on /Dev	ratering	j stru	ctures								
	Total Existing N									Total Proposed No.:				0	
			DW	DCB	BW	TW	MP	MPu	DV	V DCB	BW	TW	MP	MPu	
	Abstraction Structu	- 1	0	0	2	0	0	0	0	0	0	0	0	0	
	Dewatering Structure* 0 DW- Dug Well; DCB-Dug-cum-Bore Well; BW-8			0	0	0	0	0	0		0	0	0	7	
								ne Pit;MPt	ı-Mine	Pumps					
	Ground Water Abstraction/Restoration Charges paid							the state of the s				12985110.00			
li.	Number of Piezometers(Observation v constructed/ monitored & Monitoring n				ls) to b chanisr	to be No. of Piezome nism.			ters	memoring meananch					
	**DWLR - Digital Water Level Recorder									Manual	DWLR*	DWLF		elemetry	
						2				0	1		1		

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली - 110011 / 18/11, Januagar House, Mansingh Road, New Delhi-110011 Phone: (811) 23383561 Fax: 23382051, 23386743 Website: egwa-noc.gov.in

> पानी बवाये - जीवन बचाये SAVE WATER - SAVE LIFE

VIII. Karwahi
Po. Saroitola,
Tannar Raijiah 495107
C.G. 495107

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Validity of this NOC shall be subject to compliance of the following conditions:

- 1) Installation of temper proof digital water flow mater with belentating on at the abstraction structurals) shall be mandatory for editional seeking No Objection Certificate and infilmation regarding their installation shall be contracticated to the CGWA within 30 days of grant of No Objection Certificate.
- 2) Proponents shall mandatonly get water flow meter calibrated from an authorized agency once in a year
- Construction of purpose-built, observation wells (prezented as for ground water level monitoring shell be mandatory as per Section 14 of Guidetines. Water level data shall be made available to CGWA (through web pond. Detailed guidetines for construction of piezometers are given in Annexure-II of the guidetines.
- 5) In case of mining projects, additional key wells shall be established in consultation with the Regional Director, CGV/B for ground water level monitoring four (4) times a year (January, May, August and November) in once as well as buffer zones of the mine
- 6) In case of mining project the firm shall submit water quality report of mine discharger seepage from Govt, approved/ NASI, accredited lab.
- 7) The fam shall report compliance of the NOC conditions online in the website (www.opwa-noc gov.in) within one year from the date of issue of this NOC.
- nes abstracting ground water in excess of 100 on 3 fd stall underlake annual water audit through certified auditions and submit audit reports within three months of completion of the same to is such undustness shall be required to reduce their ground water use by at least 20% over the next large years through appropriate means.
- Application for receival can be submitted online from 90 cays before the expiry of HOC. Ground water withdrawal, if any, after expiry of NOC shall be likegof & fields for legal action as per provisions of Environment (Protection) Act, 1986.
- 10). This NOC is subject to prevailing Central/State Government nées/haws/norms or Court orders related to construction of tube well/ground water abstraction structure / recharge or conservation structure/decharge of effluence or any such matter as applicable.

General conditions:

- 11) No administral ground water abstraction and/or de-watering structures shall be constructed for this purpose without prior approval of this Central Ground Water Authority (CGWA).
- 12) The proponent shall seek prior parmission from CGWA for any increase in quantum of groundwater abstraction (more than that permitted in NOC for specific period).
- 131 Precorants shall install roof too roon water harvespra in the premise as per the existing building bye laws in the premise.
- 14) The project proponent shall take all necessary measures to prevent contamination of ground water in the premises failing which the firm shall be responsible for any consequences arising thereupon.
- 15). In case of industries that are likely to contaminate the ground water, no recharge measures shall be taken up by the firm inside the plant premises. The runtil generated from the rooffop shall be stored and put to benefit; all use by the firm.
- 16) Wherever fessible, requirement of water for greenbelt (horriculture) shall be met from recycled / treated waste water
- 17) Wherever the NOC is for abstraction of saline water and the existing wells (s) is largifieding fresh water, the same shall be sealed and new tubewoli(s) tapping saline water constructed within 3 manths of the issuance of NOC. The firm shell also ensure sefe disposal of saline residue, if any
- 18) Unexpected variations in inflow of ground water into the mine pit, if any, shall be reported to the concerned Regional Director, Central Ground Water Board.
- 18) In case of victation of any NOC conditions, the applicant shall be liable to pay the penalties as per Section 16 of Guidelines.
- 20) This NOC does not absolve the proponents of their obligation / requirement to obtain other stalling and administrative clearances from appropriate authorities.
- 21) The issue of this NOC does not imply thef other statutory / administrative clearances shall be granted to the project by the concerned authorities. Such authorities would consider the project on meres and take decisions independently of the NOC.
- 22) In case of change of ownership, new owner of the industry will have to apply for incorporation of necessary changes in the No Objection Certificate with documentary proof within 60 days of taking over possession of the previous.
- 23) This NOC is being issued without sity prejudice to the directions of the Hor/bie NGTicourt orders in cases related to ground water or any other related matters
- 24) Proponents, who have installed constructed artificial recharge structures in compliance of the NOC granted to them previously and have availed rebate of upto 50% (fifty percent) in the ground water abstraction charges/ground water restoration charges, shall continue to regularly maintain artificial recharge structures.
- 25) Industries which are likely to cause ground water politicining. Staughter Incuses, Dye, Chemical Petrochomical, Cost washeries, pharmicounities, other hazardous units etc. (as per CPCB bist) need to undertake necessary well head protection measures to ensure prevention of ground water politificinies per Annoxure 4th of the guidelines.
- 26) In case of new intrastructure projects having ground water abstraction of more man 20 m3/day, the firmfenbly shall ensure implementation of dual water supply system in the projects
- 27) In case of infrastructure projects, parediparting area must be covered with interlocking/perforated blas or other suitable measures to ensure groundwater infiltration/harvesting.
- 28) In case of cost and other base metal mixing projects, the project proponent shall use the advance dewatering technology (by construction of series of dewatering abstraction structures) to evoid
- 29) The NOC issued is conditional subject to the conditions mentioned in the Public notice dated 27.01.2021 failing which penalty/EC/canonission of NOC shall be imposed as the case may be 30). This I/OC is assued subject to the ideatance of Expert Appraisal Committee (EAC) (f applicable).

(Non-compliance of the conditions mentioned above is likely to result in the cancellation of HOC and legal action against the proponent.)

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Annexure_6 - Photograph of Borewells & Piezometers:











CEMENT
Vill. Karwahi
Po. Saraidola,
Tammar Raigan 496107
(C.G.)

Annexure_7 - Copy of 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 ANAVIDA KUMAR
MANDAL

Date: 2017 05 15 VAB 29 (ST

(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)

CEMENT LIME OF THE PROPERTY OF





Annexure_9 - Copy of CAAQMS login credentials submitted to CECB

Ambuja Cement

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

Date: 20.05.2022

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

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

(Gare Palma IV/8 Coal Mine COA

Email: unit-head-garepalma@ambujacement.com

Mo.: 7225054477

Authorized Signatory

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. Off.: PO. Ambujanagar, Taluka - Kodinar, Dist. Gir Somnath, Gujrat

CIN: L26942GJ1981PLC004717

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

Annexure_10 - Photographs of Environment Monitoring









Annexure_11 - Photograph of WTP & STP



WTP

Capacity of ETP: $200m^3/hr$, No of Tank: 8 and Tank Capacity – 3,00,000 x 8 = 24 Lakh Itr



STP Capacity of STP: 20,000 ltr/ Day

