# Ambuja Cement

# Letter no. ACL/GP/Env/Comp/2020-21/200 A

Date: 04.08.2020

The Ministry of Environment, Forest and Climate Change, India Paryavaran Bhavan, Jorbagh Road, New Delhi - 110003

Sub: Submission of Half-Yearly Compliance Report (from January, 2020 to June, 2020) for Gare Palma IV/8 Coal Mines, Khamaria, Tamnar, Raigarh, CG allocated to Ambuja Cements Ltd.

Ref: Environment Clearance No. J-11015/352/2006-IA.II(M) dated 22<sup>nd</sup> December'2008 and Corrigendum issued to EC dated 26th November'2010 issued to prior allottee M/S Jayswal Neco Industries limited and transfer of EC Title issued in the name of Ambuja Cements Limited vide letter No. 11015/352/2006-IA.II(M) dated 10<sup>th</sup> June'2015.

Dear Sir,

То

Gare Palma IV/8 Coal Block has been allocated to M/S Ambuja Cements Ltd. by Ministry of Coal vide vesting order No. 104/28/2015/NA dated 22<sup>nd</sup> April'2015 and Corrigendum No. 1 to the vesting order dated 14th December'2015. Subsequently ,the execution of Mining Lease has been completed on 31st December'2015 for the Coal Block. The production of coal from opencast mine has been started from 22<sup>nd</sup> October, 2018.

With reference to the above subject matter, please find enclosed herewith six monthly Environment Clerance Compliance Report for the period from January,2020 to June,2020 for the Coal Mines.

This is for your kind information Please.

Thanking you,

Yours faithfully

For Ambuja Cements Limited

**Pradeep Samanta** 



FMEA

(Jt. President- Gare Palma IV/8 Coal Mines)

Encl: i)Six monthly Environment Clearance Compliance Report of Gare Palma IV/8 Coal Block. Copy to :

1. Ministry of Environment, Forests and Climate Change Govt.of India, Regional Office, Western Region, Kendriya Paryavaran Bhawan, Link Road No.3 E-5, Ravishnakar Nagar Bhopal-462016 (M.P.) 2.The Member Secretary, Zonal Officer, Chhattisgarh Environment Conservation Board, Nava Raipur (C.G.)

3.Central Pollution Control Board, Sahkar Bhawan, 3rd Floor, North T.T. Nagar, Bhopal-462003 4.Regional Officer, Chhattisgarh Environment Conservation Board (CECB), TV tower Road, Raigarh (CG) 5. Ministry of Environment, Forest and Climate Change, Regional Office (WCZ), Ground Floor, East Wing, New Secretariat Building Civil Lines, Nagpur-440001

# AMBUJA CEMENTS LIMITED Gare Palma IV/8 Coal Mine

SITE OFFICE : Village - Karwahi, Post. - Saraitola, Tahsil - Tamnar, Dist. - Raigarh (C.G.) 496 001 www. ambujacement.com, E-mail : garepalmacoalmine@ambujacement.com Regd. Off. : PO. Ambujanagar, Taluka - Kodinar, Dist. Gir Somnath, Gujrat CIN: L26942GJ1981PLC004717

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# HALF - YEARLY

# ENVIRONMENT CLEARANCE COMPLIANCE REPORT

# OF GARE PALMA IV/8 COAL MINES

# 11015/352/2006-IA.II (M) dated 10th June'2015

For

January-2020 to June-2020

# AMBUJA CEMENTS LTD.

# UNDERTAKING

Information provided in the Half-yearly EC Compliance Report for the period Jan-2020 to Jun-2020 for Gare Palma IV/8 Coal Mines, Raigarh is true to the best of my knowledge.

For,

Ambuja Cements Ltd.

Party Sind

Pradeep Samanta (Jt. President, Gare Palma IV/8 Coal Mines)

# 1.0 INTRODUCTION

Ministry of Coal, Govt. of India through Nominated Authority conducted 2<sup>nd</sup> 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 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 16<sup>th</sup> March, 2015 followed by issuance of Vesting Order by Nominated Authority on 22<sup>nd</sup> April, 2015 & corrigendum no. 1 to the vesting order with co-ordinate dated 14<sup>th</sup> December, 2015. The mining lease execution and registration of the lease agreement has been completed for an area of 474.703 Ha on 31<sup>st</sup> 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**.

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, Industrial Wastewater and Dust Fall measurement. Detailed observations and respective interpretations for the period from Jan – June, 2020 have been explained in the report.

# 2.0 POINT WISE COMPLIANCE REPORT FOR THE ENVIRONMENT CLEARANCE CONDITION

2.1 Transfer of EC Title in the name of ACL vide letter no 11015/352/2006-IA –II(M) dated 10<sup>th</sup> 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 <sup>nd</sup> June'2008 & corrigendum issued to EC dated 26 <sup>th</sup> November 2010 shall remain unchanged.	Agreed.
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

# 2.3 Corrigendum issued to EC dated 26th November, 2010.

# 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 clearance has been obtained. Documents as attached in <b>Annexure: A.</b>	
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	Agreed. We have obtained Consent to Operate for production of Coal from Open Cast mine vide letter no. 5670/TS/CECB/2018 on 15.10.2018 & renewal of Consent to Operate vide letter no 8454/TS/CECB/2019 on 23.03.2019 & 10897/TS/CECB/ 2020 on 06.03.2020 from Chhattisgarh Environment. The Consent is valid till <b>31</b> <sup>st</sup> March, 2021. Refer to <b>Annexure-B</b> .	
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	Agreed, 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	

Sl.no	Conditions	Remarks
	drains shall be provided so that no water from the surface enters the subsidence area and the shaft	also. At present only OC Mine is being operated and development work of U/G mine is going on with prior intimation CECB, Atal Nagar, Raipur Vide letter no. ACL/GP-IV-8/2018- 19/149 dated on 22/12/2018. Depillaring shall be done after 5 years.
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 done 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.
6.	Solid barriers shall be left below the village, roads falling within the blocks to avoid any damage to the roads	Noted.
7.	No depillaring operation shall be carried out below the roads and habitation area found within the lease	Shall be complied during the underground Mine Operation.
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.	Agreed, 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.	Company has constructed the more than 2600 meter length garland drain, around open cast mine and OB dump as well as catch water drain and 3 nos. Settling pond /sedimentation pond 20 m x 10 m x 2.5m capacity 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 12 KL each. This water is also being used in mine operation.
10.	OB should be stacked at the area earmarked for external OB dump site within ML area. The maximum height of the dump is 60m with two benches of 30m each. The ultimate slope of the dump shall not exceed 28°. Monitoring and management of existing reclaimed dumpsites should continue until the vegetation becomes self-	Agreed, All the slope of external dumps are being maintained at a maximum of 28 degrees. OB is being stacked at the earmarked external OB dumpsites within ML area. The ultimate slope of the dumps does not exceed 28 degree. <b>IIT</b> <b>BHU</b> was engaged for scientific study

Sl.no	Conditions	Remarks	
	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 <sup>th</sup> year of mining operation	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.	Garland drain has been constructed to collect the surface run off from the mining area, soil dumps, waste dumps etc. Garland drain with proper gradient & sump 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	CHP has not been constructed.	
14.	Drills should be wet operated only	Agreed, is being done.	
15.	No coal washery shall be established within the ML without prior environmental clearance form the MOEF	EC for coal washery has been transferred from prior allottee. Again we have applied for Extension of Validity of EC with the proposal no. <b>IA/CG/CMIN/153935/2020</b> on 22 <sup>nd</sup> May 2020 to the MoEF&CC, New Delhi. Refer to <b>Annexure: C.</b>	
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.	
17.	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	Last year Green belt has been developed with <b>5000</b> numbers local broad leaves species in the periphery of the mine lease area / premises. For pandemic outbreak of Covid-19 due to liquidity crunch this year company shall develop green belt with <b>3000</b> nos. of Saplings. Company shall carry out the	

Sl.no	Conditions	Remarks
	local DFO/Agriculture Department. The density of the trees should be around 2500 plants per ha	plantation along ML boundary, barrier zone (6ha) along roads (4.5 ha) and infrastructure (4 ha) by maintaining the density of the trees around 2500 plants per ha.
18.	Backfilling shall start by the 4 <sup>th</sup> year of operations and concurrent backfilling form the 8 <sup>th</sup> 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 with.
19.	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.
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.	NOC for abstraction of ground water from Central Ground Water Authority, New Delhi has been obtained vide letter no.21-4(124)/NCCR/CGWA/2011- 1035 on 8 <sup>th</sup> June, 2016. We have obtained again for extension of validity of NOC from Central Ground water Board, New Delhi, copy is attached as Annexure D. Again we have applied for extension of validity of NOC on 5 <sup>th</sup> June, 2020 to the CGWA, New Delhi. Waiting for extension. copy is attached as Annexure: E
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), monsoon (August), post-monsoon (November)	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 50meter distance of the existing bore well for

Sl.no	Conditions	Remarks
	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.	installation of Piezometer. The Piezometer has already been installed with telemetry systems. Ground Water monitoring is carried out by <b>Environ</b> <b>Techno Consultants</b> , Raipur with a frequency of four time a year - pre- monsoon (April/May), monsoon (August), post-monsoon (November) and winter (January) seasons. Regular monitoring of surface and ground water quality is being carried out by establishing a network of stations at suitable locations in project area and solid waste storage/ disposal area. Copy of ground water level of core and buffer zone for the year 2018 has already been submitted. The copy of groundwater level & monitoring report for the year 2019 is attached as <b>Annexure-F.</b>
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.	Shall be complied.
23.	ETP should also be provided for treatment of effluents from workshop, CHP. There shall be zero discharge from the coal washery. 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	-
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.	Shall be complied. Production of our mine has been started from 22nd Oct, 2018.

Sl.no	Conditions	Remarks
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	by Ministry of Coal on 15 <sup>th</sup> May, 2017.

# **B. GENERAL CONDITIONS:**

<u> </u>	3. 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, 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.	We have engaged the M/s SMS Envocare Ltd, Nagpur (for Maharashtra Enviro Power Ltd- Nagpur, a NABL accredited company) to install ambient air quality monitoring stations (at least four) in the core zone as well as buffer zone for SPM, RPM, NOx, SO2, CO on monthly basis and Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr in particulates have been carried out once in six months.			
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	We have deployed a reputed monitoring agency who are having empanelled MoEFCC recognized Laboratory for regular environment monitoring on monthly basis and the data. on ambient air quality (PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>x</sub> and heavy metals such as Hg, As, Ni, Cr etc) and other monitoring data are well maintained			
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 dust emissions are regularly monitored by an agency and the proper record are maintained. Company has provided water sprinkler trucks for adequate water spraying to control the fugitive emission being generated due to mining operations.			
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.	Noise levels are being monitored on monthly basis and data recorded. We have provided ear plugs/muffs to the workers engaged in blasting and drilling operations. Company has provided appropriate noise barriers. Workers engaged in blasting and drilling operations, operators of heavy			

Sl.no	General condition	Compliance
3.10		earth moving machinery (HEMM) etc. have been provided with ear plugs/muffs. Plantation has been developed. Adequate measures are being taken for control of noise levels below 70 dB(A) in the work environment. Company will follow all the directions issued by CECB Raipur in this regard.
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 <sup>th</sup> May 1993 and 31 <sup>st</sup> June 1993 or as amended from time to time before discharge. Oil and grease trap should be installed before discharge of workshop effluents	Mine water discharge is being treated properly in settling pond system the & the treated water is being used for dust suppression in the haul road, plantation area etc.
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.	Vehicular emissions will be kept under control and regularly monitored. Vehicles used for transporting mineral will be covered with tarpaulins and optimally loaded.
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	All the Environmental parameters are being monitored Pvt. Ltd. a MoEFF&CC recognised lab & reports are being submitted to SPCB, CPCB, MoEF&CC, & Regional Office.
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.
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. Plantation has been developed and monitoring for ambient air quality, water, noise, ground water etc are being done. CSR activity is also being done by the company.
13.	The Regional Office of this Ministry located at Bhopal shall monitor compliance of the stipulated	Agreed.

Sl.no	General condition	Compliance
	conditions. The Project authorities shall extend full cooperation to the office(s) of the Regional Office by furnishing the requisite data/ information/monitoring reports	

Sl.no	General condition	Compliance
14.	A copy of the EC will be marked to concerned Panchayat/ local NGO, if any, from whom any	Condition already complied by the prior allocatee.
	suggestion/representation has been received while processing the proposal.	
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 <sup>th</sup> 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 <u>http://envfor.nic.in</u> . The compliance status shall also be uploaded by the project authorities in their website so as to bring the same in the public domain	EC has been transferred from the Prior Allottee. Compliance status shall be uploaded in the website of ACL.

# 3.0 AMBIENT AIR QUALITY

# 3.1 GENERAL

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

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

S.N	Sampling Stations	Station Code	Distance from Mine Lease	Direction from Mine Lease	Coordinates
1.	At Site Office	AAQ-1	Within	Within	Longitude- 83º29'39" E Latitude- 22º10'14" N
2.	At Banjari Temple	AAQ-2	0.3 km	North	Longitude- 83º30'32" E Latitude- 22º10'43" N
3.	Khamaria village	AAQ-3	0.5 km	NW	Longitude- 83º29'51" E Latitude- 22º09'59" N
4.	Nr School, Rampura village	AAQ-4	0.4 km	East	Longitude- 83º30'16" E Latitude- 22º09'59" N
5.	At Durga House	AAQ-5	0.3 km	South	Longitude- 83º29'53" E Latitude- 22º09'42" 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 and Graphical presentation in Figure 5, 6, 7, 8, and Figure 9.

#### TABLE - 3.2: RESULTS OF AMBIENT AIR QUALITY MONITORING

Code	Stations	Jan - 20	Feb -20	Mar -20	Apr- 20	May -20	Jun- 20	MIN	MAX	AVG	98 percentile
AAQ-1	At Site Office	61.3	63.5	**	**	**	61.8	61.3	63.5	62.2	63.4
AAQ-2	At Banjari Temple	57.2	58.4	**	**	**	57.3	57.2	58.4	57.6	58.4
AAQ-3	Khamaria village	66.1	67.1	**	**	**	61.8	61.8	67.1	65.0	67.1
AAQ-4	Nr School, Rampura village	57.6	59.5	**	**	**	53.6	53.6	59.5	56.9	59.4
AAQ-5	At Durga House	49.1	51.3	**	**	**	50.7	49.1	51.3	50.4	51.3

#### FOR PARTICULATE MATTER (<10 µm)

\*Values are in µg/m<sup>3</sup>

\* Due to Nationwide lockdown Ambient Air Quality Monitoring could not be done from March, 2020 to May, 2020.

#### TABLE – 3.3: RESULTS OF AMBIENT AIR QUALITY MONITORING

#### FOR PARTICULATE MATTER (<2.5 µm)

Code	Stations	Jan -20	Feb- 20	Mar- 20	Apr- 20	May -20	Jun- 20	MIN	MAX	AVG	98 percentile
AAQ-1	At Site Office	24.4	23.7	**	**	**	22.4	22.4	24.4	23.5	24.4
AAQ-2	At Banjari Temple	22.8	23.9	**	**	**	22.7	22.7	23.9	23.1	23.9
AAQ-3	Khamari a village	25.2	26.3	**	**	**	25.5	25.2	26.3	25.7	26.3
AAQ-4	Nr School, Rampura village	23.6	25.7	**	**	**	23.8	23.6	25.7	24.4	25.6
AAQ-5	At Durga House	19.7	23.2	**	**	**	22.5	19.7	23.2	21.8	23.2

\*Values are in  $\mu g/m^3$ 

\* Due to Nationwide lockdown Ambient Air Quality Monitoring could not be done from March, 2020 to May, 2020.

## TABLE - 3.4: RESULTS OF AMBIENT AIR QUALITY MONITORING

Code	Stations	Jan -20	Feb- 20	Mar- 20	Apr- 20	May -20	Jun- 20	MIN	MAX	AVG	98 percentile
AAQ- 1	At Site Office	17.9	18.2	**	**	**	17.6	17.6	18.2	17.9	18.2
AAQ- 2	At Banjari Temple	15.7	16.3	**	**	**	13.2	13.2	16.3	15.1	16.3
AAQ- 3	Khamari a village	23.2	23.1	**	**	**	16.9	16.9	23.2	21.1	23.2
AAQ- 4	Nr School, Rampura village	18.2	19.7	**	**	**	11.5	11.5	19.7	16.5	19.6
AAQ- 5	At Durga House	13.7	14.4	**	**	**	11.4	11.4	14.4	13.2	14.4

#### FOR SULPHUR DIOXIDE (SO<sub>2</sub>)

\*Values are in µg/m<sup>3</sup>

\* Due to Nationwide lockdown Ambient Air Quality Monitoring could not be done from March, 2020 to May, 2020.

#### TABLE - 3.5: RESULTS OF AMBIENT AIR QUALITY MONITORING

#### FOR OXIDES OF NITROGEN (NOx)

Code	Stations	Jan -20	Feb- 20	Mar- 20	Apr- 20	May -20	Jun- 20	MIN	MAX	AV G	98 percentile
AAQ- 1	At Site Office	29.8	30.1	**	**	**	28.9	28.9	30.1	29.6	30.1
AAQ- 2	At Banjari Temple	21.9	23.2	**	**	**	17.6	17.6	23.2	20.9	23.1
AAQ- 3	Khamari a village	31.6	33.2	**	**	**	19.4	19.4	33.2	28.1	33.1
AAQ- 4	Nr School,	29.1	30.3	**	**	**	17.4	17.4	30.3	25.6	30.3

	Rampura village										
AAQ- 5	At Durga House	20.9	22.6	**	**	**	16.3	16.3	22.6	19.9	22.5
*Volues or	in ug/m3										

\*Values are in µg/m<sup>3</sup>

\* Due to Nationwide lockdown Ambient Air Quality Monitoring could not be done from March, 2020 to May, 2020.

#### TABLE – 3.6: RESULTS OF AMBIENT AIR QUALITY MONITORING

Cod	Stations	lan	Eab	Mar	Amr	Many	lum	AAINI		A\/	00
Cod e	Signors	Jan -20	Feb- 20	Mar- 20	Apr- 20	May -20	Jun- 20	MIN	MAX	AV G	98 percentile
AAQ -1	At Site Office	556	568	**	**	**	554	554	568	559	568
AAQ -2	At Banjari Temple	452	463	**	**	**	354	354	463	423	463
AAQ -3	Khamaria village	528	538	**	**	**	392	392	538	486	538
AAQ -4	Nr School, Rampura village	488	496	**	**	**	366	366	496	450	496
AAQ -5	At Durga House	387	395	**	**	**	295	295	395	359	395

#### FOR CARBON MONOXIDE (CO)

\*Values are in µg/m3

\* Due to Nationwide lockdown Ambient Air Quality Monitoring could not be done from March, 2020 to May, 2020.

## **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).

S.N	Pollutant	Unit	Area	Concentration in A	Ambient Air
				Annual Average	24 Hours
1.	Sulphur Dioxide (SO <sub>2</sub> )	$\mu g/m^3$	Industrial	50.0	80.0
2.	Nitrogen Dioxide (NO <sub>x</sub> )	$\mu g/m^3$	Industrial	40.0	80.0
3.	Particulate Matter PM <sub>10</sub>	$\mu g/m^3$	Industrial	60.0	100.0
4.	Particulate Matter PM <sub>2.5</sub>	$\mu g/m^3$	Industrial	40.0	60.0
5.	Ozone (O <sub>3</sub> )	$\mu g/m^3$	Industrial	100.0	180.0
6.	Lead (Pb)	$\mu g/m^3$	Industrial	0.50	1.2
7.	Carbon Monoxide(CO) mg/m <sup>3</sup>	mg/m <sup>3</sup>	Industrial	2.0	4.0
8.	Ammonia (NH <sub>3</sub> )	$\mu g/m^3$	Industrial	100.0	400.0
9.	Benzene (C <sub>6</sub> H <sub>6</sub> ) $\mu$ g/m <sup>3</sup>	$\mu g/m^3$	Industrial	05.0	05.0
10.	Benzo(α) Pyrene,	$\mu g/m^3$	Industrial	01.0	01.0
11.	Arsenic (As) µg/m <sup>3</sup>	$\mu g/m^3$	Industrial	6.0	6.0
12.	Nickel (Ni) µg/m <sup>3</sup>	$\mu g/m^3$	Industrial	20.0	20.0

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

- 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 ( $PM_{10}$ ) at all five air quality monitoring stations AAQ-1, AAQ-2, AAQ-3, AAQ-4 and AAQ-5 are 62.2,57.6,65.0,56.9 & 50.4 µg/m<sup>3</sup> respectively. All monitored stations have  $PM_{10}$  concentrations well within stipulated 24 hours limit, 100 µg/m<sup>3</sup> as prescribed for residential, rural and other areas in longstanding NAAQ Standards of CPCB. Thus, the position regarding  $PM_{10}$  concentration in ambient air is quite satisfactory.

Maximum concentration of  $PM_{10}$  was found **67.1 µg/m<sup>3</sup>** during the month of **Feb-2020** at AAQ-3 [At Khamaria village].

# 3.3.2 PARTICULATE MATTER <2.5 μ (PM<sub>2.5</sub>)

The average PM<sub>2.5</sub> concentration at all five ambient air quality monitoring stations AAQ-1, AAQ-2, AAQ-3, AAQ-4 and AAQ-5 are 23.5,23.1,25.7,24.4 & 21.8 µg/m<sup>3</sup> respectively. All monitored stations have PM<sub>2.5</sub> concentrations well within stipulated 24 hours limit, 60 µg/m<sup>3</sup> prescribed for industrial, residential, rural and other areas in revised NAAQ Standards from CPCB. Maximum concentration of PM<sub>2.5</sub> was found **26.3 µg/m<sup>3</sup>** during the month of **Feb-2020** at AAQ-3 [At Khamaria village].

# 3.3.3 SULPHUR DIOXIDE (SO<sub>2</sub>)

Average Sulphur Dioxide (SO<sub>2</sub>) concentrations at all five sampling stations AAQ-1, AAQ-2, AAQ-3, AAQ-4 and AAQ-5 are 17.9,15.1,21.1, 16.5 & 13.2 µg/m<sup>3</sup> respectively and well within the stipulated 24 hours limit, 80µg/m<sup>3</sup> recommended for industrial, residential, rural and other areas in revised NAAQ Standards of CPCB. Maximum concentration of SO<sub>2</sub> was found **23.2 µg/m<sup>3</sup>** during the month of **Jan-2020** at AAQ-3 [At Khamaria village].

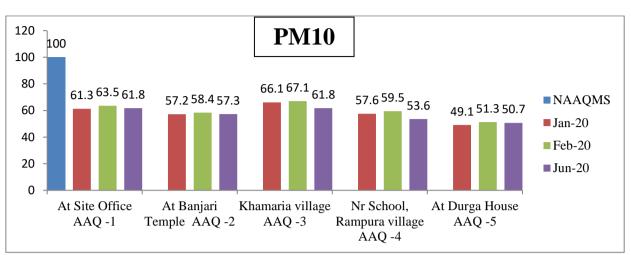
# OXIDES OF NITROGEN (NO<sub>x</sub>)

Average Oxides of Nitrogen (NO<sub>x</sub>) concentrations at all sampling stations AAQ-1, AAQ-2, AAQ-3, AAQ-4 and AAQ-5 are 26.9,20.9,28.1,25.6, & 19.9 µg/m<sup>3</sup> respectively and these are also well within the stipulated 24 hour limit, 80 µg/m<sup>3</sup> recommended for industrial, residential, rural and other areas in revised NAAQ Standards of CPCB. Maximum concentration of Oxides of Nitrogen was found **33.2 µg/m<sup>3</sup>** during the month of **Feb-2020** at AAQ-3 [At Khamaria village].

# 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 423,486,450, & 359 µg/m<sup>3</sup> respectively and these values are well within stipulated 8 hours limit, 2000 µg/m<sup>3</sup> recommended for industrial, residential, rural and other areas in revised NAAQ Standards. Maximum concentration of Oxides of Nitrogen was found **568.0 µg/m<sup>3</sup>** during the month of **Feb-2020** at AAQ-1 [At Site Office].

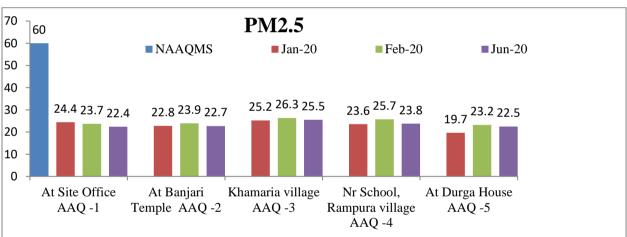
All observed values meet the prescribed standards.





\*Values are in µg/m<sup>3</sup>

\* Due to Nationwide lockdown Ambient Air Quality Monitoring could not be done from March, 2020 to May, 2020.

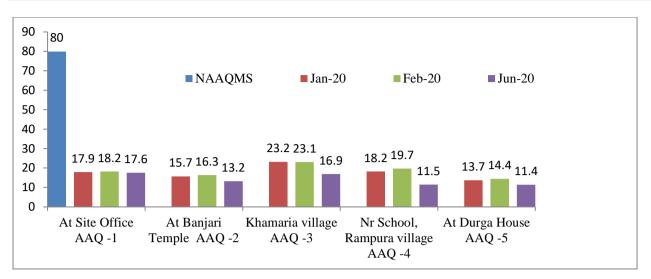


#### Figure 7: Graphical Representation for PM2.5

\*Values are in µg/m<sup>3</sup>

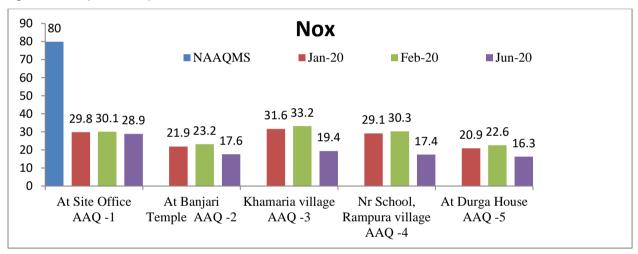
\* Due to Nationwide lockdown Ambient Air Quality Monitoring could not be done from March, 2020 to May, 2020.

#### Figure 8: Graphical Representation for SO2



\*Values are in  $\mu g/m^3$ 

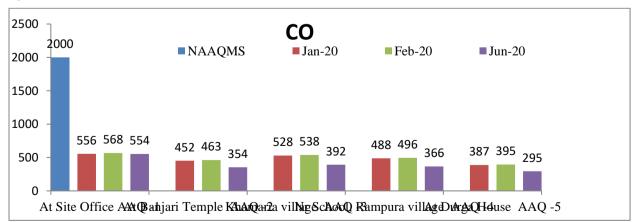
\* Due to Nationwide lockdown Ambient Air Quality Monitoring could not be done from March, 2020 to May, 2020.





\*Values are in µg/m<sup>3</sup>

\* Due to Nationwide lockdown Ambient Air Quality Monitoring could not be done from March, 2020 to May, 2020.





\*Values are in  $\mu g/m^3$ 

\* Due to Nationwide lockdown Ambient Air Quality Monitoring could not be done from March, 2020 to May, 2020.

# 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**.

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
б.	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

# TABLE - 4.1: DETAILS OF NOISE LEVEL MEASUREMENT STATIONS

# 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**.

#### TABLE - 4.2: RESULTS OF AMBIENT NOISE LEVEL MEASUREMENT

#### NOISE LEVEL (DAY HOURS)

Code	Stations	Unit	Jan -20	Feb- 20	Mar-20	Apr- 20	May- 20	Jun- 20	MIN	MAX	AVG
NL-1	Nr Main Gate		53.8	55.7	**	**	**	53.5	53.5	55.7	54.3
NL-2	At Site Office		55.6	56.2	**	**	**	52.6	52.6	56.2	54.8
NL-3	Nr Weigh Bridge		65.4	66.5	**	**	**	57.7	57.7	66.5	63.2
NL-4	Nr Parking		49.5	50.4	**	**	**	47.2	47.2	50.4	49.0
NL-5	Nr Khamaria village	dB(A)	53.1	52.9	**	**	**	51.8	51.8	53.1	52.6
NL-6	Nr School, Rampura village		51.3	50.9	**	**	**	46.6	46.6	51.3	49.6
NL-7	At Durga House		51.6	53.1	**	**	**	47.4	47.4	53.1	50.7
NL-8	At Banjari Temple		55.3	54.9	**	**	**	48.5	48.5	55.3	52.9

# NOISE LEVEL (NIGHT HOURS)

Code	Stations	Unit	Jan -20	Feb- 20	Mar-20	Apr- 20	May- 20	Jun- 20	MIN	MAX	AVG
NL-1	Nr Main Gate		43.4	44.6	**	**	*	47.6	43.4	47.6	45.2
NL-2	At Site Office		48.4	49.7	**	**	**	44.5	44.5	49.7	47.5
NL-3	Nr Weigh Bridge		57.4	57.9	**	**	**	51.7	51.7	57.9	55.7
NL-4	Nr Parking		43.4	44.6	**	**	**	42.8	42.8	44.6	43.6
NL-5	Nr Khamaria village	dB(A)	43.1	42.7	**	**	**	42.4	42.4	43.1	42.7
NL-6	Nr School, Rampura village		43.4	44.6	**	**	**	40.3	40.3	44.6	42.8
NL-7	At Durga House		48.4	49.7	**	**	*	42.5	42.5	49.7	46.9
NL-8	At Banjari Temple		57.4	57.9	**	**	**	39.8	39.8	57.9	51.7

Note: All values are in dB (A)

\* Due to Nationwide lockdown Ambient Air Quality Monitoring could not be done from March, 2020 to May, 2020.

# 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 26<sup>th</sup> June 1989**. It is based on a weighted equivalent noise level (Leq). National Ambient Noise Level Standards are given below in **Table – 4.3**.

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

## TABLE - 4.3: NATIONAL AMBIENT NOISE LEVEL STANDARDS

\*\* 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 proposed mine lease, are in the **range of 39.8 – 66.5 dB(A)** at all eight monitoring stations. Usually day hours have shown higher noise levels which are natural due to vehicular movement and other related activities.

None of the monitored location has shown Noise level beyond 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.

Code	Sampling Stations	Unit	Jan - 20	Feb- 20	Mar- 20	Apr- 20	May- 20	Jun- 20
<b>FE-1</b>	PM <sub>10</sub>		69.8	71.3	**	*	*	63.4
	PM <sub>2.5</sub>		35.6	36.4	**	**	**	32.6
FE- 2	PM <sub>10</sub>	µg/m³	85.7	87.4	**	**	**	64.5
	PM <sub>2.5</sub>		47.2	48.6	**	**	**	36.7

TABLE - 5 .2: RESULTS OF FUGITIVE EMISSION MONITORING

\* Values are in µg/m3

\* Due to Nationwide lockdown Ambient Air Quality Monitoring could not be done from March, 2020 to May, 2020.

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	Jan -20	Feb-20	Mar-20	Apr-20	May-20	Jun-20
1	pH at 25 <sup>0</sup> C	-	IS:3025 (part 11)- 1983	6.82	6.90	**	**	**	7.19
2	Total Dissolved Solids	mg/l	IS:3025 (part 16)- 1984	156.0	164.0	**	**	**	136.0
3	Total Suspended Solids	mg/l	IS:3025 (part 16)- 1984	9.0	8.0	**	**	**	7.0
4	Chloride as Cl	mg/l	IS:3025 (part 32)- 1988	19.99	20.1	**	**	**	26.2
5	Sulphate as SO <sub>4</sub>	mg/l	IS:3025 (part 24)- 1986	65.88	67.3	**	**	**	64.8
6	Chemical Oxygen Demand (COD)	mg/l	IS:3025 (part 58)- 2006	112.0	118.0	**	**	**	88.0
7	Biological Oxygen demand (BOD) 3days @27 <sup>0</sup> C	mg/l	IS:3025 (part 44)- 1993	<3.0	<3.0	**	**	**	<3.0
8	Oil & Grease	mg/l	IS:3025 (part 39)- 1991	<1.0	<1.0	**	**	**	<1.0

\* Due to Nationwide lockdown Water Quality Monitoring from mine pit could not be done from March, 2020 to May, 2020.

# 6.2 Mine Discharge Water

	Mine Discharge Water										
Sr. No.ParametersUnitRef. MethodJan -20Feb-20Mar-20Apr-20May-20Jun -20											
1	pH at 25°C	-	IS:3025 (part 11)-1983	6.90	6.85	**	**	**	6.90		
2	Total Dissolved Solids	mg/l	IS:3025 (part 16)-1984	122.7	132.4	**	**	**	154.6		
3	Total Suspended Solids	mg/l	IS:3025 (part 16)-1984	7.0	7.0	**	**	**	8.0		
4	Chloride as Cl	mg/l	IS:3025 (part 32)-1988	9.9	9.7	**	**	**	10.22		
5	Sulphate as SO <sub>4</sub>	mg/l	IS:3025 (part 24)-1986	38.2	40.2	**	**	**	38.2		
6	Chemical Oxygen Demand (COD)	mg/l	IS:3025 (part 58)-2006	65.0	67.0	**	**	**	62.0		
7	Biological Oxygen demand (BOD) 3days @27 <sup>0</sup> C	mg/l	IS:3025 (part 44)-1993	<3.0	<3.0	**	**	**	<3.0		
8	Oil & Grease	mg/l	IS:3025 (part 39)-1991	<1.0	<1.0	**	**	**	<1.0		

\* Due to Nationwide lockdown Water Quality Monitoring from mine discharge could not be done from March, 2020 to May, 2020.

# 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.

Sampling Station	Unit	Jan -20	Feb-20	Mar-20	Apr-20	May-20	Jun-20
At Site Office	ton/km <sup>2</sup> /month	4.1	4.2	**	**	**	4.1

TABLE – 7.1: RESULT OF DUST FALL MONITORING

\*Due to Nationwide lockdown the measurement of Dust Fall could not be done from March, 2020 to May, 2020.

# 7.2 **OBSERVATIONS**

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

# 8.0 Ground Water

# 8.1 GENERAL

To assess the ground water level in area, one location was selected in core zone. Ground water level measurement was done regularly in the area. Monthly observations are given in Table –8.1.

TABLE – 8.1: GROUND WATE	R LEVEL MONITORING

Sampling Station	Unit	Jan - 20	Feb- 20	Mar- 20	Apr- 20	May- 20	Jun- 20
Near Site Office of Underground Mine	Meter	19	19.5	19.44	20.5	20.0	21.0

## TABLE – 8.2: GROUND WATER LEVEL MONITORING

Sampling Station	Unit	Jan - 20	Feb- 20	Mar- 20	Apr- 20	May- 20	Jun- 20
Near Site Office of Opencast Mine	Meter	10.5	11	12	11.5	10.0	10.5

# 9.0 Hazardous Waste

## 9.1 GENERAL

The quantities of hazardous waste generated Monthly observations are given in Table -9.1.

Sampling Station	Unit	Jan -20	Feb-20	Mar-20	Apr-20	May-20	Jun-20
Workshop Area	litre	453	140	110	325	200	90

TABLE – 9.1: HAZARDOUS WASTE

#### कार्यालय वनमण्डलाधिकारी, रायगढ वनमण्डल, रायगढ (छ.ग.) 🕿 07762-224426 (O), 07762-222178 (R), 07762-226047 (F) E-mail: dfo-raigarh.cg@gov.in क्रमांक/तक.अधि/ 1869 /2018/रायगढ़, दिनांक – 29/05/2018 प्रति, वन परिक्षेत्राधिकारी तमनार विषय :--Transfer of lease in respect of 224.220 ha. of forest land for coal mining in Gare Pelma IV/8 Block in Raigarh District in the State of Chhattisgarh From Original user i.e. M/S Jayaswal Neco Industries Limited, in Whose favour the 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. उप वनमण्डलाधिकारी, घरघोड़ा का ज्ञापन क्रमांक/791 दिनांक 28.02.2018. संदर्भ :--TYNN STREET, ST उपरोक्त विषयान्तर्गत लेख है कि भारत सरकार पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, नई दिल्ली द्वारा रायगढ़ जिले के रायगढ़ वनमण्डल अंतर्गत अंबूजा सीमेंट लिमिटेट को आबंटित गारे पेलमा कोल ब्लाक IV/8 के 224.220 हे. (रकबा 167.330 हें. भूमिगत खुदान तथा रकबा 56.890 हें. खुली खदान) वनभूमि के गैर वानिकी उपयोग कार्य हेतु अंतिम चरण स्वीकृति प्रदान की गई है। आपके प्रतिवेदन अनुसार व्यपवर्तित की जाने वाली निम्नानुसार क्षेत्रों में वृक्ष विदोहन उपरांत वनोपज कार्य पूर्ण कर लिया गया है :--

क्रमांक	ग्राम	कक्ष क्रमांक/खसरा नं.	रकबा (हे.में)
1.		738 पी	31,548
2.	करवाही	24/1	0.664
3.	खम्हरिया	24/1	0.235
4.	खम्हरिया	26/1	0.274
5.	खम्हरिया	28/1 क	0.742
		योग :	33.463

अतः उक्त वनभूमि को व्यपवर्तन की अनुमति सशर्त प्रदान की जाती है।

वन मण्डलाधिकारी रायगढ़ वन मुण्ड्ल, रायमुढ

Annexure –A

पृ. क्रमांक/तक.अधि./ प्रतिलिपि :—

/2018/रायगढ़, दिनांक - 29 /05/2018

 उपवनमण्डलाधिकारी घरघोड़ा की ओर सूचनार्थ एवं यह सुनिश्चित करेंगे कि समस्त शर्तों का भविष्य में विधिवत पालन हो रहा है।

1870

2. अंबूजा सीमेंट लिमिटेट गारे—पेलमा तमनार जिला रायगढ़ (छ.ग.) को। दिये गये समस्त शर्तो का पालन पूर्णतः सुनिश्चित करेंगे, आपके अथवा आपके द्वारा कार्य पर लगाये गये मजदूरों, ठेकेदारों द्वारा वनों तथा वन्य प्राणियों को कोई हानि नहीं की जावे तथा निर्माण सामग्री के पश्चिहेन के लिये कोई अतिरिक्त या नये मार्ग का निर्माण नहीं किया जावेगा। यदि किसी प्रकार का वन सरक्षण अधिनियम का उल्लंघन किया जाता हो तो आपके विरुद्ध कार्यवाही की जावेगी।

वनमण्डलाधिकारी रायगढ़ वनमण्डल, रायमह

53

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कार्यालय वनमण्डलाधिकारी, रायगढ वनमण्डल, रायगढ (छ.ग.	कार्या	लिय	वनमण्डला	धिकारी,	रायगढ	वनमण्डल,	रायगढ	(छ.ग.	)
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🖀 07762-224426 (O), 07762-222178 (R), 07762-226047 (F) E-mail: dfo-raigarh.cg@gov.in

क्रमांक/तक.अधि./ प्रति.

/2018/रायगढ, दिनांक - 23/02/2018

वन परिक्षेत्राधिकारी तमनार

1275

विषय :- Transfer of lease in respect of 224.220 ha. of forest land for coal mining in

Gare Pelma IV/8 Block in Raigarh District in the State of Chhattisgarh From Original user i.e. M/S Jayaswal Neco Industries Limited, in Whose favour the 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. आपका ज्ञापन क्रमांक/277 दिनांक 15.02,2018.

संदर्भ :--

उपरोक्त विषयान्तर्गत लेख है कि भारत सरकार पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, नई दिल्ली द्वारा रायगढ़ जिले के रायगढ़ वनमण्डल अंतर्गत अंबूजा सीमेंट लिमिटेट को आबंटित गारे पेलमा कोल ब्लाक IV/8 के 224.220 हे. (रकबा 167.330 हें. भूमिगत खदान तथा रकबा 56.890 हें. खुली खदान) वनभूमि के गैर वानिकी उपयोग कार्य हेतु अंतिम चरण स्वीकृति प्रदान की गई है। आपके प्रतिवेदन अनुसार व्यपवर्तित की जाने वाली कक्ष क्रमांक 738 पी.एफ. रकबा 36.548 हे. (खुली खदान) प्रस्तावित क्षेत्र में से रकबा 5.000 हे. भूमि के सीमा लाईन में 4 फीट ऊँची आर.सी.सी. पीलर्स गड़ाकर फारवर्ड एवं बैकवर्ड बियरिंग अंकित

-----

कर वृक्ष कटाई का कार्य पूर्ण कर लिया गया है।

अतः उक्त वनभूमि को व्यपवर्तन की अनुमति सशर्त प्रदान की जाती है।

वन मण्डलाधिकारी वन मण्डल. स्रायगढ

पृ. क्रमांक/तक.अधि./ 1276 प्रतिलिपिः- /2018/रायगढ़, दिनांक - 23/02/2018

- उपवनमण्डलाधिकारी घरघोड़ा की ओर सूचनार्थ एवं यह सुनिश्चित करेंगे कि समस्त शर्तों का भविष्य में विधिवत पालन हो रहा है।
- 4. अंबूजा सीमेंट लिमिटेट गारे—पेलमा तमनार जिला रायगढ़ (छ.ग.) को। दिये गये समस्त शर्तों का पालन पूर्णतः सुनिश्चित करेंगे, आपके अथवा आपके द्वारा कार्य पर लगाये गये मजदूरों, ठेकेदारों द्वारा वनों तथा वन्य प्राणियों को कोई हानि नहीं की जावे तथा निर्माण सामग्री के परिवहन के लिये कोई अतिरिक्त या नये मार्ग का निर्माण नहीं किया जावेगा। यदि किसी प्रकार का वन संरक्षण अधिनियम का जल्ल्घन किया जाता हो तो आपके विरूद्ध कार्यवाही की जावेगी।

वनमण्डलाधिकारी 1.

Annexure –B



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

No. 10897/TS/CECB/ 2020 Nava Raipur Atal Nagar, Raipur,

Dated 06/ 03/2020

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: 1. Consent of the Board issued 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 vide letter no. 5670/TS/CECB/2018, Atal Nagar, Raipur dated: 15/10/2018.
  - 2. 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. 8454/TS/CECB/2019 Atal Nagar Raipur, dated: 23/03/2019.
  - 3. Your online application no. 5050030, dated 29/02/2020.

--:: 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 01/04/2020 to 31/03/2021, subject to the fulfillment of the terms and conditions incorporated in the water and air consent letter no. 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	0.70 MTPA
Cast Method)	(Zero Point Seven Million Tonnes Per Annum

### Additional Conditions

## B. 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 factory 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 following work as per action plan submitted along with bank guarantee vide letter dated 06/08/2018 :
  - i. Mine Management shall complete construction of effluent treatment plant for mine discharge on or before 31<sup>st</sup> August 2020.
  - ii. Mine Management shall complete construction of Sewage Treatment Plant (STP) on or before 31<sup>st</sup> August 2020.
  - Mine Management shall made all the internal roads pucca on or before 31<sup>st</sup> August 2020.
  - iv. Mine Management shall complete plantation of trees in the green belt of 7.5 meter width along the coal block boundary on or before 31<sup>st</sup> August 2021.
  - v. Mine Management shall obtain NOC from DGMS for fly ash backfilling with permission on or before 31<sup>st</sup> August 2021.

In case the industry fails to implement above works in the stipulated time period, the bank guarantee may be forfeited.

3. Mine Management shall comply with the provisions of notification dated 03/11/2009 (Amended) regarding utilization of fly ash in over burden and back filling.

- 4. Mine Management shall transport the coal in mechanically covered vehicles to avoid dust emission during transportation.
- 5. This renewal of consent is being issued under the "Scheme of Auto-Renewal of Consent" of the Board issued vide office order no. 5937 dated 29/01/2018 as per self certificate submitted by authorized signatory Mr. Pradeep Samanta, Joint President (Coal Block Gare Palma IV/8) of M/s Ambuja Cements Limited, Gare Palma IV/8 Coal Mine, Villages Khamharia, Karwahi Lamdarha, Milupara, Tehsil Gharghoda, District Raigarh (C.G.).
- 6. Extensive tree plantation shall be carried out in the open areas available within and around the plant premises in the current monsoon season. Fruit bearing species like mango, tamarind, guava etc. shall be given preference in this regard.
- 7. Chhattisgarh Environment Conservation Board reserves the rights to revoke the consent / renewal of consent at any time for any violation/noncompliance.

## B. Air (Prevention and Control of Pollution) Act, 1981

- 1. Mine Management shall operate and maintain the air pollution control equipments properly. Mine Management shall ensure the emission quality meets the standards prescribed by the Board.
- 2. Mine Management shall execute following work as per action plan submitted along with bank guarantee vide letter dated 06/08/2018 :
  - i. Mine Management shall complete construction of effluent treatment plant for mine discharge on or before 31<sup>st</sup> August 2020.
  - ii. Mine Management shall complete construction of Sewage Treatment Plant (STP) on or before 31<sup>st</sup> August 2020.
  - Mine Management shall made all the internal roads pucca on or before 31<sup>st</sup> August 2020.
  - iv. Mine Management shall complete plantation of trees in the green belt of 7.5 meter width along the coal block boundary on or before 31<sup>st</sup> August 2021.
  - v. Mine Management shall obtain NOC from DGMS for fly ash backfilling with permission on or before 31<sup>st</sup> August 2021.

In case the industry fails to implement above works in the stipulated time period, the bank guarantee may be forfeited.

- 3. Mine Management shall comply with the provisions of notification dated 03/11/2009 (Amended) regarding utilization of fly ash in over burden and back filling.
- 4. Mine Management shall transport the coal in mechanically covered vehicles to avoid dust emission during transportation.
- 5. This renewal of consent is being issued under the "Scheme of Auto-Renewal of Consent" of the Board issued vide office order no. 5937 dated 29/01/2018 as per self certificate submitted by authorized signatory Mr. Pradeep Samanta, Joint President (Coal Block Gare Palma IV/8) of M/s Ambuja Cements Limited, Gare Palma IV/8 Coal Mine, Villages Khamharia, Karwahi Lamdarha, Milupara, Tehsil Gharghoda, District Raigarh (C.G.).
- 6. Extensive tree plantation shall be carried out in the open areas available within and around the plant premises in the current monsoon season. Fruit bearing species like mango, tamarind, guava etc. shall be given preference in this regard.
- 7. Chhattisgarh Environment Conservation Board reserves the rights to revoke the consent / renewal of consent at any time for any violation/noncompliance.

Member Secretary Chhattisgarh Environment Conservation Board Nava Raipur Atal Nagar, Raipur (C.G.)

Endt. No. 10898/TS/CECB/ 2020 Nava Raipur Atal Nagar, Raipur, Dated 06/ 03/2020

Copy to: - Regional Officer, Regional Office, Chhattisgarh Environment Conservation Board, Raigarh (C.G.). Please ensure compliance and report, if any condition/conditions are violated by the Mine Management.

> Member Secretary Chhattisgarh Environment Conservation Board Nava Raipur Atal Nagar, Raipur (C.G.)



## Annexure –C

### Acknowledgement Slip for extension of validity of TOR

This is to acknowledge that the proposal for extension of validity of TOR has been successfully uploaded on the portal of the Ministry. The proposal shall be examined in the Ministry to ensure that required information has been submitted. An email will be sent for seeking additional information, if any, within 5 working days. Once verified, an acceptance letter shall be issued to the project proponent.

Following should be mentioned in further correspondence

1. Proposal No.	: IA/CG/CMIN/153935/2020
2. Category of the Proposal	: Coal Mining
3. Name of the proposal	Pit head captive wet coal washery (1.8 MTPA in : an area of 10.336 ha) located at Gare Palma IV/8 Coal mine
4. Date of submission	: 22 May 2020
5. Name of the Project proponent along with contact details	
a) Name of the proponent	: AMBUJA CEMENT LIMITED
b) Mobile No.	: 9717069200
c) State	: Maharashtra
d) District	: Gurgaon

: 122016

e) Pincode

Member Secretary

To



भारत सरकार केन्द्रीय भूमि जल प्राधिकरण जल संसाधन, नदी विकास और गंगा संरक्षण मंत्रालय

Government of India Central Ground Water Authority Ministry of Water Resources, River Development & Ganga Rejuvenation

Dated:- 16 NOV 2018

No.21-4(124)/NCCR/CGWA/2011-2/86

M/s Ambuja Cements Ltd. 306-307, 3<sup>rd</sup> Floor, Ambuja City Centre, Vidhan Sabha Road-Mowa, District Raigarh, Chhattisgarh - 492007

Sub:- Extension of NOC for ground water withdrawal to M/s Ambuja Cements Ltd. in respect of their existing "Gare Palma Coal Mine, Mand Raigarh Coal Fields" located at Villages Khamariya, Karwahi, Milupara & Lamdarha, Block Tamnar, District Raigarh, Chhattisgarh - reg.

Refer to your application dated 05/06/2018 & 06/08/2018 on the above cited subject. Based on recommendations of Regional Director, Central Ground Water Board, North Central Chhattisgarh Region, Raipur vide their office letter No. No. 35-1/NCCR/CGWA/Vol.XI-944 dated 19/09/2018, and further deliberations on the subject, the extension of NOC issued vide this office letter of even no. dated 08/06/2016 is hereby accorded to M/s Ambuja Cements Ltd. in respect of their existing "Gare Palma Coal Mine, Mand Raigarh Coal Fields" located at Villages Khamariya, Karwahi, Milupara & Lamdarha, Block Tamnar, District Raigarh, Chhattisgarh. The extension of NOC is valid from 08/06/2018 to 07/06/2020 and subject to the following conditions:-

- 1. The firm may abstract 100 cu.m/day of ground water (and not exceeding 36,500 cu.m/year) through two (2) existing bore wells and 3,243 cu.m/day (not exceeding 11,83,660 cu.m/year) through dewatering the mine seepage through one (1) existing mine pit on account of mining intersecting the water table. The total withdrawal should not exceed 3,343 cu.m/day (not exceeding 12,20,160 cu.m/year). No additional dewatering and ground water abstraction structure shall be constructed for this purpose without prior approval of the CGWA. The firm shall submit detailed mine dewatering report indicating depth wise and year wise mine dewatering within six months. Any unexpected variation in inflow of ground water into the mine pit should be reported to the concerned Regional Director, North Central Chhattisgarh Region, Raipur.
- The dewatering structure as well as the bore wells shall be fitted with digital water flow meters by the firm at its own cost and monitoring of monthly ground water abstraction data of each well shall be recorded in a log book. Compliance to this condition shall be reported within one month from the date of issue of this letter.
- M/s Ambuja Cements Ltd., shall, continue to implement ground water recharge measures to the tune of 9,27,000 m<sup>3</sup>/year for augmenting the ground water resources of the area. Firm shall also undertake periodic maintenance of recharge structures at its own cost.
- The firm, at its own cost, shall construct four (4) observation wells (piezometers) at suitable locations and install digital water level recorders along the periphery of

18/11, Jamnagar House, Mansingh Road, New Delhi-110011 Phone : (011) 23383561 Fax : 23382051, 23386743 Website: www.cgwa.noc.gov.in स्वच्छ सुरक्षित जल - सुन्दर खुशहाल कल

CONSERVE WATER - SAVE LIFE

the mine for monthly ground water level monitoring. Further, the firm shall continue to monitor ground water levels four (4) times a year (January, May, August and November) in core and buffer zone through existing key wells. The firm shall install telemetry system in all the piezometers and share user ID and password of the telemetry system with the Regional Director, Central Ground Water Board, North Central Chhattisgarh Region, Raipur.

- 5. The ground water quality shall be monitored at least once in a year during pre monsoon period.
- 6. The ground water monitoring data in respect of S. No. 2, 4, & 5 shall be submitted to the Regional Director, Central Ground Water Board, North Central Chhattisgarh Region, Raipur on regular basis at least once in a year.

The firm shall ensure proper recycling and reuse of waste water after adequate treatment.

- Action taken report in respect of S.N o. 1 to 7 shall be submitted to CGWA within one year period.
- 9. The NOC is liable to be cancelled in case of non-compliance of any of the conditions as mentioned in S. No. 1 to 8.
- 10. This NOC is subject to prevailing Central/State Government rules/laws or Court orders related to construction of tubewell/ground water withdrawal/construction of recharge or conservation structures/discharge of effluents or any such matter as applicable.
- 11. This NOC does not absolve the applicant / proponent of his obligation / requirement to obtain other statutory and administrative clearances from other statutory and administrative authorities.
- 12. The NOC does not imply that other statutory / administrative clearances shall be granted to the project by the concerned authorities. Such authorities would consider the project on merits and be taking decisions independently of the NOC.

Member Secretary

#### Copy to:

- 1. The Member Secretary, Chhattisgarh Environment Conservation Board, Paryavas Bhavan, North Block Sector-19, Naya Raipur, Chhattisgarh with a request to ensure that the conditions mentioned in the NOC are complied by the firm in consultation with the District Collector & Magistrate, District Raigarh, Chhattisgarh.
- 2. The District Collector & Magistrate, District Raigarh, Chhattisgarh for necessary action.
- The Regional Director, Central Ground Water Board, North Central Chhattisgarh Region, Raipur. This has reference to your recommendation dated 19/09/2018.
   Guard File 2018-19.

Member Secretary



Annexure-F



Letter No. ACL/GP-IV-8 /Ext. NOC-CGWA /2020-21/017

Date: 05<sup>th</sup> June, 2020

The Member Secretary, Central Ground Water Authority, 18/11, Jam Nagar House, Man Singh Road, Near India Gate, New Delhi \_India

Subject: Application for Extension of Validity of NOC (for two year up-to 07/06/2022) for withdrawal of 100 m<sup>3</sup>/Day ground water (36500 m3 / year) and permission for mine seepage dewatering 4615 m<sup>3</sup>/day (16,84,440 m3 /year) (intersecting the water table) for Gare Palma IV/8 (Open cast & Underground) Coal mineS, Mand Raigarh Coal Fields located at Village : Khamaharia, Karwahi, Milupar & Lamdarha, Block & Tehsil : Tamnar, District : Raigarh, Chhattisgarh allocated to Ambuja Cements Limited-reg.

Ref:- NOC Letter no. and Date: 21-4(124)/NCCR/CGWA/2011 - 1035 Date: 21-4(124)/NCCR/CGWA/2011 - 2186 Date: 21-4(124)/NCCR/CGWA/2011 - 21-4(124)/NCCR/CGWA/2000/NCCR/CGWA/200/NCCR/CGWA/200/NCCR/CGWA/200/NCCR/CGWA/200/NCCR/CGWA/200/NCCR/CGWA/200/NCCR/CGWA/200/NCCR/CGWA/200/NCCR/CGWA/200/NCCR/CGWA/200/NCCR/CGWA/200/NCCR/CGWA/200/NCCR/CGWA/200/NCCR/CGWA/200/N

Dated:- 08/06/2016 And Dated:- 16/11/2018.

Dear Sir,

With reference to the above subject, we would like to inform that we have obtained the NOC on dated 08/06/2016 and then CGWA – New Delhi accorded a Extension Validity of NOC on dated : 16/11/2018(Please refer **Annexure - IIA**), accordingly we have submitted the action taken report (Please refer **Annexure : A**) with computation of mine seepage on the basis of depth wise & year wise along with Hydrogeological Investigation Report(as Shown in **Annexure: 1**) & compliance being done by the firm. As per Extension of Validity of NOC the permission is to abstract 100 m<sup>3</sup>/day ground water and dewatering for mine seepage 3243 m<sup>3</sup>/day (11,83,660) (intersecting the water table) for Gare Palma block IV/8 (Open cast & Underground) Coal mines, Mand Raigarh Coal Fields located at Villages : Khamaharia, Karwahi, Milupar & Lamdarha, Block & Tehsil : Tamnar, District : Raigarh, Chhattisgarh. Now as per Hydrogeological Investigation Repot and computation of mine seepage the additional total quantity of estimated mine seepage in 5<sup>th</sup> year will be 4615 m3/day (16,84,440 m3/year), means it will be increased by 1372m3/day (500780 m3/year). Total ground water abstraction will be 4715 KLD(17,20,940 M3/year). Mine seepage water will be utilize in own Coal Mines Area in mine operation, dust suppression and plantation, recharge of ground water for augmenting the ground water resources of the surrounding area 927000 m3/year and balance water will be supplied to Village

RAIGARH (C'G.), MUX & CON

AMBUJA CEMENTS LIMITED Gare Palma IV/8 Coal Mine

RAIGARH OFFICE : 2nd Floor, Aditya Business Park, Opp. Modi Plaza, Near Carmel School, Dhimrapur Road, Dist. - Raigarh (C.G.) 496 001 www. ambujacement.com, E-mail : garepalmacoalmine@ambujacement.com Regd. Off. : PO. Ambujanagar, Taluka - Kodinar, Dist. Gir Somnath, Gujrat

CIN: L26942GJ1981PLC004717



Firm has installed 2 numbers bore well and fitted with Digital Water flow Meter, Two numbers Piezometers & fitted with AWLR / Telemetry. To recycle and reuse the waste water ETP & Oil grease trap constructed. At present ground water table has not been intersected due to mining activity, for mine seepage dewatering 4 numbers Centrifugal pumps installed till date (2 nos. in O/C mine & 2 nos. in U/G mine) and 6 numbers are proposed to be installed, thus total 10 numbers of mine pumps (centrifugal type) will be installed and all existing 4 numbers pump will be fitted with Digital Water Flow Meter within 2 months before mine seepage dewatering. RWH Pond with de-silting tanks constructed. In nearby village area water supply & sanitation facility has been provided and the plantation has also been carried out. Regarding the above copy of Compliance Report is attached as **Annexure: 2** and Comprehensive Monitoring Report of the Year 2019 is also attached as **Annexure: 3**.

In support of above details and annexure attached, we are herewith submitting the Notarized Affidavit to fulfill the all terms and conditions as mention in NOC. Copy of Affidavit is enclosed herewith as Annexure : G.

As per guideline of CGWA New Delhi, to obtain the extension of validity of NOC for abstraction of ground water & dewater of mine seepage from CGWA-New Delhi, the processing fee for Rs.500/- is enclosed herewith as **Annexure: H**. The fee deposited in favor of PAO, CGWB through bharatkosh.gov.in (Government of India Receipt Portal) payable at Faridabad-Haryana. The transaction reference no. is "2705200004840" Date: 27/05/2020.The validity of NOC is valid up-to 08/06/2020 hence we are herewith applying to extend the validity of NOC for two year from 08/06/2020 to 07/06/2022 as well RWH Pond to recharge the ground water and other works as mention in NOC. **Due to Nationwide lockdown from 25/03/2020 till date the renewal application has got delayed.** 

Put up for your kind perusal & Extension validity of NOC for two years.

Thanking You,

#### For, Ambuja Cements Limited

Puly Lawb Pradeep Samanta

Jt. President (Gare Palma IV/8 Coal Mines)

Enclose: As above.

RAIGARH (C.G.) \*

Copy to : **The Regional Director,** Central Ground Water Board, North Central Chhattisgarh Region, 2<sup>nd</sup> Floor - NH – 30, Near Dhamtari Road, Dumartari - Raipur (C.G.):- **kindly process the case for approval please**.

#### AMBUJA CEMENTS LIMITED Gare Palma IV/8 Coal Mine

RAIGARH OFFICE : 2nd Floor, Aditya Business Park, Opp. Modi Plaza, Near Carmel School, Dhimrapur Road, Dist. - Raigarh (C.G.) 496 001 www. ambujacement.com, E-mail : garepalmacoalmine@ambujacement.com Regd. Off. : PO. Ambujanagar, Taluka - Kodinar, Dist. Gir Somnath, Gujrat

CIN: L26942GJ1981PLC004717



Khamaharia, Karwahi, Rampur, Milupar & Lamdarha for their domestic use as well as for Irrigation purpose. It is pertinent to mention here that in case of GP IV/8 Coal Mines the production of Coal yet be started due to delay in granting Consent to Operate from State Government. We have applied to District Collector (Mining) Raigarh for permission for "Bhu Pravesh" / enter into land of mine area to start the mining activity, but DC-Raigarh issued a letter on dated 17/01/2017 regarding obtaining the CTO form Chhattisgarh Environment Conservation Board Raipur, permission of DGMS and Coal Controller also. Copy of DC Raigarh is attached as Annexure: B Accordingly we applied to the Chhattisgarh Environment Conservation Board Raipur to grant the CTO for Development, Copy of CTO Letter for Development under water & air act obtained on dated 13/11/2017 is shown in Annexure: II B,. After obtaining the statutory clearances we have again applied to Mining Office, District Collectorate : Raigarh to grant the permission for enter in to the land (Bhu Pravesh) of mining area to start the mining activity on 02<sup>nd</sup> May 2018 (Copy of letter is attached as Annexure: C, on the basis of CTO of CECB Raipur, Permission of Coal Controller and DGMS and the permission for "Bhu Pravsh" of DC - Raigarh obtained. After above exercises we were able to start the mining activity in O/C mine within Forest area, in which no any pucca / concrete structure can be constructed as per guideline of State Forest Department and Central Govt. / MoEF. Further we started the installation of Porta cabin and Mine site Office along with installation of Piezometers, BWs, ETP and RWH Pond with de-silting pit in mine lease area in own land and started dumping of OB in forest land only.

Further we would like to inform that due to non availability of whole land we were not able to fulfill all the terms and conditions as mentioned in NOC/Extension validity of NOC. We have already deposited the full amount of land compensation to Government of Chhattisgarh, but land owners case was sub-judice in High Court Bilaspur (Chhattisgarh) therefore land cannot be transferred in the name of company – Ambuja Cements Limited. Finally High Court - Bilaspur vide its order dated : 08/04/2019 awarded the land. The land acquisition is still under process . Copy of High Court Decision is attached herewith as Annexure : D.

We have applied in CECB Naya Raipur on 30/10/2019 to issue the CTO for U/G coal mine also, but CTO for U/G mine is pending. A reminder has been submitted on dated 28/05/2020 to issue the CTO, copy of application and reminder letter for U/G mine is attached herewith as Annexure : II C & II D. At present only O/C mine is operational, regarding this CECB- Raipur has accorded the renewal of CTO on dated : 06/03/2020,copy is attached as Annexure : II E.

In view of the above we are herewith again applying for Extension Validity of NOC and submitting all the documents in support of prescribed form of NOCAP-CGWA, New Delhi (As shown in Annexure - E) and Power of Attorney as Authorization Letter (Annexure : F).



AMBUJA CEMENTS LIMITED Gare Palma IV/8 Coal Mine

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### Annexure-G

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:-1. 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 theproject 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 /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 ANANDA MANDAL Date: 2017 05 15 V 88:29 IST Reason: Approved 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)