

Ambuja Cement

ACL/GP-IV/8/EC(Mine)/2021-22/699

Date: 07.01.2022

To,
Regional Office, Western Region
Ministry of Environment, Forest & Climate Change
Kendriya Paryavaran Bhawan, Link Road No. 3
E-5, Ravi Shankar Nagar, Bhopal (M.P.)

Sub: Submission of six monthly EC Compliance Report for the period of July 2021 to December 2021 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,

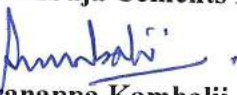
The MoEF&CC issued to Environmental Clearance for opencast mining 0.7 MTPA and underground mining 0.5 MTPA located in Gare Palma IV/8 coal mine on 22.12.2008 in name of M/s Jaiswal Neco Ltd. (prior allottee). Later on Environmental Clearance was transferred from M/s Jaiswal Neco Ltd. (prior allottee) 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 July 2021 to December 2021 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**


Sharanappa Kambalii
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, Paryavaran Parisar, E-5, Arera Colony, Bhopal, (M.P.).
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@ambujacement.com

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

CIN : L26942GJ1981PLC004717

**HALF – YEARLY
ENVIRONMENT CLEARANCE COMPLIANCE REPORT**

**For the Period of
July-2021 to December-2021**

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 July 2021 – December, 2021 have been explained in the report.

**Six Monthly Compliance Report for Gare Palma IV/8 Coal Mine at Village-
Khamaria and Karwahi, P.O- Tanmar, Dist.- Raigarh (C.G.)**
[Period-July 2021 to December 2021]

**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

Sl.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.	Agreed. Conditions and compliance status outline below.
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:

Sl.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.
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 by open cast mining will be kept within 0.7 MTPA and under 0.5 MTPA. Production is being carried out as per Consent granted by Chhattisgarh Environment Conservation Board vide 11474/TS/CECB/2021 on 30.03.2021 and valid till 31.03.2022. Copy of valid CTO enclosed as Annexure-1 .
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

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

[Period-July 2021 to December 2021]

Sl.no	Conditions	Remarks
		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.	Depillaring shall be under taken after 5 years.
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	Noted and Agreed.
7.	No depillaring operation shall be carried out below the roads and habitation area found within the lease	Agreed.
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.	Regular monitoring of subsidence movement on the surface over working area and impact water bodies / vegetation / structures / surrounding shall be done once the underground mining starts. It shall continue till the movement ceases completely.
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 55,912m 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 sprinkler of 2 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	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.

**Six Monthly Compliance Report for Gare Palma IV/8 Coal Mine at Village-
Khamaria and Karwahi, P.O- Tanmar, Dist.- Raigarh (C.G.)
[Period-July 2021 to December 2021]**

Sl.no	Conditions	Remarks
	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	The ultimate slope of dumps does not exceed 28 degree. Agreed, not to take up external OB dump after 10 th 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 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 has not 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. EC for coal washery has been transferred from prior allottee. We have for extension of validity of EC with the proposal no. IA/CG/CMIN/153935/2020 on 22.05.2020 to MoEF&CC, New Delhi & obtained the same on 30.09.2020 with the validity for 3 years. Refer to Annexure-2 .
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	Implemented. Control blasting are being done as per DGMS approval.

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

[Period-July 2021 to December 2021]

Sl.no	Conditions	Remarks
	should be implemented	
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, 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.	We are agreed to undertake the progressive afforestation of 133.53 ha, Currently OB dumps not being reclaimed & dumps have not reached the maximum height and backfilling also not started in FY 21-22. Total 17,720 nos. of local native species has been planted till date. Photographs of green belt enclosed as Annexure-3.
19.	Backfilling shall start by the 4 th year of operations and concurrent backfilling from the 8 th 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 during underground mining.
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.
20.	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.	Complied. We have obtained NOC for withdrawal of ground water from CGWA and subsequently obtained Renewal of NOC.
21.	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),	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

**Six Monthly Compliance Report for Gare Palma IV/8 Coal Mine at Village-
Khamaria and Karwahi, P.O- Tanmar, Dist.- Raigarh (C.G.)
[Period-July 2021 to December 2021]**

Sl.no	Conditions	Remarks
	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.	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.
22.	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.
23.	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.
24.	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.
25.	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.
26.	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 15 th May, 2017. Attached in Annexure-4

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

[Period-July 2021 to December 2021]

B. GENERAL CONDITIONS:

Sl.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.	Agreed.
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, SO ₂ and NO _x 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.	We have purchased CAAQMS and is in process for installation we will complete the installation by last January 2022. Presently regular monitoring is being carried out at four location by NABL accredited laboratory M/s Gyan Enviro Ltd.
4.	Data on ambient air quality (SPM, RSPM, SO ₂ , NO _x 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 laboratory M/s Gyan Enviro Ltd. Data of AAQ is being submitted with six monthly EC compliance report.
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 laboratory M/s Gyan Enviro Ltd. 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 the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc should be provided with ear plugs/muffs.	Regular maintenance is being carried of moving equipments engaged in mining operation. We are monitored noise levels on 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 developed.

**Six Monthly Compliance Report for Gare Palma IV/8 Coal Mine at Village-
Khamaria and Karwahi, P.O- Tanmar, Dist.- Raigarh (C.G.)
[Period-July 2021 to December 2021]**

Sl.no	General condition	Compliance
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 19 th May 1993 and 31 st June 1993 or as amended from time to time before discharge. Oil and grease trap should be installed before discharge of workshop effluents	Waste water from workshop is being treated with Effluent Treatment Plant and treated water is being utilized in dust suppression and green belt 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	NABL accredited laboratory M/s Gyan Enviro Ltd. is being monitoring on regular basis.
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.	Agreed. The Personnel working in mine area are wearing protective respiratory device mask. They have been provided with adequate training and information on safety and health aspects through our Occupational health & safety department.
11.	A separate environmental management 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	Environment management cell has been established under supervision of competent and senior executive technical personnel. <div style="text-align: center;"> Senior Vice President ↑ Mine Manager ↑ Senior Officer Environment </div>
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	Agreed.

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

[Period-July 2021 to December 2021]

S.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 PM₁₀, PM_{2.5}, SO₂, 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	Coordinates
1.	At Site Office	AAQ-1	Within	Within	Longitude- 83.494959 E Latitude- 22.169931 N
2.	At Banjari Temple	AAQ-2	0.3 km	North	Longitude- 83.508995 E Latitude- 22.178831 N
3.	Khamaria village	AAQ-3	0.5 km	NW	Longitude- 83.498074 E Latitude- 22.161729 N
4.	Nr School, Rampura village	AAQ-4	0.4 km	East	Longitude- 83.504231 E Latitude- 22.162807 N
5.	At Durga House	AAQ-5	0.3 km	South	Longitude- 83.497756 E Latitude- 22.166381 N

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.

**Six Monthly Compliance Report for Gare Palma IV/8 Coal Mine at Village-
Khamaria and Karwahi, P.O- Tanmar, Dist.- Raigarh (C.G.)**
[Period-July 2021 to December 2021]

TABLE – 3.2: RESULTS OF AMBIENT AIR QUALITY MONITORING

FOR PARTICULATE MATTER (<10 µm)

Code	Stations	July-21	AUG-21	SEP-21	OCT-21	NOV-21	NAAQM STANDARD
AAQ-1	At Site Office	50.4	53.7	51.5	50.8	53.4	100
AAQ-2	At Banjari Temple	51.5	55.0	53.8	52.5	50.8	100
AAQ-3	Khamaria village	48.8	50.0	48.7	50.0	51.9	100
AAQ-4	Nr School, Rampura village	52.6	51.4	50.09	48.7	50.0	100
AAQ-5	At Durga House	48.5	50.3	47.6	49.5	51.3	100

*Values are in µg/m³

TABLE – 3.3: RESULTS OF AMBIENT AIR QUALITY MONITORING

FOR PARTICULATE MATTER (<2.5 µm)

Code	Stations	July-21	AUG-21	SEP-21	OCT-21	NOV-21	NAAQM STANDARD
AAQ-1	At Site Office	16.7	14.8	15.3	15.1	13.7	60
AAQ-2	At Banjari Temple	18.4	17.2	16.0	15.1	14.3	60
AAQ-3	Khamaria village	17.1	16.9	15.5	14.8	15.3	60
AAQ-4	Nr School, Rampura village	20.3	17.0	15.4	13.6	14.9	60
AAQ-5	At Durga House	16.0	15.8	14.3	15.1	14.6	60

*Values are in µg/m³

TABLE – 3.4: RESULTS OF AMBIENT AIR QUALITY MONITORING

FOR SULPHUR DIOXIDE (SO₂)

Code	Stations	July-21	AUG-21	SEP-21	OCT-21	NOV-21	NAAQM STANDARD
AAQ-1	At Site Office	11.1	12.4	11.9	12.7	15.2	80
AAQ-2	At Banjari Temple	10.7	11.5	12.1	14.2	14.9	80
AAQ-3	Khamaria village	10.1	12.4	11.0	13.4	15.8	80
AAQ-4	Nr School, Rampura village	11.5	11.5	12.7	14.1	15.3	80
AAQ-5	At Durga House	9.9	10.7	11.8	13.5	15.0	80

*Values are in µg/m³

**Six Monthly Compliance Report for Gare Palma IV/8 Coal Mine at Village-
Khamaria and Karwahi, P.O- Tanmar, Dist.- Raigarh (C.G.)**
[Period-July 2021 to December 2021]

**TABLE – 3.5: RESULTS OF AMBIENT AIR QUALITY MONITORING
FOR OXIDES OF NITROGEN (NO_x)**

Code	Stations	July-21	AUG-21	SEP-21	OCT-21	NOV-21	NAAQM STANDARD
AAQ-1	At Site Office	14.9	16.1	17.4	19.0	19.5	80
AAQ-2	At Banjari Temple	15.2	16.0	14.5	16.7	18.2	80
AAQ-3	Khamaria village	14.4	16.7	14.1	16.7	18.2	80
AAQ-4	Nr School, Rampura village	14.9	15.2	16.1	19.5	19.0	
AAQ-5	At Durga House	15.5	16.1	17.4	18.8	19.5	80

*Values are in µg/m³

**TABLE – 3.6: RESULTS OF AMBIENT AIR QUALITY MONITORING
FOR CARBON MONOXIDE (CO)**

Code	Stations	July-21	AUG-21	SEP-21	OCT-21	NOV-21	NAAQM STANDARD
AAQ-1	At Site Office	401.0	425.0	408.0	425.0	455.0	80
AAQ-2	At Banjari Temple	415.0	445.0	466.0	485.0	472.0	80
AAQ-3	Khamaria village	455.0	470.0	482.0	456.0	465.0	80
AAQ-4	Nr School, Rampura village	460.0	460.0	472.0	490.0	470.0	80
AAQ-5	At Durga House	425.0	455.0	460.0	454.0	470.0	80

*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 Ambient Air	
				Annual Average	24 Hours
1.	Sulphur Dioxide (SO ₂)	µg/m ³	Industrial	50.0	80.0
2.	Nitrogen Dioxide (NO _x)	µg/m ³	Industrial	40.0	80.0
3.	Particulate Matter PM ₁₀	µg/m ³	Industrial	60.0	100.0
4.	Particulate Matter PM _{2.5}	µg/m ³	Industrial	40.0	60.0
5.	Ozone (O ₃)	µg/m ³	Industrial	100.0	180.0
6.	Lead (Pb)	µg/m ³	Industrial	0.50	1.2
7.	Carbon Monoxide(CO) mg/m ³	mg/m ³	Industrial	2.0	4.0
8.	Ammonia (NH ₃)	µg/m ³	Industrial	100.0	400.0
9.	Benzene (C ₆ H ₆) µg/m ³	µg/m ³	Industrial	05.0	05.0
10.	Benzo(α) Pyrene,	µg/m ³	Industrial	01.0	01.0
11.	Arsenic (As) µg/m ³	µg/m ³	Industrial	6.0	6.0
12.	Nickel (Ni) µg/m ³	µg/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)

Average concentration of Particulate Matter (PM₁₀) at all five air quality monitoring stations AAQ-1, AAQ-2, AAQ-3, AAQ-4 and AAQ-5 are 51.96, 52.72, 49.88, 50.55 & 49.44 µg/m³ respectively. All monitored stations have PM₁₀ concentrations well within stipulated 24 hour limit, 100 µg/m³ as prescribed for residential, rural and other areas in longstanding NAAQ Standards of CPCB.

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

The average $PM_{2.5}$ concentration at all five ambient air quality monitoring stations AAQ-1, AAQ-2, AAQ-3, AAQ-4 and AAQ-5 are 15.12, 16.12, 15.92, 16.24 & 15.16 $\mu g/m^3$ respectively. 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 (SO_2)

Average Sulphur Dioxide (SO_2) concentrations at all five sampling stations AAQ-1, AAQ-2, AAQ-3, AAQ-4 and AAQ-5 are 12.66, 16.68, 12.54, 13.02 & 12.18 $\mu g/m^3$ 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 AAQ-1, AAQ-2, AAQ-3, AAQ-4 and AAQ-5 are 17.38, 16.12, 16.02, 16.94 & 17.46 $\mu g/m^3$ respectively and these 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.

3.3.4 CARBON MONOXIDE (CO)

Average Carbon Monoxide (CO) concentrations at all sampling stations AAQ-1, AAQ-2, AAQ-3, AAQ-4 and AAQ-5 are 422.8, 456.6, 465.6, 470.4 & 452.8 $\mu g/m^3$ respectively and these values are well within stipulated 8 hours limit, 2000 $\mu g/m^3$ recommended for industrial, residential, rural and other areas in revised NAAQ Standards. Maximum concentration of Oxides of Nitrogen was found 568.0 $\mu g/m^3$ during the month of Feb-2020 at AAQ-1 [At Site Office].

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**.

**Six Monthly Compliance Report for Gare Palma IV/8 Coal Mine at Village-
Khamaria and Karwahi, P.O- Tanmar, Dist.- Raigarh (C.G.)**
[Period-July 2021 to December 2021]

TABLE – 4.2: RESULTS OF AMBIENT NOISE LEVEL MEASUREMENT

NOISE LEVEL (DAY HOURS)

Code	Stations	Unit	Jul -21	Aug- 21	Sep-21	Oct- 21	Nov- 21	MIN	MAX	AVG
NL-1	Nr Main Gate	dB(A)	55.2	56	52.1	53.7	55.1	52.1	56	54.42
NL-2	At Site Office		59.4	58.1	53.4	55	54.4	53.4	59.4	56.06
NL-3	Nr Weigh Bridge		63.1	65	62.8	61.6	62.3	61.6	65	62.96
NL-4	Nr Parking		53.3	56.7	59	56.8	57	53.3	59	56.56
NL-5	Nr Khamaria village		53.8	50.1	46.9	49.9	51.8	46.9	53.8	50.5
NL-6	Nr School, Rampura village		54.2	52.4	45.8	47.2	46.9	45.8	54.2	49.3
NL-7	At Durga House		57.2	56.1	54.4	51.5	53.4	51.5	57.2	54.52
NL-8	At Banjari Temple		59.5	57.9	47.9	48.4	50.6	47.9	59.5	52.86

NOISE LEVEL (NIGHT HOURS)

Code	Stations	Unit	Jul -21	Aug- 21	Sep-21	Oct- 21	Nov- 21	MIN	MAX	AVG
NL-1	Nr Main Gate	dB(A)	40.7	41.2	39.4	37.3	38	37.3	41.2	39.32
NL-2	At Site Office		44.1	43.7	42.5	41	40.5	40.5	44.1	42.36
NL-3	Nr Weigh Bridge		46.9	47.1	48.3	45.7	46.1	45.7	48.3	46.82
NL-4	Nr Parking		41.4	41.9	41.9	42.2	43.4	41.4	43.4	42.16
NL-5	Nr Khamaria village		41.3	40	32.8	33.1	35	32.8	41.3	36.44
NL-6	Nr School, Rampura village		42.1	41.9	34.5	34	32.8	32.8	42.1	37.06
NL-7	At Durga House		44	43.8	37.1	35.8	36.7	35.8	44	39.48
NL-8	At Banjari Temple		43.9	42.5	34.3	32	37.2	32	43.9	37.98

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 26th June 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
A	Industrial Area	75	70
B	Commercial Area	65	55
C	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.

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	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 Stations	Unit	Jul -21	Aug-21	Sep-21	Oct-21	Nov-21
FE- 1	PM ₁₀	µg/m ³	63.7	61.8	63.4	78.8	72.9
	PM _{2.5}		27.4	24.5	22.9	26.9	23.2
FE- 2	PM ₁₀		76.8	72.4	68.8	84.2	80.6
	PM _{2.5}		27.3	25.9	23.0	27.5	24.5

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.

6.0 MINE WASTEWATER QUALITY

6.1 MINE PIT WATER

Mine-Pit Water								
Sr. No.	Parameters	Unit	Ref. Method	Jul -21 ETP Outlet	Aug-21 Borewell water	Sep-21	Oct-21	Nov-21
1	pH at 25°C	-	IS:3025 (part 11)- 1983	7.11	8.04	6.88	6.95	7.20
2	Total Dissolved Solids	mg/l	IS:3025 (part 16)- 1984	235	968	405	424	310
3	Total Suspended Solids	mg/l	IS:3025 (part 16)- 1984	25	28.0	22.0	28	33.0
4	Chloride as Cl	mg/l	IS:3025 (part 32)- 1988	15.0	135	45.0	48	16.0
5	Sulphate as SO ₄	mg/l	IS:3025 (part 24)- 1986	86.0	108	152	167	59.0
6	Chemical Oxygen Demand (COD)	mg/l	IS:3025 (part 58)- 2006	52.0	4.0	48.0	52	12
7	Biological Oxygen demand (BOD) 3days @27°C	mg/l	IS:3025 (part 44)- 1993	14.0	<3.0	8.0	7.0	3.0
8	Oil & Grease	mg/l	IS:3025 (part 39)- 1991	0.88	0.32	0.44	0.35	0.54

**Six Monthly Compliance Report for Gare Palma IV/8 Coal Mine at Village-
Khamaria and Karwahi, P.O- Tanmar, Dist.- Raigarh (C.G.)**
[Period-July 2021 to December 2021]

6.2 Mine Discharge Water

Mine-Discharge Water								
Sr. No.	Parameters	Unit	Ref. Method	Jul -21	Aug-21	Sep-21	Oct-21	Nov-21
1	pH at 25°C	-	IS:3025 (part 11)-1983	7.02	6.47	7.15	7.34	7.59
2	Total Dissolved Solids	mg/l	IS:3025 (part 16)-1984	161	346	367	390	236
3	Total Suspended Solids	mg/l	IS:3025 (part 16)-1984	10.0	14.0	18.0	20	40.8
4	Chloride as Cl	mg/l	IS:3025 (part 32)-1988	15.0	12.9	20.4	33	12.0
5	Sulphate as SO ₄	mg/l	IS:3025 (part 24)-1986	107	164	178	190	29.0
6	Chemical Oxygen Demand (COD)	mg/l	IS:3025 (part 58)-2006	24.0	40	32.0	24.0	8.0
7	Biological Oxygen demand (BOD) 3days @27°C	mg/l	IS:3025 (part 44)-1993	4.0	3.0	5.0	6.0	2.0
8	Oil & Grease	mg/l	IS:3025 (part 39)-1991	<1.0	0.45	0.58	0.42	1.12

6.2 OBSERVATIONS

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

7.0 DUST FALL

7.1 GENERAL

To assess the Dust Fall in area, one monitoring location was selected at site office in core zone. Dust fall measurement was done regularly and total dust was observed in the area. Monthly observations are given in Table -7.1.

TABLE - 7.1: RESULT OF DUST FALL MONITORING

Sampling Station	Unit	Jul -21	Aug-21	Sep-21	Oct-21	Nov-21
At Site Office	ton/km ² /month	3.9	3.65	3.82	3.54	3.68

7.2 OBSERVATIONS

The observed values of Dust fall monitoring are very less, however, there is no limit has prescribed from CPCB.

--X--X--X--

Six Monthly Compliance Report for Gare Palma IV/8 Coal Mine at Village-
Khamaria and Karwahi, P.O- Tanmar, Dist.- Raigarh (C.G.)
[Period-July 2021 to December 2021]

Annexure -1



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

- No. 11474/TS/CECB/ 2021 Nava Raipur Atal Nagar, Raipur, Dated 30/03/2021
To,
- M/s Ambuja Cements Limited,
Gare Palma IV/8 Coal Mine,
Villages - Khamaria, 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: -
1. 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.
 2. 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.
 3. 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.
 4. 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).
 5. 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.

6. 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. 10897/TS/CECB/2020 Nava Raipur Atal Nagar Raipur, dated: 06/03/20120.
7. 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.
8. Your online application no. 6958057, dated 12/02/2021.

--- 00 ---

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 one year from 01/04/2021 to 31/03/2022, 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 (By Open Cast Method)	0.70 MTPA (Zero Point Seven Zero Million Tonnes Per Annum)
Mining of Coal (By Underground Method)	0.50 MTPA (Zero Point Five Zero Million Tonnes Per Annum)
Total	1.2 MTPA

Additional Conditions

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

1. 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.
2. Mine management shall execute the works such as contraction of setting tanks, pucca roads, utilization of fly ash in stowing & mine back filling etc. within specified time period as per action plan submitted along with bank guarantee vide letter dated 06/08/2018 & 06/02/2021. In case the Mine

**Six Monthly Compliance Report for Gare Palma IV/8 Coal Mine at Village-
Khamaria and Karwahi, P.O- Tanmar, Dist.- Raigarh (C.G.)**
[Period-July 2021 to December 2021]

Annexure-2

EC Validity Extension:

**Six Monthly Environment Clearance Compliance Status Report from January -21
to June -21 for Gare Palma IV/8 Coal Mines located at Villages- Khamaria,
Lamdarha, Milupara&Karwahi, Tehsil: Tanmar Dist. Raigarh (C.G.)**

Annexure-A



No. J-11015/76/2010-1A-11 (M) Government of India
Ministry of Environment, Forest and Climate Change
Impact Assessment Division

Indira Paryavaran Bhawan,
Jorbagh Road, N Delhi - 3

Dated: 30th September, 2020

To

The Managing Director
M/S Ambuja Cements Limited
PO Ambuja Nagar, Taluka Kodinar
District Gir Somnath - 362715 (Gujarat)

Sub: Pit head captive wet coal washery of 1.8 MTPA in an area of 10.336 ha located
in Gare Palma-IV/8 Coal Mine in Tehsil Garghora, District Raigarh
(Chhattisgarh)- Extension of Environmental Clearance - reg.

Sir,

This is with reference to your online application No. 1A/CG/CMIN/153935/2020
dated 22 May 2020, submitted to this Ministry for grant of Extension in Environmental
Clearance (EC) in terms of the provisions of the Environment Impact Assessment (EIA)
Notification, 2006 under the Environment (Protection) Act, 1986 for pit head captive wet
coal washery of 1.8 MTPA in an area of 10.336 ha located in Gare Palma-IV/8 Coal Mine
in Tehsil Garghora, District Raigarh (Chhattisgarh) in favour of M/s Jayaswal Neco
Limited vide letter dated 10th June, 2013 subject to compliance of terms and conditions
stipulated therein.

The project/activity is covered under category 'A' of Item 1 (a) 'Mining of Minerals' the
Schedule to the EIA Notification, 2006

2. In pursuance of the judgment and order of Hon'ble Supreme Court and in accordance with
the provisions of the Coal Mines (Special Provisions) Second Ordinance, 2014 and the
Coal Mines (Special Provisions) Rules, 2014, Ministry of Coal, vide vesting order No.
104/28/2015/NA dated 22nd April, 2015 under clause (b) of sub-rule (2) of rule 7 and sub-
rule (1) of rule 13, has allotted Gare Palma-IV/8 Coal Mine of 1.2 MTPA in an area of 491
ha located in villages Khamaria and Karwahi, Tehsil Garghora, District Raigarh
(Chhattisgarh) in favour of M/S Ambuja Cements Limited as the successful bidder. Further,
Ministry of Coal, vide Addendum No. 1 dated 19th June, 2018 to the above said vesting
order dated 22nd April, 2015, has allotted the pit head captive wet coal washery of 1.8
MTPA in an area of 10.336 ha located in Gare Palma-IV/8 Coal Mine in Tehsil Garghora,
District Raigarh (Chhattisgarh) in favour of M/S Ambuja Cements Limited.

Six Monthly Environment Clearance Compliance Status Report from January-21
to June -21 for Gare Palma IV/8 Coal Mines located at Villages- Khamaria,
Lamdarha, Milupara & Karwahi, Tehsil: Tamnar Dist. Raigarh (C.G.)

3. In view of the Addendum No.1 dated 19th June, 2018 to the vesting order dated 22nd April, 2015 issued by Nominated Authority in the Ministry of Coal, and the provisions contained in the EIA Notification, 2006, the environmental clearance dated 10th June, 2013 granted by the Ministry

of-

in favour of M/s Jayaswal Neco Ltd to pit head captive wet coal washery of 1.8 MTPA in an area of 10.336 ha located in Gare Palma-IV/8 Coal Mine in Tehsil Garghora, District Raigarh (Chhattisgarh) was transferred to M/S Ambuja Cements Limited subject to the following conditions:-

- (i) Any change in scope of work will attract provisions of the Environment (Protection) Act, 1986 and the EIA Notification, 2006 and subsequent amendments therein.
- (ii) All conditions stipulated in the environmental clearance dated 10th June, 2013 shall remain unchanged.
- (iii) The allottee shall be liable for any act of violation of the EP Act, 1986/EIA Notification 2006/subsequent amendments and circulars which it has inherited during the revalidation/transfer.
- (iv) The allottee shall be liable for compliance of all court directions, if any.

4. Now, Project proponent has submitted that project could not be implemented due to delay in land acquisition. Now that all the cases related to land disputes have been disposed off on 8th April, 2019 by the Bilaspur High Court passing the final order for the compensation. The disbursement of approx. 94% of compensation has been done by SDM, Garghoda (Raigarh) till 1st July, 2019.

5. The proposal was considered by the sectoral Expert Appraisal Committee in its 1st meeting held on 17-18 August, 2020 through video conferencing wherein the Committee recommended to grant of extension/amendment of Environment Clearance dated 10th June, 2013 for a further period of 3 years from the date of issue of letter. Based on recommendations of the EAC, Ministry of Environment, Forest and Climate Change hereby accords approval for the extension of validity of Environmental Clearance (EC) dated 10th June, 2013 for a period of three years to Pit head captive wet coal washery (1.8 MTPA in an area of 10.336 ha) Gare Palma IV/8 Coal mine M/S Ambuja Cement Limited located at Tehsil Tamnar District Raigarh, (Chhattisgarh), under the provisions of Environment Impact Assessment Notification, 2006 and subsequent amendments/circulars thereto subject to the compliance of the following terms & conditions / specific conditions:-

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

Page 27 of 38

**Six Monthly Compliance Report for Gare Palma IV/8 Coal Mine at Village-
Khamaria and Karwahi, P.O- Tanmar, Dist.- Raigarh (C.G.)**
[Period-July 2021 to December 2021]

**Six Monthly Environment Clearance Compliance Status Report from January -21
to June -21 for Gare Palma IV/8 Coal Mines located at Villages- Khamharia,
Lamdarha, Milupara&Karwahi, Tehsil: Tamnar Dist. Raigarh (C.G.)**

- (i) The project proponent shall obtain Consent to Establish/Operate from the State Pollution Control Board for the proposed peak capacity of 1.8 MTPA (Peak) prior to commencement of the production
- (ii) Permission for ground water withdrawal shall be obtained from Central Ground Water Authority (CGWA), if applicable.
- (iii) 100% water requirement for washery shall be met with mine water. No other source of water shall be used for washery operations
- (iv) The washing technology so chosen should conform to 'Zero Liquid Discharge'.
- (v) Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.
- (vi) For proper baseline air quality assessment, adequate monitoring stations in the downwind areas based on wind rose pattern of the area, shall be set up for collection of air quality data and air quality modelling.
- (vii) Disposal of washery rejects shall only be in proposed CPP of the project proponent.
- (viii) Thick green belt of 20 mts width to be provided around the washery to mitigate/check the dust pollution. A 3-tier avenue plantation should also be developed along vacant areas, storage yards, loading/transfer points, and also along internal roads/main approach roads.
- (ix) Peripheral and inside road shall be made of Rigid Pavement.

6. All other conditions stipulated in the environmental clearance letter dated 10th June, 2013 and 1st April, 2019 shall also apply.

(Lalit Bokolia)
D

Director Copy to:

1. The Secretary, Ministry of Coal, Shastri Bhawan, New Delhi
2. The APCCF, Ministry of Environment Forest and Climate Change, Regional Office (Western Central Zone), Ground Floor, East Wing, New Secretariat Building Civil Lines, Nagpur -1
3. The Secretary, Deptt. of Environment & Forests, Govt of Chhattisgarh, Secretariat, Raipur
4. The Member-Secretary, Central Ground Water Authority, Ministry of Water Resources, Curzon Road Barracks, A-2, W-3 Kasturba Gandhi Marg, New Delhi

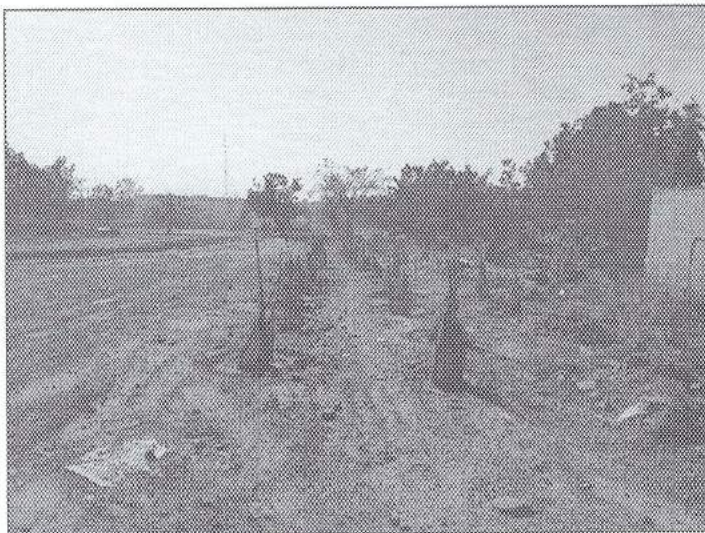
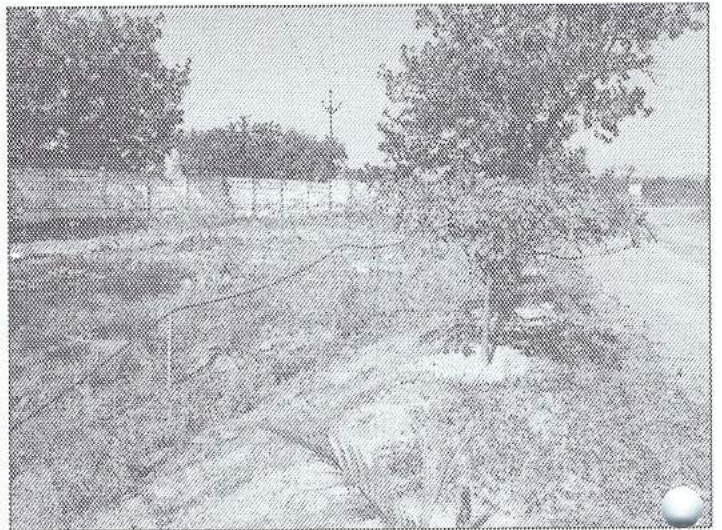
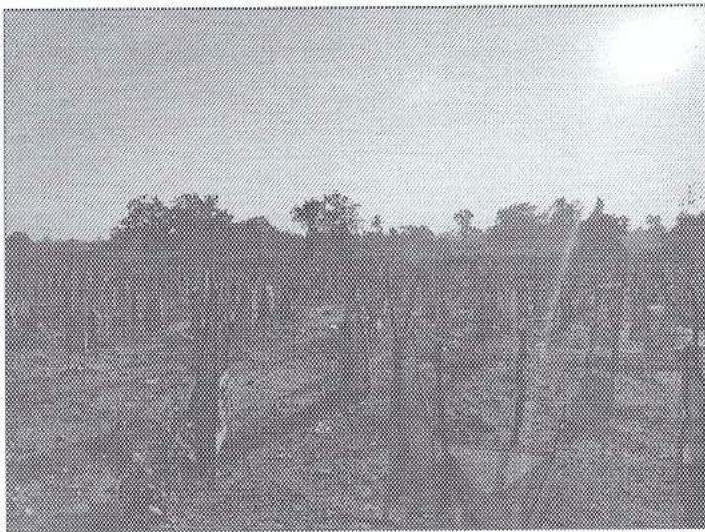
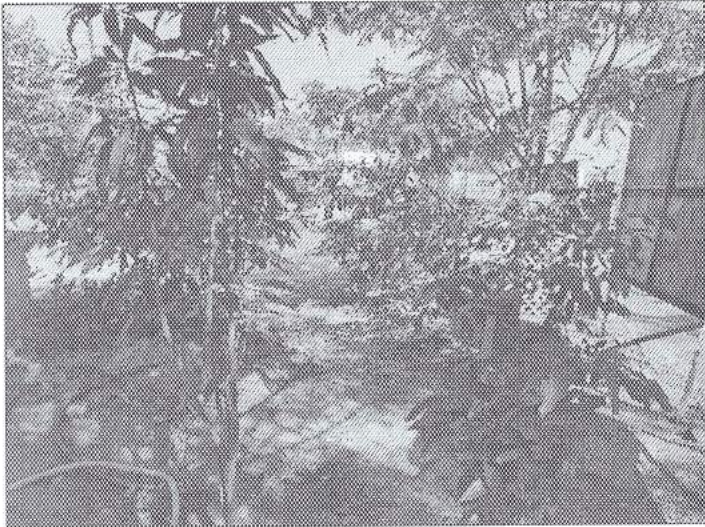
Six Monthly Environment Clearance Compliance Status Report from January -21
to June -21 for Gare Palma IV/8 Coal Mines located at Villages- Khamaria,
Lamdarha, Milupara&Karwahi, Tehsil: Tamnar Dist. Raigarh (C.G.)

5. The Chairman, Chhattisgarh Environment Conservation Board, Commercial Complex,
C.G.
Housing Board Colony, Kabir Nagar, Raipur (Chhattisgarh) - 492 099.
6. The District Collector, Raigarh, Government of Chhattisgarh
7. Guard File 8. Record File.9. PARIVESH Portal

(Lalit Bokolia) Director

Annexure-3

Green Belt Photos:



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	
To,	M/s Ambuja Cements Limited 306-307, 3 rd Floor, Ambuja City Centre Mall Vidhan Sabha Road, Saddu Raipur, Chhattisgarh-492007 e-mail: u.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/CP/IV-8/MCP/2016-16/71 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/CP/IV-8/MCP/2016-17/68 dated 25/04/2016 and letter no ACL/CP/IV-8/MCP/2016-17/31 dated 18/01/2017 incorporating modifications 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:-	
<ol style="list-style-type: none">1. The Mining Company will come up with revised Mining Plan in case of unfavourable result of the subsidence study for the block.2. The Mining company shall take all necessary precautions regarding safety of mine workings and persons deployed therein.3. Strong topsof of this block shall not approach into any other adjacent block.4. The cost of abandonment for carrying out the closure activities envisaged in the Mine closure plan is indicative. The actual cost for carrying out the activities at the time of final closure may be higher. The actual cost of abandonment will have to be borne by the proponent for carrying out the closure activities.5. The approval of the mine closure plan is without prejudice to the requirement of approvals from competent governmental authority under the relevant rules/regulations etc.	

Six Monthly Compliance Report for Gare Palma IV/8 Coal Mine at Village-
Khamaria and Karwahi, P.O- Tanmar, Dist.- Raigarh (C.G.)
[Period-July 2021 to December 2021]

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 A.K. Mandal

DN: cn=A.K. Mandal

o=Coal Controller, ou=CPAM

email=amandal@cpam.gov.in

(A.K. Mandal)

Under Secretary to the Govt. of India (CPAM)

Enc. As Above

Copy to

1. Under Secretary (CA III Section) along with one copy of approved Mine Closure Plan
2. Section Officer (Nominated Authority)